8 RESPONSES TO COMMENTS

The public comment period for the Tier II DEIS extended from the date of publication in May 2010 through September 10, 2010. Agencies, organizations, and members of the public supplied comments on the DEIS through letters or emails to NCDOT or DRPT, a project telephone hotline, an internet survey form, or at public hearings (either orally or using a comment form). More than 1,850 individuals and 50 agencies and organizations submitted comments to the project team. Many of the comments were several pages in length, and most covered multiple topics.

Responses are provided for individual agency and local government comments (Section 8.1). Due to the large number of public comments, many of which addressed similar issues or presented similar preferences, the comments have been summarized and responses are provided for these summary comments (Section 8.2).

8.1 AGENCY AND LOCAL GOVERNMENT COMMENTS AND RESPONSES

This section presents the comments on the DEIS submitted by state and Federal environmental and resource agencies and local governments and commissions. Responses are provided to individual statements from within the correspondence for ease of reading.

Federal Agencies

AG44 United States Dept. of Interior, Office of Environmental Policy and Compliance - Willie R. Taylor, Director	
Comment	**Response**
The Department concurs that there is no prudent and feasible alternative to the proposed use of Section 4(f) land, which includes parks, recreational areas, historic architectural sites, battlefields, and archeological sites. We note that the Draft Section 4(f) Evaluation includes additional mitigation measures to be agreed upon with the Virginia and North Carolina State Historic Preservation Officers (SHPOs) and Section 106 Consulting parties, including the National Park Service: specifically, preparation of a Memorandum of Agreement (MOA) and a potential land exchange with Petersburg National Battlefield, as stated in a letter dated March 4, 2009, from the park's Superintendent. We encourage continued consultation with the SHPOs, the National Park Service, and additional Section 106 consulting parties to ensure that all of these mitigation measures be satisfactorily implemented. We also recommend that a signed copy of the MOA be included in the Final Environmental Impact Statement.	Where the Project has been determined to have an adverse effect on historic resources, Section 106 requires that efforts be undertaken to avoid, minimize, or mitigate the adverse effects. As part of this process, consultation has taken place and is ongoing with the Virginia Department of Historic Resources (VDHR), North Carolina State Historic Preservation Office (NC-HPO), and other "consulting parties," such as the National Park Service, local historical societies, and property owners. FRA, the Virginia State Historic Preservation Officer, the North Carolina State Historic Preservation Officer, DRPT, NCDOT, and the Advisory Council on Historic Preservation have developed a draft Programmatic Agreement (Process PA) to ensure compliance with Section 106 of the Historic Preservation Act for the Proposed SEHSR project. (It is included in this FEIS for public review.) This provides a consistent process for considering the effects of each portion of the SEHSR on historic properties and resolving adverse effects where appropriate. As per the Process PA, "When the State Rail Transportation Agency proposes a finding of adverse effects to historic properties, it shall notify FRA. FRA shall initiate consultation with the appropriate SHPO and other consulting parties, interested Federal and state recognized Indian tribes, ACHP, FRA and the State Rail Transportation Agency shall develop a Memorandum of Agreement (MOA) to identify measures to avoid, minimize, and mitigate the adverse effects prior to beginning any work on that portion of the SEHSR Project. The State Rail Transportation Agency shall submit a draft of each MOA to the appropriate SHPO for review and comment. NCDOT and DRPT shall ensure that all comments received within thirty (30) days of SHPO's receipt of the draft MOA are addressed in the final MOA. One (1) copy of each final MOA shall be provided to the appropriate SHPO and other consulting parties and one (1) copy shall be provided to any consulting party or other group who may have a vested interest in a particular property." The Project Team is continuing dialogue with consulting parties for the Section 106 MOAs and will have signed agreements prior to a Record of Decision (ROD) for the Project.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
The U.S. Environmental Protection Agency (EPA) Regions 4 and 3 have reviewed the subject document and are commenting in accordance with Section 309 of the Clean Air Act (CAA) and Section 102(2)(C) of the National Environmental Policy Act (NEPA). We are providing cooperating agency input for your consideration. In addition, EPA also included technical review comments from the Centers for Disease Control and Prevention (CDC) under a 2010 Partnership Agreement with EPA and on behalf of the Department of Health and Human Services (DHHS). The Federal Railroad Administration (FRA), North Carolina Department of Transportation (NCDOT) Rail Division and the Virginia Department of Rail and Public Transportation (DRPT) are proposing to make rail improvements for an approximate distance of 162 miles between Richmond, Virginia and Raleigh, North Carolina. EPA Regions 3 and 4 provided comments on the Final Tier I Environmental Impact Statement (FEIS) in 2002. EPA Region 4 also provided review comments on the Preliminary Draft EIS for Tier I1 on December 18, 2009. EPA and CDC's technical review comments on the Tier II DEIS are attached to this letter (See Attachment A). Specific advisory comments on the Environmental Justice analysis contained in Chapter 4 are also attached to this letter (See Attachment B). EPA rated the Tier I1 DEIS as 'Environmental Concerns' (EC-2) indicating that the review identified some environmental concerns requiring potentially minor changes to the preferred alternative or the application of mitigation measures that can reduce environmental impacts. The review disclosed the opportunity for possible avoidance and minimization measures and mitigation measures related to wetland and stream impacts, water quality, and environmental justice and community health issues. The '2' rating indicates that DEIS information and environmental analysis requires some additional information and clarification, including wetland and stream impacts, Section 303(d) listed impaired waters, socio-economic and community health issues, and a reassessment of potential minority and low-income population impacts. Overall, EPA supports the development of additional mass transit options for the populations in Virginia and North Carolina because it provides an alternative to the sole reliance on highways for transportation demand. We also support the proposed project's purpose and need and detailed study alternatives. With appropriate disclosure and proper mitigation, this project should result in fewer adverse impacts. EPA recommends that all of the technical comments in the attachments be addressed in a Final EIS (FEIS). Furthermore, all relevant environment impacts that have not been disclosed in this document or covered in the FEIS should be addressed in additional NEPA documentation prior to the issuance of a Record of Decision (ROD).	Comment noted. The Project Team appreciates EPA's participation in the Project.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
1) Purpose and Need for the Proposed Project – EPA and CDC generally support the purpose and need for the Southeast High Speed Rail (SEHSR) project from Richmond, VA to Raleigh, NC. Section 1.2 of the DEIS identifies other current and planned projects for the entire Washington, D.C. to Charlotte, N.C. corridor.	Comment noted.
2) Detailed Study Alternatives – a. The DEIS identifies 3 rail alignments (Detailed Study Alternatives) each for the portions in Virginia (i.e., VA1, VA2 and VA3) and for North Carolina (i.e., NC1, NC2 and NC3). The DEIS does not evaluate the impacts with the specific rail stations. Section 2.2.4 indicates that specific station locations will be determined in the future by the municipalities and appropriate levels of environmental documentation will be undertaken at that time. The DEIS does address where general station locations might be, including Richmond, VA, Petersburg, VA (Ettrick and 3 alternative station locations), La Crosse, VA, Henderson, NC and Raleigh, NC. Servicing the SEHSR long-term and meeting future ridership demands appears to depend on these stations. These stations may have an impact on air quality, community resources, land use, stormwater management, etc. Low-impact development practices, as well as 'Green building' initiatives, should be considered during planning and design. EPA requests that all of the potential human and natural resource impacts from these stations are addressed in future NEPA documentation.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations or design needs because the development of stations is a unique undertaking at an individual location. As noted, generalized sites were evaluated, but only to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility to the larger transportation network. All public and agency comments received regarding specific station locations have been noted and will be provided to transportation planning organizations in each station location. Those governments at the individual station locations will perform separate environmental evaluations and make the final decision on the station location and design at a later date. As noted in revised Section 4.17 in the Tier II FEIS, locating the HSR stations in developing urban and suburban areas that serve as population centers, rather than undeveloped, sparsely populated rural areas, is likely to avoid and minimize many potential direct and indirect environmental impacts from the Project.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
b. Section 2.4 of the DEIS discusses the Multiuse Greenway Concept and that the exact location of it will not be determined until the preferred alternative for the SEHSR project is selected. A separate decision document (e.g., Finding of No Significant Impact) is expected to be prepared for the Greenway Concept. The associated impacts for the Greenway Concept are proposed to be documented in the FEIS. EPA requests that the environmental analysis and impact disclosure be addressed in the FEIS and that consideration should be given to incorporate this information into the SEHSR project. As a result, additional NEPA documentation will not be required.	The concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Project DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for HSR projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project (with the understanding that existing rail ROW not required for the Preferred Alternative may potentially be available for segments of a future greenway) the process of developing the environmental documentation for the greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This document is currently under development, with completion anticipated at the time of the ROD for Richmond to Raleigh Project. The Project website will provide additional details on this separate plan and opportunities for its public review and comment.
c. Page 2-56 of the DEIS included a discussion of impact evaluation for the 30-foot trail greenway on 60-foot of right of way. The width of the trail itself is proposed at 10 feet. Each section of trail is independently managed and representative of the needs of its respective region. The Multiuse Greenway Concept may be incorporated into the East Coast Greenway. EPA and CDC request that several environmental enhancements be considered in the development of the SEHSR's Multiuse Greenway Concept trail, including the use of renewable materials for rural sections (e.g., wood-chip based), an invasive plant species management plan that avoids the excessive use of herbicides, and appropriate 'solar' lighting in more urbanized settings. Safety features that minimize conflicts between the bicycle and pedestrian use and the adjacent high-speed rail should be considered during FRA, USDOT and municipalities final planning and design.	These requested enhancements have been forwarded to the team preparing the Greenway Corridor Plan (discussed in response “b,” above). Please note that individual greenway segments will be developed by local governments, and that any greenway enhancements will be considered during the final design phase (i.e., when greenway construction funding is secured).

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
3) Community Resources: Demographics and Public Educational Facilities a. According to Table 3-23 (pg. 3-67), over 18% of the population in the Colonial Heights study area in Virginia is 65 years or older compared to 11.2% statewide. The population of resident's age 65 or older in the study area in Mecklenburg, Virginia is 17.8% compared to 11.2% statewide. Population projections in the US show a rapidly growing population of those ages 65 and older with many living below or near the poverty line, especially in minority populations (DHHSIAOA, 201 0; DHHS/AOA(b), 2010). Health and social impacts due to changes in transportation systems and local roadway connectivity may be more severe in older populations who rely more heavily on pedestrian infrastructure and/or transit (Balfour and Kaplan, 2002). The Community Resources Section 3.1 1.1.3 describes the age of the population, but the DEIS does not assess potential impacts to this population in the Environmental Consequences section related to Community Resources (i.e., Section 4.1 1). The assessment of how vulnerable populations, such as the elderly, may or may not be impacted by the proposed high-speed rail project should be addressed in the FEIS.	Section 4.11.5.1 of the Tier II FEIS has been amended to address concerns with impacts to elderly (and disabled) populations.
b. On Page 3-93 of the DEIS, Forest Pines Drive Elementary is identified as being in the project study area. The school is located on East Perry Avenue in Wake Forest, but the closest access road crossing the existing corridor near the school appears to be either at Brick Street or East Cedar Avenue (see Map #135 of 151 from Appendix Q). The map and the narrative on page 3-93 needs to be consistent in FEIS.	Page 3-93 of the Tier II DEIS incorrectly stated that Perry Avenue is the closest access road that crosses the rail corridor for Forest Pines Drive Elementary. In fact, Perry Avenue does not cross the railroad. However, Forest Pines Drive Elementary was only temporarily located on the campus of the former DuBois school at 530 E. Perry Avenue in Wake Forest, NC. The school has since relocated outside the study corridor, to Forest Pines Drive, which is southwest of the town core. Section 3.11.5.1.2.4 and associated mapping have been corrected in the Tier II FEIS.

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Comment	**Response**
4) Socio-economic Issues a. Section 4.1 1.1 provides a general assessment of the potential socio-economic benefits of the proposed project to the impacted communities but does not provide as much detail of the potential socio-economic consequences. Socio-economic impacts can affect the health of communities and individuals. The effect of increased rail-related activity on residential property values appears to be impacted either positively or negatively by a number of factors including proximity to tracks and changes in volume of activity such as the number of trains per day (Simons, 2004) as well as accessibility and/or proximity to rail stations (Diaz, nd). Communities without a rail station are likely to be disproportionately impacted by this project. This concern is mentioned in Sections 4.11.2.1.1 and 4.11.2.1.2 (Page 4-67), but a more robust assessment of any potential economic consequences is not included. For communities without rail station/stops, where rail activity will be re-introduced after having been absent, and where rail activity increases, potential socio-economic consequences should to be considered and more fully assessed in the FEIS.	Section 4.11 of the Tier II FEIS has been amended to better identify both the benefits and impacts to communities from a socio-economic standpoint from the preferred alternative. Additionally, the referenced study "The Effect of Freight Railroad Tracks and Train Activity on Residential Property Values" (Simons, 2004) was reviewed by the Project Team. Although train horn noise has been shown to affect property values, the Project proposes to eliminate all at-grade crossings, which will remove horn noise in the Project corridor.
b. Section 4.11.2.1.2 of the DEIS discusses 'Neighborhood Disruptions'. On Page 4-68, the DEIS notes that residents and businesses [within the communities not currently living with an active rail line] could experience a sense that their community is being bisected by the new active rail line and that previously unencumbered access would now only be possible at designated bridges and underpasses. The DEIS also notes that community travel patterns will not be substantially altered because consolidated crossings are designed to be no more than one mile apart from each other. However, changes to the pedestrian environment can affect health outcomes and health determinants in a variety of ways, including but not limited to injury rates, physical activity levels, and accessibility. Rural residents are more likely than urban or suburban individuals to report barriers to physical activity, including barriers in the pedestrian or built environment (Parks, 2003). For example, long distances to schools are a primary barrier to walking (Dellinger, 2002). Impacts to the pedestrian environment occur at intervals less than 1 mile. Impacts to the pedestrian environment should be considered in ¼ of mile increments, which is the more commonly used measure. Such impacts to the human environment ought to be considered separately from impacts to driving patterns and traffic in the assessment of impacts to the transportation network.	Section 4.11.5.1 of the Tier II FEIS has been amended to address impacts to the pedestrian environment (as well as overall benefits/impacts) within affected communities from the preferred alternative.

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Comment	**Response**
c. Section 4.1 1.2.2 includes information on the impacts from changes to the transportation network. The DEIS assesses potential impacts from changes to the transportation network by tabulating rail crossing consolidations by type and section (Pages 4-70 to 4-74) and then describes impacts to specific communities. According to the DEIS between 56 and 64 public crossings will be relocated due to crossing consolidations, two pedestrian-only crossings will be maintained, and eight to nine new pedestrian-only crossings will be built. It is not clear which of the existing bridges/underpasses [that will be maintained] or which of the new bridges/ underpasses [that will be built] have pedestrian or bicycle facilities (e.g., sidewalks, ramps, stairs, bike lanes, etc.). Including this information is important in the assessment of impacts to the transportation network and ought to be considered in the FEIS. We recommend that all new crossings [not specifically identified as pedestrian-only crossings] follow a 'Complete Streets' model aligned with both Virginia and North Carolina Complete Streets Policies, so as to safely accommodate both pedestrians and bicycles.	Sections 4.11.5.1 and 4.16 of the Tier II FEIS state that all of the new bridges and underpasses will have sufficient width so as not to create a hazard for pedestrian movement. In locations where existing pedestrian accommodations (e.g., sidewalks) currently exist, these accommodations will be provided on the bridges/underpasses.* At other locations, pedestrian accommodations on the bridges/underpasses will be evaluated during final design based on the current NCDOT and VDOT pedestrian policies (i.e. Complete Streets). In general, these policies consider the provision of pedestrian accommodations in more populous locations where pedestrian activity currently exists. The Project designs also include 12 new pedestrian-only crossings of the rail corridor within municipalities to provide increased pedestrian access. The locations of these pedestrian crossings were determined in coordination with local government representatives and in response to comments from the public on the Tier II DEIS. * Section 4.16 of the Tier II DEIS mistakenly stated that all bridge designs would include sidewalks to facilitate pedestrian access. While pedestrians will be able to cross at all bridges, the inclusion of sidewalks will depend on the current NCDOT and VDOT pedestrian policy at the time the Richmond to Raleigh Project is constructed.
d. The DEIS includes general information that two ball parks will be displaced due to the proposed project alignment (Page 4-83). It is unclear how the loss of these community ball fields will potentially impact the amount of accessible greenspace and/or recreation facilities in this community. Loss of community access to greenspace and recreation facilities can impact community health and community cohesion (Sullivan, 2004; TPL, 2004). Furthermore, rural residents are more likely than urban or suburban individuals to report barriers to physical activity, including limited access to exercise facilities (Parks, 2003). It is recommended that the FEIS include a contextual description of these ball fields in relation to other community recreation facilities and greenspace/parks in the Wake Forest, N.C. area. The community's use of these fields should be described and, if appropriate, possible mitigation measures to ensure adequate community recreation and greenspace access.	Sections 3.11.3.2 and 4.13.2 of the Tier II FEIS explain that preferred alternative (NC1) in Section U does not displace the private ball fields and that the Project has coordinated with the owner of the ball fields.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
e. Section 4.11.3 of the DEIS addresses Community Facilities and Services. Under 'Schools', the section assesses the alternatives in light of changes in accessibility and safety improvements due to crossing consolidations and elimination of at-grade crossings. On page 4-85 the DEIS states that: "The negative impacts of potentially longer driving distances to cross the rail line would be minimal and offset by the benefits gained in safety and unimpeded access." This statement does not take into consideration students and/or teachers who might walk (or bicycle) to school. Changes to the pedestrian environment can affect health outcomes and health determinants in a variety of ways, including but not limited to injury rates, physical activity levels, and accessibility. Rural residents are more likely than urban or suburban individuals to report barriers to physical activity, including barriers in the pedestrian or built environment (Parks, 2003). For example, long distances to schools are a primary barrier to walking (Dellinger, 2002). The importance of pedestrian access to schools may differ amongst the various locations/study areas, but should be considered separately from auto access or driving distances.	Section 1.4 (Project Description) and Section 4.11 (Community Resources) of the Tier II FEIS have been amended to clarify that grade separations will provide access across the rail corridor and will have sidewalks if the current route does. Sections 4.11.5.1 and 4.16 have been amended to indicate that all of the new bridges and underpasses will have sufficient width so as not to create a hazard for pedestrian movement. In locations where existing pedestrian accommodations (e.g., sidewalks) currently exist, these accommodations will be provided on the bridges/underpasses.* At other locations, pedestrian accommodations on the bridges/underpasses will be evaluated during final design based on the current NCDOT and VDOT pedestrian policies (i.e. Complete Streets). In general, these policies consider the provision of pedestrian accommodations in more populous locations where pedestrian activity currently exists. The Project designs also include 12 new pedestrian-only crossings of the rail corridor within municipalities to provide increased pedestrian access. The locations of these pedestrian crossings were determined in coordination with local government representatives and in response to comments from the public on the Tier II DEIS. * Section 4.16 of the Tier II DEIS mistakenly stated that all bridge designs would include sidewalks to facilitate pedestrian access. While pedestrians will be able to cross at all bridges, the inclusion of sidewalks will depend on the current NCDOT and VDOT pedestrian policy at the time the Richmond to Raleigh Project is constructed.

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Comment	**Response**
f. Forest Pines Drive Elementary is noted to exist in Wake Forest, N.C. at 530 E. Perry Avenue. This school, and any related impacts due to rail crossing consolidation, is not included in the Environmental Consequences chapter, Section 4.1 1.3.1, Table 4-28, along with the other schools. In Table 4-28 on Page 4-88, impacts to Wake Forest Elementary include the closing of the at-grade crossing on East Elm Street. This crossing at Elm Street provides the most direct access from the school to the business district on the east side of the tracks. With the current consolidation plan, crossings would be realigned at Roosevelt Avenue and Holding Avenue, each of which is approximately 1,750 feet from the current crossing at Elm St. While this distance might seem insignificant to most drivers this adds almost 2/3 of a mile for a pedestrian-trip to access either the school or the business district just across the tracks. Because this area appears to be fairly congested (population and development) and the opportunity for children to walk to school is evident, we recommend that FRA and other transportation agencies consider a pedestrian crossing be considered for the Elm Street crossing. Similarly, the FEIS should also consider pedestrian access to places of worship and how the proposed project might alter current patterns and use.	Section 3.11.5.1.2.4 of the Tier II FEIS has been amended to indicate that Forest Pines Drive Elementary was only temporarily located on the campus of the former DuBois school at 530 E. Perry Avenue in Wake Forest, NC. The school has since been relocated outside the study corridor, to Forest Pines Drive, which is southwest of the town core. This change in location is noted in Chapter 3 of the Tier II FEIS. With regard to accessibility for Wake Forest Elementary School, please note that in response to these comments on the Tier II DEIS as well as comments from the Town and from the public, a new rail underpass was designed for this location. There are numerous design constraints in this location including the terrain, the Wake Forest Historic District, dense development, and driveway encroachment on the rail ROW. Coordination with the Town and with the North Carolina State Historic Preservation Office (NC-HPO) took place as the new bridge design was developed. (See Section 2.2, Preferred Alternative by Section, in the Tier II FEIS for more information.) Section 2.2 also includes expanded public involvement activities related to this issue. The public was provided an opportunity to view and comment on the underpass at a public update meeting (PUM) on May 15, 2012. Strong opposition to the underpass was voiced at the PUM, particularly from the businesses and residences impacted by the new design. A meeting with the Town and with a representative from the NC-HPO was held on Monday, June 18, 2012, to discuss the responses, and the Town stated that the impacts of a grade separation at this location were too severe. It was decided that a minimal footprint pedestrian bridge (i.e., steps only, no ramps) over the railroad would be a better fit at this location. The pedestrian bridge would minimize impacts to adjacent businesses, yet it would still allow students from Wake Forest Elementary School to cross the tracks. The maintenance of pedestrian access across the railroad at Elm Street is included in Table 4-28 of the Tier II FEIS.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
g. On Page 4-107 of the DEIS, it is unclear which crossings would be closed due to consolidation under alternatives NC113 or NC2. For the Ridgeway Volunteer Fire Department the notable difference in 5-minute response coverage areas between the No Build versus Build scenarios is of potential concern. Until the budgeted satellite facilities in Warren County (Cited on Page 4- 1 08) are built, further impeding emergency response times in this area is not recommended. It is recommended that different locations for crossing consolidations be assessed to increase the 5-minute response coverage area in the Build scenarios for this community and that the results from such an assessment be included in the FEIS.	The DEIS designs included a grade separation at Ridgeway Warrenton Road, approximately three quarters of a mile to the north of the Ridgeway Volunteer Fire Department (VFD), in keeping with the County thoroughfare plan. Following the Tier II DEIS, coordination with Warren County Fire and EMS representatives led to development of a new design for a bridge over the railroad located closer to the Ridgway VFD, to replace the design at Ridgway Warrenton Road. The Warren County thoroughfare plan was modified, with planned routing that include a grade separation in the new location. Chapter 4 of the Tier II FEIS contains a discussion of the GIS analysis of the 5-minute response time coverage under the new design. The results indicate some difference between the overall EMS service area for the Ridgeway Volunteer Fire Department under the Preferred Alternative compared to a No Build scenario. However, the difference is less substantial than the difference for the designs in the Tier II DEIS.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
h. Section 4.11.6 addresses Relocations and Associated Right of Way Costs and provides a summary of the state DOT relocation policies within the project areas as well as the number of residential and business relocations by SEHSR project section and alternative (pages 4-130 and 4-131). The number of potential residential relocations proposed for this project is not negligible. Potential impacts to the human environment from inadequate housing can include crowding and increased disease transmission, a loss of protective social connections, and general declines in health (Bashir, 2002; Fullilove, 2004). This section of the DEIS does not assess the availability of comparable replacement properties in the project areas. It is recommended that the FEIS impact analysis include a general survey of available comparable replacement properties (e.g. average local rental unit vacancy rates and average number of active residential and commercial real estate listings) to provide a description of typical availability by project section. Table 4-35 is not totaled for each of the alternatives (VA1, VA2 and VA3 and NC1, NC2 and NC3). EPA and CDC note that number of expected relocations for each alternative appears to be the same or of similar magnitude. However, it would be helpful to discern numerically if there are any differences between the alternatives. Alternative VA1, VA2 and VA3 have 124/30,119/1 9, and 124/30, residential and business relocations, respectively. Alternative NC1, NC2 and NC3 have 97/51, 105/48, and 91/81 residential and business relocations, respectively. It is important to note that VA2 has fewer residential and business relocations overall than either VA1 or VA3. Alternative NC3 has the least residential relocations (91) but the greatest number of business relocations (81). Furthermore, 54 of the 8 1 business relocations for NC3 all occur in Segment V in the City of Raleigh. There is no further description of the magnitude or intensity of this potential impact. The FEIS should include an analysis of the potential Regional economic impact associated with the different alternatives and their business impacts (e.g., Number of employees, opportunities for relocation, etc.).	Section 4.11 of the Tier II FEIS has been amended to include this analysis for the Preferred Alternative.

AG33 US Environmental Protection Agency Regions 3 & 4, Heinz J. Mueller, NEPA Program Office (Agency Contact - Christopher Militscher), Project FRA-D40344-00	
Comment	**Response**
5) Farmland Impacts a. Section 4.3 addresses Prime and Other Important Farmlands. In the analysis of environmental consequences to prime and other important farmlands the narrative notes that the NRCS did not provide the Land Evaluation Criterion Values for project sections AA through C requested by September of 2009. The DEIS further notes that the 45-day review period had passed and, therefore, these sections were assumed to require no mitigation for farmland losses. The statement on Page 4-17 concerning 'no compensation' for farmland loss is also not believed to be accurate. As with any business, active farmlands would still potentially qualify for compensation. These should be verified by the NRCS in the FEIS.	Attempts were made to obtain NRCS input on Sections A through C, and to note any changes to prime and important farmland impacts caused by alignment adjustments made between the Tier II DEIS and FEIS. This information is presented in Section 4.3 of the Tier II FEIS.
b. Page 3-76 of the DEIS states that Agriculture is an important element of the economies of both Virginia and North Carolina. Specifically noted are Dinwiddie County, VA and Warren County, NC, where agriculture sales amount to 23% of total sales within these counties. Additionally, it states that 'agri-tourism' is the most common tourism activity in Franklin County, NC. Table 4-9 includes the impacts of the three alternatives by State and the prime and State important farmland for each section of the project. Total impacts (rounded to a tenth of an acre) for each alternative and each State is not included and should be addressed in the FEIS. EPA recognizes that prime farmland and other impacts for each section are included in the executive summary tables (e.g., ES-9). However, it is difficult to make a comparison between the alternatives (i.e., VA1, VA2, VA3, NCI, NC2, and NC3) without providing the appropriate totals. The FEIS should include this information.	As stated in Section 2.2 of the Tier II DEIS, the Project Study Area was divided into 26 segments. A preferred alternative will be selected for each of the 26 sections, and is independent of the selection made in any other segment. For this reason, a tally of all VA1/NC1 segments, collectively, would not influence the selection within an individual segment. For example, the selection of Alternative VA1 for Section D would not generate a preference for Alternative VA1 in Section E. The FEIS provides total prime and important farmland impacts for each state in Section 4.3.
c. Impacts to prime and State important farmland should be avoided and minimized to the extent practicable. The transportation agencies should also consult with the Virginia Department of Agriculture and Consumer Services and the North Carolina Department of Agricultural and Consumer Services for other applicable requirements concerning farmlands (e.g., In North Carolina, the Voluntary Agricultural District program) and appropriate compensation proposed for impacted prime and State important farmlands.	Comment noted.

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Comment	**Response**
6) Noise and Vibration Impacts a. Section 4.7 of the DEIS explains in depth the criteria used for determining noise and vibration impacts within the project area that will result from the proposed project. The DEIS includes an analysis of projected Noise Impacts in Table 4-16 and projected Vibration Impacts in Table 4-18. These tables summarize potential impacts for each section alternative. Noise and vibration impacts not only impact the socioeconomic wellbeing of neighborhoods, they also impact human health outcomes (Evans, 2004). Some populations are particularly sensitive to noise and/or vibration impacts. There appears to be severe noise impacts anticipated in many section alternatives (in Tables 4-16), but it is unclear what particular populations will be impacted by this noise. It is not possible to determine if specific or vulnerable populations will bear more or less of the potential environmental consequences from noise impacts. It is recommended that the FEIS include in the analysis of noise impacts a clear characterization of the populations impacted within each project segment and/or alternative. Any mitigation measures developed should consider the specific population for which they are being developed so as to more effectively protect public health and well-being and promote environmental justice. Likewise, for vibration impact mitigation development, specific population characterization should to be considered by FRA, where applicable.	FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (October 2005) procedures have been followed for this Project. It is anticipated that mitigation will be used to abate for noise and vibration impacts, particularly severe impacts, and will be evaluated during final design. It should be noted that prior to determination of mitigation, FRA's procedures provide for more detailed impact analysis during the final design stage. It is possible that some of the potential severe impacts identified in the Tier II DEIS and Tier II FEIS will be determined to be moderate or no impact when more detailed survey-level information is available.

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7) Mobile Source Air Toxics (MSATs) a. Sections 3.6.1.6,4.6.2 (Locomotive Operations) and 4.6.5 (Highway Vehicle Operations) and Appendix P generally address potential MSAT issues. One obvious deficiency in these sections is the discussion and identification of potential near-roadway/near-railway sensitive receptors, such as day care facilities, schools, hospitals and nursing homes. If there are no existing or future near-roadway/near-railway sensitive receptors, there would not be a need to perform any type of qualitative or quantitative analysis regardless of the Federal Highway Administration (FHWA) guidance criteria. b. While EPA does not anticipate that MSAT impacts to be significant from the standpoint of the current scope of the proposed high speed rail improvements as well as from roadway access changes, the FEIS might include an analysis of sensitive receptors that are near the proposed improvements and what changes in traffic patterns might occur at these locations. The FEIS might also indicate the relative significance of these changes in relation to the estimated existing MSAT emissions conditions.	The FEIS MSAT discussion has been updated to more fully address potential MSAT issues. Please note that sensitive receptors along the corridor were not identified for the Tier II FEIS as this task is no longer recommended by FHWA for qualitative analyses. Performing the highly intensive task of identifying sensitive sites from Raleigh, NC, to Richmond, VA, and looking at anticipated traffic volume change for each of these sites would not produce meaningful information, especially given the low volumes of the roads along the Project and the fact that MSATs are anticipated to decrease throughout the United States based on improvements in vehicle standards.
8) Mitigation During Construction and Operation a. Under Sections 4.7.3.1 and 4.7.3.2 of the DEIS, EPA and CDC recommend that the concept of a community liaison program should be developed and implemented during construction and that reducing noise and vibration impacts for long-term operations should be given full consideration by the transportation agencies. The use of building insulation and noise barriers should continue to be evaluated under current FRA other transportation agency criteria. FRA, NCDOT and DRPT should continue to coordinate with impacted receptors, local community officials and other interested parties to protect public health and wealth. This coordination should be documented in the FEIS. Any environmental commitments identified during additional NEPA planning and final design efforts for the preferred alternative should be included in the Record of Decision (ROD) for the proposed project.	As stated above, FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (September 2012) procedures have been followed for this Project. A Detailed Noise Analysis will be conducted during final design, which will allow for site-specific noise predictions and mitigation evaluations for full consideration of noise impacts at specific receptors identified through the initial assessment. While the initial assessment involves the use of generalized, overall noise source levels and simplified noise projection models, a Detailed Noise Analysis considers the noise from each subsource component, with each component defined in terms of a noise generating mechanism (e.g., propulsion, wheel-rail, aerodynamic), reference noise level, location along the train, and speed dependency. The Detailed Noise Analysis also uses more precise methods to estimate adjustments for horizontal and vertical geometry, ground absorption, and shielding. The analysis is completed after preliminary engineering and NEPA have been completed because more detailed information is required to perform a Detailed Noise Analysis, including the type of vehicle equipment to be used, train schedules, speed profiles, plan and profiles of guideways, locations of access roads, and landform topography, including adjacent terrain and building features. Recommendation for a community liaison program is noted

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9) Natural Resources Impacts - Jurisdictional Streams and Wetlands a. Sections 3.1, 4.1.1 and Appendix H provide information on jurisdictional streams and surface waters, drainage basins and related information. The FEIS should identify if the streams are perennial, intermittent or ephemeral.	Section 3.1 has been revised to note that identification of the perennial/intermittent/ephemeral nature of affected streams will take place during Section 401 Water Quality Certification and Section 404 permitting required by of the Clean Water Act (CWA) (33 USC 1344).
b. Tables 4-1 and 4-2 provide information of the potential information to jurisdictional streams for the different alternatives in Virginia and North Carolina. Of the totals provided in the tables, the linear feet of impact should be identified in the FEIS to include the quantification of impact to 303(d) listed impaired waters (from Appendix H) and the cause(s) of the water impairment.	Potential impacts to jurisdictional stream channels with Section 303(d) impaired waters were added to Tables 4-1 and 4-2 of the Tier II FEIS for the Preferred Alternative, and discussion regarding the source of the impairment was added to Section 4.1.1.1.
c. Section 4.1.1.2 includes impacts to riparian buffers and other jurisdictional waters (e.g., Lakes, ponds and reservoirs). Water supply reservoirs should be further identified and potential impacts detailed in the FEIS.	Potential impacts to water supply reservoirs were included in Section 4.1.1.2 of the Tier II FEIS for the Preferred Alternative.
d. The Virginia minimum/maximum of stream impact ranges between 27,304 and 31,163 linear feet. The North Carolina minimum/maximum of stream impact ranges between 11,774 and 18,292 linear feet. The DEIS sections should have clearly described how impacts are being calculated (e.g., Proposed right of way, construction limits plus 25 feet, etc.).	Section 4.1.1.1 of the Tier II FEIS was amended to clarify exactly how stream impacts were calculated.
e. For the Tar-Pamlico alternatives NC1, NC2 and NC3, the stream impact numbers do not appear to be accurate for the minimum/maximum (i.e., 5,330; 7,025; and 7,739 linear feet, respectively). Similarly, the stream impact numbers for the Neuse watershed in Table 4-2 also appear to be inaccurate (i.e., 5,238; 4,211; and 5,082 linear feet). All of the impact numbers presented in the tables should be re-calculated and confirmed in the FEIS. The FEIS should provide this information as well as the relevant avoidance and minimization efforts. Referring to Appendix H, the transportation agencies should explain the VA classification and special standard designation.	The river basin minimum and maximum impact figures shown in Tables 4-1 and 4-2 of the Tier II DEIS are correct. The minimum was defined as the combination of the alternatives with the least impact for the respective sections in the basin (e.g., for the Roanoke Basin in North Carolina, that would be NC2 in Section L (922 lf); NC1/NC3 in Sect M (442 lf); and, NC1/NC2/NC3 in Section N (41 lf), Section O (53 lf), and Section P (777 lf), which altogether totals 2,235). The impact numbers for the Preferred Alternative presented in the various tables of Section 4.1 of the Tier II FEIS have been confirmed. Section 4.1.6 of the Tier II FEIS was amended to include additional avoidance and minimization efforts. Appendix H of the Tier II FEIS explains the Virginia classification and special standard designation.

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f. According to EPA's estimate, 303(d) listed impacts for Virginia and North Carolina streams from Appendix H are approximately 14,960, 15,520, and 15,001 linear feet for VA1, VA2 and VA3, respectively, and 849,849, and 664 linear feet for NC1, NC2 and NC3, respectively. For Virginia, the potential impacts to 303(d) listed streams is relatively substantial (i.e., 2.83, 2.94 and 2.84 miles, respectively) and EPA requests that FRA consider very pro-active avoidance and minimization efforts in these impaired watersheds as well as the most stringent Best Management Practices (BMPs) for stormwater management. The DEIS identifies two primary avoidance and minimization measures for reducing jurisdictional impacts, including reducing fill slopes and the conservative use of culverts.	As noted in response 9b above, potential impacts to jurisdictional stream channels with impaired waters (and the source of the impairment) were added to Tables 4-1 and 4-2 of the Tier II FEIS for the Preferred Alternative. Proposed avoidance and minimization efforts are updated in Section 4.1.6 of the Tier II FEIS.
g. Once the preferred alternative is selected, EPA recommends that FRA begin the evaluation of bridging versus culverts during the final design process. FRA should seriously consider the use of bridges over culverts for major drainage structures (e.g., Greater than or equal to 3-barrel reinforced concrete box culverts - RCBCs) and/or where there are potential floodplain/floodway issues associated with crossing. The discussion of avoidance and minimization measures used to reduce impacts to streams, wetlands and other jurisdictional waters from Section 4.1.6 should be more robust and site specific once the preferred alternative is selected. Please include other appropriate measures such as sequencing, time-of-year restrictions for sensitive ecosystems, engineering controls, monitoring, and adaptive management techniques. The FEIS should further discuss how the proposed project and associated activities will not contribute to additional impairment of the 303(d) listed streams.	Avoidance and minimization efforts, including a review of crossing structures, will be evaluated during final design. The FEIS includes a list of avoidance and minimization measures (see Section 4.1.6). Bridges have been included in the designs where practicable. However, a key difference should be noted regarding the design of bridges for passenger HSR projects compared to highway projects due to restrictions on grade (generally 1%). To raise the grade to carry rail up and over a bridge can result in impacts along the rail line for a long distance on the approach and departure from the bridge. Due to these impacts and associated costs, culverts are often a more practicable option. For new culverts constructed in streams, the inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, the inverts will be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

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h. Jurisdictional wetland impacts are specifically identified in Tables 4-6 and 4-7. For Virginia, Alternative VA2 has substantially more wetland impact than either VAI or VA3. The minimum/maximum numbers for the Chowan watershed in Table 4-6 do not appear to be accurate. For VA1, the impact is 9.46 acres. For VA2, the impact is 17.74 acres. For VA3 the impact is 9.5 acres. The difference in the minimum/maximum for the impacted wetlands in North Carolina is also potentially substantial (i.e., 1.65 acres versus 5.31 acres). The minimum impact number for the Neuse watershed is not 0.25 acres but 0.27 acres. All of the totals and calculations presented in the DEIS should be reaffirmed for the FEIS. The DEIS does not provide a specific identification of the function or quality of the wetlands being impacted. For North Carolina jurisdictional wetlands, the FRA should identify and provide the North Carolina Division of Water Quality (NCDWQ) score or the North Carolina Wetlands Assessment Methodology (NCWAM) scoring in the FEIS.	As stated in Section 2.2 of the Tier II DEIS, the Project Study Area was divided into 26 segments. A preferred alternative will be selected for each of the 26 sections, and is independent of the selection made in any other segment. For this reason, a tally of all VA1/NC1 segments, collectively, would not influence the selection within an individual segment. For example, the selection of Alternative VA1 for Section D would not generate a preference for Alternative VA1 in Section E. The need for specific identification of wetland functions or quality (beyond that determined during the jurisdictional determination process) will be determined during the Section 404 permitting process. If USACE determines the need for impacted wetland functional/quality analysis in order to evaluate mitigation options, then an appropriate method will be applied.
i. In general, FRA should identify any special wetland type system or high quality wetland system that might be potentially impacted such as a headwater system or Cypress-gum forest. Temporary and permanent impacts should also be identified and disclosed during the final NEPA process and during the Section 404 permitting process. The issue of remnant wetland systems that are not directly impacted 'from proposed dredge and fill activities should also be discussed during future Section 404 coordination with resource and permitting agencies. Regarding the maps in Appendix Q, the Transportation agencies should confirm that all proposed impacts to jurisdictional resources are identified and included in the appropriate tables in the FEIS.	The need for specific identification of wetland functions or quality (beyond that determined during the jurisdictional determination process) will be determined during the Section 404 permitting process. Temporary and permanent impacts will be specified during the 404 permitting process as well as appropriate “wetland function/quality” determination if required by USACE. The issue of remnant wetland systems that are not directly impacted from proposed dredge and fill activities will be addressed with the Corps during 404 permitting.
j. All jurisdictional delineations should be updated and confirmed with the U.S. Army Corps of Engineers (USACE) and included in the FEIS for the preferred alternative. EPA understands that National Wetlands Inventory (NWI) mapping can be potentially inaccurate. The transportation agencies need to confirm these differences between the NWI mapping and the delineated jurisdictional mapping efforts in the FEIS.	NWI mapping was only used as one of many mapping aids in the jurisdictional determination process. All wetlands listed in the Tier II DEIS were field delineated and verified by the USACE. The Project Team is working with USACE to re-verify the jurisdictional determination for all potentially impacted wetlands on the Preferred Alternative. This information is listed in Section 4.1.2 of the Tier II FEIS.

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k. Compensatory mitigation for jurisdictional impacts to waters of the U.S. is discussed on Page 4.1.6.3 of the DEIS. FRA should immediately begin consultation with the respective regulatory agencies once a preferred alternative is identified and more accurate impact numbers are verified with additional final design efforts. Estimated compensatory mitigation needs should be provided to the N.C. Ecosystem Enhancement Program as soon as possible following the identification of the preferred alternative. Because there are no mitigation banks currently available in the Roanoke Rapids (03010106) hydrologic unit (HU), the transportation agencies should also begin immediate coordination with the regulatory agencies for compensatory mitigation of the impacts in that watershed. To be consistent with the watershed approach that also includes permittee-responsible mitigation, EPA recommends identifying and prioritizing the immediate and long-term aquatic resource needs within the impacted watersheds. This information will be useful in determining the approach to compensatory mitigation and may require a combination of on-site and off-site mitigation. The transportation project team should work with EPA and other state and federal agencies to develop an acceptable compensatory mitigation plan, including the identification of potential on-site mitigation opportunities. FRA should also consider evaluating the use of the 12-digit HUC for compensatory mitigation needs.	Mitigation for stream impacts is discussed in Sections 4.1.1.1, 4.1.1.2, and 4.1.6, and of the Tier II FEIS. Mitigation for stream and wetland impacts will be secured prior to project permitting. While 12-digit HUCs will be examined, mitigation will be secured based on USACE and state regulations in place during the permitting process.
l. Regarding other general aquatic resources issues, please provide more detailed information in the FEIS concerning the potential impacts to other jurisdictional waters (such as lakes, ponds and reservoirs). EPA requests that FRA consider the need for compensatory mitigation for these resources as well, and provide the rationale supporting the determination. For the FEIS, please elaborate on the construction practices that will be implemented to protect stream bottom habitat and the integrity of riparian buffers. Confirm that sediment and erosion control measures will not be placed in wetlands or streams and that outfalls will be designed to prevent adverse impacts to the receiving stream or wetland. For additional water quality issues, activities resulting in impacts include fertilizer and pesticide application during re-vegetation. In the FEIS or Record of Decision (ROD), please provide detailed application program information that fully explains the need to use these agents, the agents to be used, frequency, timing, qualification of applicators, etc. The FRA should also comply with the requirements under Executive Order 13112 on Invasive Species. On-site mitigation, landscaping for future station locations, and other associated activities should prevent the establishment and/or spread of invasive plant species and native plants should be utilized.	More detailed information concerning the potential impacts to “other waters” and mitigation may be developed during the final design and permitting phases of the Project. Section 4.1.6.2 of the Tier II FEIS was updated to include: • Sediment and erosion control measures will not be placed in wetlands or streams and that outfalls will be designed to prevent adverse impacts to the receiving stream or wetland. Impacts to riparian buffers and stream bottom habitat will be minimized to the extent practicable. • All relevant directives with regards to invasive species will be complied with during construction.

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10) Natural Resources Impacts - Terrestrial Forests a. Terrestrial forest community impacts are detailed in Section 4.10.1.1 of the DEIS. Table 4-24 provides the potential project impacts to natural communities in acres for each section of the project under each alternative. However, the total impacts to terrestrial communities for each alternative are not summarized in the table. Furthermore, the table lists maintained/disturbed areas that are not necessarily 'natural communities'. The table does not define how the impacts were calculated (e.g., Right of way versus construction limits). Efforts to minimize clearing should be made to minimize impacts to terrestrial forest communities. (Note: Removed Page Break during PDF Redo)	As stated in Section 2.2 of the Tier II DEIS, the Project Study Area was divided into 26 segments. A preferred alternative will be selected for each of the 26 sections, and is independent of the selection made in any other segment. For this reason, a tally of all VA1/NC1 segments, collectively, would not influence the selection within an individual segment. For example, the selection of Alternative VA1 for Section D would not generate a preference for Alternative VA1 in Section E. EPA is correct that Maintained/Disturbed is not a natural community. However, NCDENR requires that all relevant ecosystem impacts be quantified, including those for Maintained/Disturbed communities. Impacts were calculated using Southeast GAP data for the slope stakes buffered by 25 feet.
11) Natural Resources Impacts - Threatened and Endangered Species a. Section 4.10.2.1 addresses issues associated with the Endangered Species Act. There appear to be several protected species that are undergoing informal Section 7 consultation with the U.S. Fish and Wildlife Service (USFWS), including the Roanoke logperch, Dwarf wedgemussel and the James River spinymussel. EPA defers to the USFWS and State wildlife agencies on these issues but recommends that these unresolved issues be addressed by FRA prior to the issuance of the FEIS.	The Project Team has continued to coordinate with USFWS regarding these species as discussed in Section 4.10.2 of the Tier II FEIS.
12) Minority and Low-Income Populations: Environmental Justice (Appendix A) a. The discussion in Section 4.11.5 on Executive Order 12898, Environmental Justice (EJ) should be revised to the actual language in the order that can be found at http://ejnet.org/ej/execorder.html.	Section 4.11.5 of the Tier II FEIS has been amended to address this comment.
b. The following statement on Page 4-118 needs to be reconsidered or fully explained in the FEIS: *As shown in Tables 3-20 and 3-21 in Chapter 3, there are no concentrations of Hispanic populations in the study area; thus, the analysis of racial and ethnic minorities focuses on race only.* The Executive Order references minority populations and low-income populations. Hispanic populations are minority populations. The DEIS EJ analysis should be performed with regard to all minority and low-income populations.	Sections 3.11 and 4.11 of the Tier II FEIS have been corrected and updated, as well as data updated to year 2010.

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c. The tables found in the FEIS do not appear to be consistent. The application of the EJ criteria using the 50% affected area or the greater than 10% threshold for the appropriate unit of geographic analysis does not appear to be consistent with CEQ's EJ Guidance under NEPA. The CEQ guidance states that minority populations should be identified where "either: (a) the minority population of the affected area exceeds 50 percent or (b) the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis." It appears that in some cases both procedures are used for a single analysis. However, Brunswick County (VA) which is 54% minority and therefore exceeds the first criteria is not included as an area of potential EJ concern. EPA recommends that it be considered an area of EJ concern in the FEIS. In some cases, it appears that minority communities in the study area are not flagged as being areas of EJ concern because they do not exceed the county average by more than 10%. Because these communities are more than 50%, FRA should identify them as communities with potential EJ concerns. The DEIS identifies the State of Virginia as being 28% minority. Areas within the project study area that meet the 50% affected area criteria should be identified as areas of EJ concern.	Sections 3.11 and 4.11 of the Tier II FEIS and the data in each chapter have been corrected and properly used, along with new FHWA EJ guidance. Also, the data was updated using 2010 data.
d. The tables on Pages 4- 121 to 4- 123 need to be clarified in the FEIS. The EJ analyses in these tables are presented as either minority or low-income communities. If they meet either criterion, they are considered to be areas of potential EJ concern. All EJ communities should be evaluated for potential impacts. For additional advisory comments on EJ that should be addressed in the FEIS, please see Attachment B.	Tables 4-38 and 4-39 of the Tier II FEIS have been updated using 2010 data for the Preferred Alternative. Also, Section 4.11.5 of the Tier II FEIS has been updated using new FHWA EJ guidance.

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13) Advisory Comments on Environmental Justice (Appendix B) In addition to those Environmental Justice (EJ) issues identified in Attachment A, the FEIS should also consider the following assessment and evaluation: a. Chapter 4 of the DEIS uses the following criteria to define and identify low income populations, "Low-Income - Defined by the US Department of Transportation (USDOT) Order on Environmental Justice, low-income refers to a person whose median household income is at or below the Department of Health and Human Services poverty guidelines. The data available for populations on a detailed geographic basis is the poverty threshold, which is related to the poverty guideline as explained in the Tier I EIS for this project; consistent with the Tier I EIS, the poverty threshold is used for this analysis." This seems to indicate that the threshold values in fact are the poverty threshold. The DEIS did not specifically identify this value. It is not listed in Table 4-34 in Chapter 4. The table lists the percentage below poverty for each county and community in the study area. If those values are being used as the thresholds: Chesterfield, VA, Colonial Heights, VA, Dinwiddie, VA, and Brunswick, VA should be identified as areas of concern, because these areas all have low-income population percentages that exceed the county thresholds. For example, Brunswick, VA includes a low-income population of 18% and was not identified as an area of concern. Alberta, VA, with a low-income population percentage of 16% was identified as such, even though they are both in Brunswick County with a low-income population percentage of 17%. From the analysis provided in the DEIS, the application of the criteria does not appear to be consistent.	Tables 4-38 and 4-39 of the Tier II FEIS have been updated using 2010 data for the Preferred Alternative. Also, Section 4.11.5 of the Tier II FEIS has been updated using new FHWA EJ guidance.

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b. Questions arise related to the appropriate use of threshold values. An examination of the results of the evaluation process leaves a number of questions and concerns that need to be addressed in the FEIS. First, the assessment process seems to be highly subjective. Even though guidelines are provided for how assessment and identification of low-income and minority populations is to be conducted, the results do not seem to follow those guidelines. Clearly, populations that are more than 50% minority are not identified as communities of concern. In looking at the make up of the population of this country, and in looking at the populations of the states, it seems unreasonable to fail to identify any community that is more than 50% minority as not being a community of Environmental Justice concern. The CEQ guidance suggests that if the first benchmark is not met, then the second benchmarking technique should be employed. EPA recommends that conservative approaches to identifying 'at risk populations' should be employed in the E.J. analysis. The approach taken in the DEIS does not appear to be conservative, and could potentially put additional persons 'at risk' from the negative environmental impacts from the proposed project.	Section 4.11.5 of the Tier II FEIS has been corrected and updated using new FHWA EJ guidance.
c. The assessment criteria chosen to identify the low-income populations in the study are vague and not equally applied. The assessment does not identify what the relevance the state percentages of minority and low-income populations play in the overall analysis. Many of the communities in the study have minority and/or low-income populations that exceed the state averages. It is not clear if this information was used in the assessment and if not, why was the information included in the DEIS. The FEIS should clearly identify the relevance of the state percentage, the county percentage, the project study area percentage and the potential impacted minority and low-income residents. All comparative and relevant data should be used in the FEIS re-assessment.	Section 4.11.5 of the Tier II FEIS has been corrected and updated using new FHWA EJ guidance

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d. The potential impacts on the minority and low-income populations in the study area should be fully disclosed. It appears that determinations were made based upon the use of alignments associated with previous construction and existing infrastructure. Any potential additional construction activities associated with the proposed project, including station locations should be included in the FEIS re-assessment. Based upon the reassessment, the actual negative or adverse impacts to the community should be reasonably identified.	Section 4.11.5 of the Tier II FEIS has been corrected and updated using new FHWA EJ guidance. Also, Section 4.11.2.1 has been amended to include a new table and discussion of community impacts and benefits from the project. The FEIS does not evaluate the environmental impacts of stations or recommend specific station locations or design needs, because the development of stations is a unique undertaking at an individual location. As noted, generalized sites were evaluated, but only to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility to the larger transportation network. Applicable governments at the individual station locations will perform separate environmental evaluations and make the final decision on the station location and design at a later date. It should be noted that Chapter 2 of the Tier II FEIS contains an expanded discussion of station design standards, and the types of information and detailed studies that those future NEPA evaluations would likely need to contain. And, as noted in revised Section 4.17 in the Tier II FEIS, locating HSR stations in center cities rather than greenfield or suburban areas is likely to avoid and minimize many of the project's potential direct and indirect environmental impacts.
e. It is assumed that the project will be beneficial to all parties in the project study area. A detailed socio-economic evaluation should be discussed in the FEIS to fully describe the claimed benefits. The FEIS re-assessment should fully address the issue of adverse and disproportional impacts to EJ communities in relation to documented benefits from the proposed project.	Chapter 1 of the Tier II FEIS provides additional information on the benefit of the project in terms of Purpose and Need. Section 4.11.1 has been amended and updated to address socio-economic changes and impacts. Also, Section 4.11.2.1 of the Tier II FEIS has been amended to include a new table and discussion of community impacts and benefits from the project.
f. The re-assessment should describe how the community is meaningfully being involved in the decision-making process.	Chapter 7 of the Tier II FEIS has been expanded to better describe the outreach efforts undertaken throughout the Project Study Area. As evidenced by the public hearing attendance, the project has received good participation from all affected communities.
g. The re-assessment should also utilize more current U.S. Census data and other more recent socio-economic data sources.	Various sections of Chapters 3 and 4 of the Tier II FEIS have been updated using 2010 Census data as well as 2006-2010 American Community Survey data.
h. From the table provided below, EPA suggests that practically all of the study areas listed below could indeed be identified as areas of concern, Table 3-25.	Chapters 3 and 4 of the Tier II FEIS have been updated using new FHWA EJ Guidance as well as 2010 Census data and 2006-2010 American Community Survey (ACS) data.

AG21 US Army Corps of Engineers, Norfolk District - Keith B. Lockwood	
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The Norfolk District Corps of Engineers is a cooperating agency in accordance with the National Environmental Policy Act (NEPA; 40 CFR 1501.6). The Norfolk District is providing comments on the project from Richmond to Norlina, NC; the Wilmington District is reviewing the remaining portion of the project from Norlina to Raleigh. We have provided page-specific comments about the document on the attachment. 1) Based on the information in the document, the project will involve a discharge of fill into waters of the United States and will require authorization from the Corps of Engineers. The Norfolk District Engineer will ultimately make a permit decision after conducting a full public interest review, following review of the Final EIS and the responses to a public notice we will release upon receipt of a complete application.	Comment noted. The Project Team will coordinate with USACE through the Tier II FEIS, ROD, and final design/permitting phase of the project.
2) In comments we provided during scoping for the Tier II EIS, by a letter dated June 27, 2003, we noted that existing rail corridors should be used as much as possible for the project, and that avoidance of impacts to aquatic resources should be an important consideration in the development of alternatives.	The Project designs attempt to maximize use of the existing rail corridor. However, due to the need to straighten curves (which relates to the Purpose and Need for the project) or to avoid impacts to other resources (such as historic properties), there are occasions when it is necessary for the designs to extend outside the existing corridor.
3) We also indicated that conceptual options for compensating for unavoidable impacts to aquatic resources should be presented in the Tier II Draft EIS, and that potential compensation sites should be identified as part of the development of alternatives. While it is clear that minimizing impacts to aquatic resources was an important consideration in the development of the alternatives, the proposed impacts in Virginia are substantial. Wetland impacts are estimated to range from approximately 22 to 32 acres, and stream impacts are estimated to range from approximately 27 to 31 thousand linear feet.	Section 4.1.6 of the Tier II FEIS was amended to clarify proposed project compensation.
4) We have evaluated and compared the alternatives in each of the sections of the project in Virginia and the sections south to and including Norlina in NC. As discussed with your consultants, some sections are of concern, because they differ in impacts to aquatic resources, but other resources will be impacted if the aquatic resources are avoided. These segments were reviewed and discussed during an interagency field visit on May 19, 2010.	Comment noted. The Project Team will coordinate with USACE through the Tier II FEIS, ROD, and final design/permitting phase of the project

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5) In accordance with the 404(b) (1) Guidelines, the Corps can authorize only the least environmentally damaging practicable alternative (LEDPA). Below is a summary of our consideration of the various alternatives in each section, with a preliminary determination of the LEDPA for each section. We are providing these preliminary determinations of LEDPA in order to assist you in identifying the selected alternative. For each, we have provided an explanation of our preliminary determination, and we have identified factors we are willing to consider further for those sections where the LEDPA is not clear. We have considered operability/constructability, cost, and impacts to the social/economic factors as well as the natural environment in making these preliminary determinations.	Comment noted. The Project Team will coordinate with USACE through the Tier II FEIS, ROD, and final design/permitting phase of the project
a. For the following sections, the impacts to aquatic resources were the same regardless of the alternative, and there were no impacts to federally listed threatened or endangered species or more than minimal differences in impacts to other resources: AA, BB, CC, C, F, and I.	Comment noted.
b. For the following sections, there were relatively minimal differences between the alignments with regard to aquatic resource impacts: i. DD: While VA2 has somewhat more stream impact, it has somewhat less wetland impact. More importantly, you have determined that this alternative has a negative rating for operability/constructability, whereas VA1 is neutral and VA3 is positive. Either VA1 or VA3 appears to be the LEDPA.	Alternative VA3 is the preferred alternative in the Tier II FEIS for Section DD.
ii. A: VA2 has less impact to aquatic resources than VA1 or VA3, and the same effect on historic resources. It costs somewhat more, but has a neutral rating for operability/constructability while VA1/VA3 has a negative rating. VA2 appears to be the LEDPA.	Alternative VA2 is the preferred alternative in the Tier II FEIS for Section A.
iii. E: VA2 has more stream and wetland impacts than VA1/VA3. Costs are similar and historic resource impacts are the same. VA1/VA3 appears to be the LEDPA.	Alternative VA1 is the preferred alternative in the Tier II FEIS for Section E.
iv. H. VA1/VA3 has less stream and wetland impacts and is rated as positive for operability/constructability, although VA2 costs somewhat less. VA2 is rated neutral. VA1/VA3 appears to be the LEDPA.	Alternative VA1 is the preferred alternative in the Tier II FEIS for Section H.
v. M. This section is located in NC. NC2 has more stream impact than NC1/NC3. Although it costs somewhat less, it is rated as negative for operability/constructability whereas NC1/NC3 is rated as neutral. NC1/NC3 appears to be the LEDPA.	Alternative NC1 is the preferred alternative in the Tier II FEIS for Section M.

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c. For the following sections, there were relatively substantial differences between the alternatives with regard to aquatic resource impacts: i. B. VA2 has substantially less stream impacts and somewhat less wetland impacts and the same historic resource effects as VA1/VA3. However, VA2 is rated negative for operability/constructability, whereas VA1/VA3 is rated as neutral. VA2 is less costly than the other alternatives. Given that VA2 is projected to impact 450 linear feet less of stream than VA1/VA3, we would like to discuss further the factors that led to a negative rating for this alternative before making a preliminary determination of the LEDPA. We need further justification that this alternative is not practicable since it appears to be less environmentally damaging.	Alternative VA1 is the preferred alternative in the Tier II FEIS for Section B. As discussed during an interagency meeting on April 12, 2011, the difference in stream and wetland impacts between the alternatives will be significantly reduced from what was presented in the Tier II DEIS. In the Tier II DEIS, Alternative VA1 had approximately 450 additional feet of stream impacts and 0.35 acres of wetland impacts compared to Alternative VA2. Of these, more than 300 feet of stream impacts and 0.3 acres of wetland impacts associated with Alternative VA1 are attributed to the proposed new access road that intersects Carson Road. This road has been re-designed in such a way as to minimize or negate the stream and wetland impacts. Any remaining stream and wetland impacts will be fully mitigated, and the design work will include coordination with the USACE. The revised stream and wetland impacts for Alternative VA1 appear in the Tier II FEIS. With these reductions, the stream and wetland impacts for Alternative VA1 are more in line with Alternative VA2. At the April 12, 2011, meeting, USACE noted that if the stream and wetland impacts from the access road can be removed for the Alternative VA1, this alternative is acceptable as the preferred alternative in Section B.
ii. D. This section of the project is of greatest concern to the Norfolk District. VA2 impacts more than seven acres of wetlands, while VA1/VA3 are on common location and impact about one acre. VA2 not only impacts more wetlands, it will cross through an expansive and complex wetland system. While there is an existing abandoned fill corridor through that system, locating the proposed railway through the wetland complex will greatly increase the fragmentation of the system by the additional noise and activity associated with the trains and construction, in addition to the direct loss of wetlands from the footprint of the fill. VA2 also has about 500 linear feet more of stream impact than VA1/VA3. However, the U. S. Fish and wildlife has determined that VA1/VA3 may affect/is likely to adversely affect the Michaux's sumac (Rhus michauxii), a plant that is federally listed as endangered. In addition, VA1/VA3 will have an adverse effect on an historic property, and VA2 will not. All alternatives are rated as neutral, but VA2 is less costly. At this time, we cannot identify the LEDPA, given the complexity of the issues involved and the uncertainty about factors related to the sumac and the historic property. A site visit and meeting have been scheduled so that we can pursue these matters further. Our strong preference is that the wetland impacts associated with VA2 are avoided, but we will consider this section again after the scheduled meetings.	Alternative VA4 is the preferred alternative in the Tier II FEIS for Section D. Alternative VA4 was developed after the completion of the public comment period for the Tier II DEIS, through coordination and consultation with the USACE, VDHR, US Fish and Wildlife Service (USFWS), and the Virginia Division of Environmental Quality (VDEQ). Alternative VA4 does not require a Section 4(f) use of the Wynnhurst historic property, avoids impacts to the delineated population of the Michaux's Sumac, and minimizes wetland impacts (compared to Alternative VA2). This alternative was determined to be an acceptable preferred alternative by USACE, VDHR, USFWS, and VDEQ at an interagency meeting held on April 12, 2011.

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iii.	G. VA2 has no effect to historic properties and costs less. However, it impacts more streams and wetlands than VA1 VA3 and has a negative rating for operability/constructability. VA1 and VA3 both have effects to historic properties. VA1 impacts more streams than VA3 and has a neutral rating, while VA3 has the least wetland and stream impacts and a positive rating for operability/constructability. Considering all factors, VA3 appears to be the LEDPA. We recognize that the impacts to the historic property may result in a Section 4(f) use. However, based on the information discussed at previous meetings regarding the site, the impacts to the historic property do not preclude VA3 from identification as the LEDPA.	Alternative VA3 is the preferred alternative in the Tier II FEIS for Section G.
iv.	J. VA2 has substantially less stream impact than VA1/VA3, 698 linear feet vs. 2,061 linear feet. VA1/VA3 has an adverse effect to an historic property. VA1/VA3 is rated positive for operability/constructability, while VA2 is rated neutral. VA2 costs somewhat less. Although VA2 is not rated as highly as VA1/VA3 for operability/constructability, it appears that VA2 is the LEDPA.	Alternative VA2 is the preferred alternative in the Tier II FEIS for Section J.
v.	K. VA2 has substantially more stream impacts than VA1/VA3, as well as an adverse effect to an historic resource, which VA1/VA3 does not have. VA2 is rated negative for operability/constructability, whereas VA1/VA3 is rated as neutral. VA2 is less costly than the other alternatives. VA1/VA3 appears to be the LEDPA.	Alternative VA1 is the preferred alternative in the Tier II FEIS for Section K.
vi.	L. This section includes portions in VA and in NC. VA2/NC2 impacts considerably less stream length than VA/NC1/VA/NC3, almost 1400 linear feet less. It also has somewhat less wetland impact. However, it has an adverse effect to an historic property, whereas VA/NC1/VA/NC3 do not, costs more, and has a negative rating for operability/constructability, whereas VA/NC1/VA/NC3 is rated as neutral. Given that VA/NC2 is projected to have substantially less stream impacts than VA/NC1/VA/NC3, we would like to discuss further the factors that led to a negative rating for this alternative before making a preliminary determination of the LEDPA.	Alternative VA1/NC1 is the preferred alternative in the Tier II FEIS for Section L. The issues associated with the VA2/NC2 alternative in this section were discussed at an interagency meeting on April 12, 2011. Alternative VA2/NC2 stays within existing rail ROW near the Granite Hall/Fitts House historic resource; however, the proposed road realignment and bridge construction along Paschall Road would result in an adverse effect on the property under Section 106 of the National Historic Preservation Act and require a Section 4(f) use of the resource. The operability and constructability rating is negative and the limiting speed is 100 mph. The negative rating stems from a sharper curvature in the rail alignment, which means an increase in long-term maintenance for the rails and train equipment, and a lower speed and longer alignment, which means an increase in schedule time and fuel use (due to the deceleration and acceleration through the curves). At the April 12, 2011, meeting, USACE stated that that Alternative VA1/NC1 would be acceptable as the preferred alternative in Section L.

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6) The document indicates compensation for these impacts will be provided through the use of mitigation banks and/or the Virginia Aquatic Resources Trust Fund (VARTF). In the discussion of compensatory mitigation on page 4-15, it is noted that not all of the watersheds in Virginia where aquatic resource impacts occur are served by existing banks. It is likely that insufficient credits exist, particularly for stream impacts, in some of the watersheds that are currently served by banks. It is likely that a determination will be made that the impacts are too extensive for compensation to be provided by the VARTF. As we recommended in our 2003 comments, investigation should be conducted now for potential compensation sites for anticipated impacts, rather than delaying a full effort to identify compensation closer to construction. It does not appear that any potential compensation sites have been identified, and sufficient bank credits may or may not be available when you begin the permitting process.	Section 4.1.6 of the Tier II FEIS provides updated information on the availability of mitigation banks in the Project Study Area.
7) It appears that any of the alternatives under consideration have the potential to affect cultural and historic resources. According to 36 CFR 800.2(a)(2): *" ... If more than one Federal agency is involved in an undertaking, some or all [of] the agencies may designate a lead Federal agency, which shall identify the appropriate official to serve as the agency official who shall act on their behalf, fulfilling their collective responsibilities under section 106. Those Federal agencies that do not designate a lead Federal agency remain individually responsible for their compliance with this part."* *Since FRA is the lead Federal agency for compliance with NEPA and would have a greater amount of Federal control and responsibility over the entire project than the Corps, we designate FRA as the lead Federal agency to fulfill the collective Federal responsibilities under Section 106 for the proposed undertaking. The Norfolk District authorizes FRA to conduct Section 106 coordination on its behalf. Any Memorandum of Agreement prepared by FRA under 36 CFR 800.6 for concerning historic resources located between and including Richmond and Norlina should include the following clause in the introductory text:* *"WHEREAS, pursuant to Section 10 and/or Section 404 of the Clean Water Act, a Department of the Army permit will likely be required from the Corps of Engineers for this project, and the Norfolk District has designated FRA as the lead Federal agency to fulfill Federal responsibilities under Section 106; and"*	Comment noted.

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8) Norfolk District Specific comments regarding the details of the Tier II DEIS a. Permits: i. In the section on permits, beginning on page 4-11, you note that any action that proposes to dredge into waters or wetlands is subject to Corps of Engineers regulations. It should be noted that some excavation/dredging in waters of the U.S. is not a jurisdictional activity for the Norfolk District, depending on how the activity is conducted. We concur with the assessment in the DEIS that an individual permit will be required from the Norfolk District for this project, given the extent of expected impacts.	Comment noted.
ii. Under the discussion of stormwater permits on page 4-13, you list several measures that would be taken as part of a stormwater management plan. Included in the list is the elimination of construction staging areas in floodplains or adjacent to streams. Such areas should also not be located in wetlands.	Section 4.1.5.2 of the Tier II FEIS was updated to state that elimination of construction staging areas in floodplains or adjacent to streams, wetlands, and tributaries to help reduce the potential for petroleum contamination or discharges of other hazardous materials into receiving waters.
iii. Regarding permit requirements of the U.S. Coast Guard (USCG; page 4-13), we recommend that you coordinate with the USCG soon regarding their permit requirements. The document states that permits would not be required for the crossings of the Appomattox, Nottoway, or Meherrin Rivers in Virginia. However, our coordination with USCG indicates that a USCG permit may be required for these waterways. You should coordinate with them directly about the specific locations of your proposed bridges to ascertain permit requirements. You should also coordinate with them about any existing bridges that will be upgraded (such as the one at Lake Gaston), because if the characteristics of use of bridge change, a permit or permit amendment may be required from the USCG.	As stated in Section 3.1.5 of the Tier II DEIS and 4.1.5.3 of the Tier II FEIS, in a letter dated November 5, 2009, the USCG verified that the Richmond to Raleigh Project crossing of the James River in Richmond, VA, is the only waterway in the Project Study Area subject to USCG jurisdiction. The Richmond to Raleigh Project crossings of the Appomattox River (near Ettrick, VA), Nottoway River (near McKenney, VA), Meherrin River (vicinity of US-1 near South Hill, VA), Tar River (vicinity of US-1 at the border of Vance County, NC, and Franklin County, NC), and Neuse River (near Capital Boulevard just north of Raleigh, NC) are not under USCG jurisdiction because they are not subject to tidal influence (Giese et al., 1985) nor are they used for interstate commerce. These rivers have active recreational use (e.g., kayaks and canoes), but cannot support commercial watercraft at the location where the Richmond to Raleigh Project crosses. In addition, a permit is not required for the crossing of Lake Gaston because the Project will use the existing bridge piers; work will involve upgrading the deck of the bridge to the Project design standards.
iv. This section also discusses vertical and horizontal clearance for the proposed James River bridge. The crossing of this waterway should be coordinated with the Operations Branch of the Norfolk District to verify proposed clearances are acceptable in relation to the federal project channel. We recognize that the bridge is being planned with the same clearance as the existing bridge, but future plans for the channel may necessitate a change in that clearance, and the new bridge may be required to meet any such future plans even if the existing bridge does not.	This issue will be addressed during final design to ensure the standards in place at that time are met.

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b. Compensatory Mitigation: i. On page 4-15, the document lists typical mitigation ratios. Generally what is presented represents what is typically required by the Norfolk District, but some ratios given do not represent the full range applied in Virginia. Generally the Norfolk District requires 2:1 for forested wetland restoration and 3:1 for creation, as indicated in the document. However, for enhancement activities to compensate for all types of wetlands, we require in the range of 3:1 to 9:1, depending on the particular situation. For preservation, the document indicates 10:1; we typically require from 10:1 to 20:1, depending on the type and quality of the wetland being preserved and the extent of uplands included in the preserved area. Our typical ratio for wetland restoration for scrub shrub wetlands is 1.5:1 and 2:1 for creation. Our typical ratio for wetland restoration for emergent wetlands is 1:1 and 1.5:1 for creation. Please refer to these ratios when developing your compensation plan for wetlands.	Section 4.1.6 of the Tier II FEIS was amended to clarify mitigation ratios, as indicated in this comment.
ii. The document also gives typical ratios for stream mitigation. In Virginia, the Unified Stream Methodology (USM), developed jointly by the Norfolk District and the Virginia Department of Environmental Quality, provides a guide for determining appropriate stream compensation requirements. The USM, including instructions, can be found at http://www.nao.usace.army.mil/technical%20services/Regulatory%20branch/USM.asp. The USM should be used for the development of the stream compensation plan for impacts in Virginia, whether compensation is provided by the applicant or through the purchase of bank credits.	Section 4.1.6 of the Tier II FEIS was amended to clarify stream compensation requirements, as indicated in this comment.
c. Other issues: i. Page ES-6: The document notes that specific locations for the railway stations within La Crosse will be determined by the town as appropriate. Railway station locations should be anticipated, so that railway alternatives are located such that any station to be constructed as a result of this project can be positioned where impacts to aquatic resources are avoided.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations or design needs, because the development of stations is a unique undertaking at an individual location. As noted, generalized sites were evaluated, but only to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility to the larger transportation network. All public and agency comments received regarding specific station locations have been noted and will be provided to transportation planning organizations in each station location. Those governments at the individual station locations will perform separate environmental evaluations and make the final decision on the station location and design at a later date. As noted in revised Section 4.17 in the Tier II FEIS, locating HSR stations in center cities rather than greenfield or suburban areas is likely to avoid and minimize many potential direct and indirect environmental impacts from the project.

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ii.	Page 4-8 notes that culverts will be countersunk. We concur, because countersinking of pipes/culverts in streams is a requirement in the Norfolk District. You may find additional information regarding our countersinking requirements at http://www.nao.usace.army.mil/technical%20services/Regulatory%20branch/NWP2007/2007%20Nationwide%20Permits%20Regional%20Conditions.pdf.	Comment noted.
iii.	Page 4-14 includes information regarding avoidance and minimization. Please note that bridges are preferred over culverts for road crossings, to minimize impacts to streams.	Comment noted
iv.	Page 4-59: The discussion of impacts to terrestrial habitats and wildlife seems inadequate, because no information is given regarding fragmentation of habitat and wildlife corridors. Considering the length of the project through largely undeveloped areas, it appears that fragmentation could be a substantial impact. Fragmentation of riparian corridors should also be evaluated. There may also be impacts to forest interior-dependent species, and this issue is not addressed in the document. Similarly, the discussion of the commitment of irreversible and irretrievable resources in section 4.19 on page 4-207 does not address these issues in its discussion of wildlife resources.	A discussion of habitat fragmentation was added to Sections 4.10.1.1 and 4.19 of the Tier II FEIS.
v.	Page 4-200: Section 4.17 on Indirect and Cumulative Effects appears inadequate. The definition of cumulative impacts in this section includes past, present, and reasonably foreseeable future actions. Yet, there is very little if any description of past actions or the history of land use and development in the area of the project. It is difficult for the reader to assess cumulative effects when present conditions and how the region has changed over time are not provided. The document does note that certain areas are urban and others rural, but very little else is provided concerning past and present actions. There is a discussion of future actions, but with the exception of development planned as part of the expansion of Ft. Lee, all of the future actions presented are railway-related. This section should address not only how this project may link with other transportation projects, but how the human environment has and will be affected, cumulatively. With regard to aquatic resources, cumulative effects should be addressed in relation to river watersheds.	Sections 4.11 and 4.17 of the Tier II FEIS have been amended to include additional discussion of secondary/cumulative impacts of the project.

State Agencies

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Comment	**Response**
1) Multiple agencies, localities and planning district commissions participated in the review of the DEIS for this proposal. Based on the information provided in the DEIS and comments from reviewers, the Commonwealth of Virginia has no objection to the proposal as presented, provided the proponent agencies comply with all applicable laws and regulations. Reviewers identified potential adverse impacts to resources and submitted recommendations to mitigate them. Future coordination with these agencies is required as follows: Water quality and wetland impacts will require authorization by the appropriate DEQ regional office (Piedmont Regional Office or Blue Ridge Regional Office) under the Virginia Water Protection Permit Program. Erosion and sediment control, stormwater management and impacts to Chesapeake Bay Preservation Areas will require review and approval by the Department of Conservation and Recreation. Impacts to state subaqueous lands fall under the authority of the Virginia Marine Resources Commission. Air quality and waste impacts are administered by DEQ. Development of the rail line should be coordinated with the U.S. Fish and Wildlife Service, Virginia Department of Game and Inland Fisheries, Department of Conservation and Recreation Division of Natural Heritage and Virginia Department of Agriculture and Consumer Services to ensure the protection of federally- and state-listed wildlife species. Project impacts on the Commonwealth's forest resources are administered by the Virginia Division of Forestry. Proponent agencies must continue to work with the Virginia Department of Historic Resources regarding the proposed Memorandum of Agreement guiding the treatment of impacted historic and archaeological resources.	Coordination with all required agencies to ensure compliance with all applicable laws and regulations will continue as the project moves forward to permitting and construction.
2) Water Quality and Wetlands. a. According to the DEIS (page ES-7), total potential stream impacts for the project corridor in Virginia may range from 27,304 linear feet up to 31,163 linear feet of jurisdictional channel, depending on the combination of alternatives selected. The greatest difference between alternatives occurs in the Roanoke River Basin, in Section J. In this section, VA1 and VA3 are on common alignment and would have 2,061 linear feet of impacts, compared to VA2 which has only 698. Total potential impacts to lakes, ponds and reservoirs for the project corridor in Virginia may range from 1.64 to 3.67 acres. The document (pages ES-9-ES-10) shows that potential project impacts to wetlands in Virginia would be from 22.03 to 31.48 acres. Selection of the VA2 project alternative would result in the least wetland impacts in the Chowan River Basin for Sections DO, A, and B. Alternatives VA1 or VA2 would best minimize impacts for Sections 0, E, and G.	For Section J, VA2 is the preferred alternative, due in part to the avoidance of stream impacts. For Section DD, Alternative VA3 was selected to minimize the effect to the Weldon Railroad/Globe Tavern Battlefield, which is eligible for the National Register of Historic Places (NRHP). VA2 was selected for Section A in part to minimize stream and wetland impacts. VA1/VA3 was selected for Section B in part to minimize noise impacts, business relocations and to maintain desired operating speed. A new alternative (VA4) was developed to avoid effects to an historic property, avoid impacts to a Michaux's sumac population, and reduce wetland impacts compared with alternative VA2. Alternative VA1/VA3 was selected for Section E, in part to minimize stream and wetland impacts. Alternative VA3 was selected for Section G, in part because stream impacts for this alternative had been reduced to 500 feet, which is less than the impacts calculated for the other alternatives in this section.

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b. According to the DEIS (ES-11), in Virginia, mitigation would be provided through the use of mitigation banks and/or the Virginia Aquatic Resources Trust Fund (VAQRTF). However, no banks are currently listed serving the Roanoke Rapids hydrologic unit (HU 03010106). The VAQRTF pursues stream and wetland mitigation projects throughout Virginia as an in-lieu fee program. It is administered in partnership with the Corps Norfolk District and The Nature Conservancy in Virginia. The use of the VAQRTF as a mitigation option is at the discretion of the appropriate regulatory agencies.	Mitigation for stream impacts has been updated in Sections 4.1.1.1, 4.1.1.2, and 4.1.6, of the Tier II FEIS, which provide updated information on established mitigation banks. Mitigation for stream and wetland impacts will be secured prior to project permitting.
c. Agency Jurisdiction. The State Water Control Board (SWCB) promulgates Virginia's water regulations, covering a variety of permits to include Virginia Pollutant Discharge Elimination System (VPDES) Permit, Virginia Pollution Abatement Permit, Surface and Groundwater Withdrawal Permit, and the Virginia Water Protection Permit (VWPP). The VWPP is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal Clean Water Act§ 404 permits for dredge and fill activities in waters of the U.S. The VWPP Program is under the Office of Wetlands and Water Protection/Compliance, within the DEQ Division of Water Quality Programs. In addition to central office staff that review and issue VWP permits for transportation and water withdrawal projects, the six DEQ regional offices perform permit application reviews and issue permits for the covered activities.	Permits are discussed in Section 4.1.6 of the Tier II DEIS. The specific need for the VWPP was included in Section 4.1.5 of the Tier II FEIS, which includes the following text: The USACE cannot issue a Section 404 permit until a Section 401 certification is issued. Therefore, the Richmond to Raleigh Project must apply to VDEQ and NCDWQ for Section 401 Water Quality Certification as part of the permit process. Based on the assessments summarized in Sections 4.1.1 and 4.1.2, it is likely that a Section 404 IP requiring mitigation will be required for the Richmond to Raleigh Project. Temporary activities such as stream dewatering, work bridges, or temporary causeways that are often used during bridge construction or rehabilitation should also be included in the permit application. The USACE will determine what permit(s) will be required to authorize project construction. In Virginia, the Richmond to Raleigh Project would complete a Joint Permit Application to apply for a Section 404 permit, Section 401 certification (Virginia Water Protection Permit), and a subaqueous permit from the Virginia Marine Resources Commission (VMRC). The Virginia Water Protection Permit (VWPP) is a state permit which governs wetlands, surface water, and surface water withdrawals/impoundments. It also serves as § 401 certification of the federal Clean Water Act § 404 permits for dredge and fill activities in waters of the U.S. The subaqueous permit is needed to encroach upon or over bottomlands under VMRC jurisdiction, which include submerged lands (beds of lakes, rivers, and streams) including non-tidal, perennial tributaries draining five square miles or greater. To issue the permit, the VMRC must determine that the Project is necessary, that there are no reasonable alternatives requiring less environmental disruption, and that adverse effects do not unreasonably interfere with other private and public rights to the use of waterways and bottomlands.

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d. Agency Comments. DEQ's Piedmont Regional Office (PRO) notes that there is the potential for adverse impacts to many natural resources in the study area (sections AA-H) due to the size, scope, and the number of alternatives considered for this project. The DEQ Blue Ridge Regional Office (BRRO) generally finds that significant long-term environmental impacts are not expected from this project (sections I-L). Principal impacts will be related to short-term construction activities. Requirements. According to DEQ-PRO and DEQ-BRRO, construction activities that adversely impact wetlands or streams will require review and approval under the VWPP program.	Comment noted. See VWPP discussion above.
e. Recommendations. DEQ-PRO recommends all efforts should be taken to ensure that the adjacent wetlands and waterways are not adversely affected by the proposed activities. DEQ-BRRO recommends the implementation of construction best management practices (BMPs) and the utilization of existing structures as recommended in the DEIS to minimize environmental impacts. In general, DEQ recommends that stream and wetland impacts be avoided to the maximum extent practicable. To minimize unavoidable impacts to wetlands and waterways, DEQ recommends the following practices: i. Stockpile material excavated for stream crossings for replacement, to the extent practicable. ii. Consider using a work bridge rather than a causeway to reduce temporary impacts. iii. Operate machinery and construction vehicles outside of stream-beds and wetlands; use synthetic mats when in-stream work is unavoidable; iv. Construct trenches in a manner that does not drain the wetlands. v. Preserve the top 12 inches of material removed from wetlands for use as wetland seed and root-stock in the excavated area. vi. Erosion and sedimentation controls (ESCs) should be designed in accordance with the most current edition of the Virginia Erosion and Sediment Control Handbook (1992, 3rd Edition). These controls should be in place prior to clearing and grading, and maintained in good working order to minimize impacts to state waters. ESCs and BMPs should be inspected and repaired before and after rain events. The controls should remain in place until the area is stabilized. Monitor construction activities to ensure that erosion and stormwater management practices are adequately preventing sediment and pollutant migration into surface waters, including wetlands. vii. Place heavy equipment, located in temporarily impacted wetland areas, on mats, geotextile fabric, or use other suitable measures to minimize soil disturbance, to the maximum extent practicable. viii. Restore a" temporarily disturbed wetland areas to pre-construction conditions	Construction of the proposed Richmond to Raleigh Project will follow all permit conditions, as described in Section 4.1.4 of the Tier II DEIS and Section 4.1.5 of the Tier II FEIS.

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and plant or seed with appropriate wetlands vegetation in accordance with the cover type (emergent, scrub-shrub, or forested). The applicant should take all appropriate measures to promote re-vegetation of these areas. Stabilization and restoration efforts should occur immediately after the temporary disturbance of each wetland area instead of waiting until the entire project has been completed. ix. Any temporary impact should be restored to their original contours and revegetated with the same or similar species. x. Place all materials which are temporarily stockpiled in wetlands, designated for use for the immediate stabilization of wetlands, on mats, geotextile fabric in order to prevent entry in state waters. These materials should be managed in a manner that prevents leachates from entering state waters and must be entirely removed within thirty days following completion of that construction activity. The disturbed areas should be returned to their original contours, stabilized within thirty days following removal of the stockpile, and restored to the original vegetated state. xi. All non-impacted surface waters within the project or right-of-way limits that are within 50 feet of any clearing, grading, or filling activities should be clearly flagged or marked for the life of the construction activity within that area. The project proponent should notify all contractors that these marked areas are surface waters where no activities are to occur. xii. Measures should be employed to prevent spills of fuels or lubricants into state waters.	
f. Regulatory and Coordination Needs. Water quality and wetland impacts associated with this proposal will require a Virginia Water Protection Permit issued by the DEQ Piedmont Regional Office (sections AA-H) or Blue Ridge Regional Office (sections I-L) pursuant to Virginia Code §62.1-44.15:5. A Joint Permit Application may be obtained from and submitted to the Virginia Marine Resources Commission which serves as a clearinghouse for the joint permitting process involving the VMRC, DEQ, Corps, and local wetlands boards. For additional information and coordination regarding the VWPP, contact Cory Chamberlain (DEQ-PRO) at (804) 527-5081 or Kip Foster (DEQ-BRRO) at (540) 562-6782.	Comment noted. See VWPP discussion above.

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Comment	**Response**
3) Subaqueous Lands. a. According to the DEIS (page 4-12), in Virginia, the SEHSR project would complete a Joint Permit Application for a subaqueous permit from the Virginia Marine Resources Commission (VMRC). The document notes that the subaqueous permit is needed to encroach upon or over bottom lands under VMRC jurisdiction, which include submerged lands (beds of lakes, rivers, and streams) including non-tidal, perennial tributaries draining five square miles or greater.	Comment noted. See VWPP discussion above.
b. Agency Jurisdiction. The Virginia Marine Resources Commission, pursuant to Section 28.2-1204 of the Code of Virginia, has jurisdiction over any encroachments in, on, or over any state-owned rivers, streams, or creeks in the Commonwealth. For any development that involves encroachments channelward of ordinary high water along natural rivers and streams, a permit is required from VMRC. The VMRC serves as the clearinghouse for the Joint Permit Application used by the: • VMRC for encroachments on or over state-owned subaqueous beds as well as tidal wetlands; • U.S. Army Corps of Engineers (Corps) for issuing permits pursuant to Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act; • DEQ for issuance of a Virginia Water Protection Permit; and local wetlands board for impacts to wetlands.	Comment noted. See VWPP discussion above.
c. Regulatory and Coordination Needs. According to VMRC, as noted in the DEIS, a JPA is required for a Section 404 Clean Water Act (CWA) permit, Section 401 CWA certification (i.e. VWPP) and a subaqueous permit from VMRC, pursuant to Section 28.2-1200 et seq. of the Code of Virginia, to encroach upon or over bottom lands under VMRC jurisdiction. VMRC must determine that the project is necessary, that there are no reasonable alternatives requiring less environmental disruption, and that adverse effects do not unreasonably interfere with other private and public rights to the use of waterways and bottom lands prior to issuing a subaqueous lands permit. Any impacts will be reviewed by VMRC with the submission of the Joint Permit Application. For additional information, contact Ben Stagg, VMRC at (757) 247-2009.	Comment noted. See VWPP discussion above.

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Comment	**Response**
4) Erosion and Sediment Control, and Stormwater Management. a. According to the DEIS (page 4-2), in order to minimize potential impacts to water resources in the project area, the most recent edition of Virginia Department of Conservation and Recreation's Erosion Sediment Control Handbook will be strictly enforced during the construction phase of the project. The document (page 4-5) states that the SEHSR project is committed to complying with all applicable water quality regulations and permit requirements, as well as to minimizing all impacts to water quality as designs are finalized. This includes complying with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act. Agency Jurisdiction. DCR's Division of Soil and Water conservation administers the Virginia Erosion and Sediment Control Law and Regulations (VESCL&R) and Virginia Stormwater Management Law and Regulations (VSWML&R).	Comment noted. As stated in the Tier II DEIS, the Richmond to Raleigh Project will comply with the Virginia Erosion and Sediment Control Law and the Virginia Stormwater Management Act.
b. Erosion and Sediment Control and Stormwater Management Plans. According to the Department of Conservation and Recreation (DCR), the proponent agencies and their authorized agents conducting regulated land-disturbing activities on private and public lands in the state must comply with VESCL&R, VSWML&R (including coverage under the general permit for stormwater discharge from construction activities) and other applicable federal nonpoint source pollution mandates (e.g. Clean Water Act-Section 313, federal consistency under the Coastal Zone Management Act). Clearing and grading activities, installation of staging areas, parking lots, roads, buildings, utilities, borrow areas, soil stockpiles, and related land-disturbing activities that result in the land disturbance of greater than 10,000 square feet (2,500 square feet in a Chesapeake Bay Preservation Area) would be regulated by VESCL&R and VSWML&R. Accordingly, proponent agencies must prepare and implement an erosion and sediment control (ESC) plan and a stormwater management (SWM) plan to ensure compliance with state law and regulations. The ESC and SWM plans are submitted to the DCR Regional Office that serves the area where the construction is located for review for compliance. The project proponent is ultimately responsible for achieving project compliance through oversight of on site contractors, regular field inspection, prompt action against non-compliant sites, and other mechanisms consistent with agency policy. [Reference: VESCL §10.1-567; Virginia Stormwater Management Act §10.1-603.3; Virginia Stormwater Management Program (VSMP) Permit Regulations' 4 VAC 50-60-110].	Section 4.1.5.2 of the Tier II FEIS was updated with the following text: Since the Richmond to Raleigh Project would disturb more than 10,000 square feet, it must obtain a Virginia Stormwater Management Program (VSMP) general National Pollutant Discharge Elimination System (NPDES) permit through the Virginia Department of Conservation and Recreation (VDCR). A site-specific Stormwater Pollution Prevention Plan (SWPPP) will need to be prepared and implemented. The SWPPP outlines the steps and techniques the operator will take to comply with the terms and conditions of the permit, including water quality and quantity requirements that are consistent with the VSMP permit regulations, to reduce pollutants in the stormwater runoff from the construction site. The SWPPP also includes a description of post development stormwater management measures to be installed, including design calculations. Prior to construction, an erosion and sediment control (ESC) plan and a stormwater management (SWM) plan to ensure compliance with state law and regulations will be prepared and implemented.

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c. Virginia Stormwater Management Program General Permit for Stormwater Discharges from Construction Activities. OCR is responsible for the issuance, denial, revocation, termination and enforcement of the Virginia Stormwater Management Program (VSMP) General Permit for Stormwater Discharges from Construction Activities related to municipal separate storm sewer systems (MS4s) and construction activities for the control of stormwater discharges from MS4s and land disturbing activities under the Virginia Stormwater Management Program. The operator or owner of construction activities involving land-disturbing activities equal to or greater than one acre (2,500 square feet in Chesapeake Bay Preservation Areas) are required to register for coverage under the General Permit for Discharges of Stormwater from Construction Activities and develop a project specific stormwater pollution prevention plan (SWPPP). The SWPPP must be prepared prior to submission of the registration statement for coverage under the general permit and the SWPPP must address water quality and quantity in accordance with the Virginia Stormwater Management Program (VSMP) Permit Regulations. General information and registration forms for the General Permit are available on OCR's website at: http://www.dcr.virginia.gov/soil and water/vsmp.shtml. [Reference: Virginia Stormwater Management Act §10.1-603.1 et seq.; VSMP Permit Regulations 4 VAC-50 et seq.] Specific questions regarding the Stormwater Management Program requirements should be directed to Holly Sepety, OCR, at (804) 225-2613. Future development must be conducted in compliance with Virginia's Erosion and Sediment Control Law (Virginia Code 10.1-567) and Regulations (4 VAC 50-30-30 et seq.) and Stormwater Management Law (Virginia Code 10.1-603.5) and Regulations (4 VAC 3-20-210 et seq.). Activities that disturb 10,000 square feet or more of land (2,500 square feet or more in Chesapeake Bay Preservation Areas) would be regulated by VESCL&R and VSWML&R. Proponent agencies are encouraged to contact OCR's Richmond Regional Office (sections AA-C) at (804) 225-3390 or the Clarksville Regional Office (sections D-L) at (434) 374-3648, for assistance with developing or implementing any future ESC plans to ensure project conformance.	Compliance with stormwater permits is discussed in Section 4.1.6.2 of the Tier II DEIS. Compliance with the Chesapeake Bay Act is discussed in Section 4.1.1.2.

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Comment	**Response**
5) Chesapeake Bay Preservation Areas. a. According to the DEIS (page 4-4), within Tidewater Virginia, the Chesapeake Bay Preservation Act (Bay Act) regulates Chesapeake Bay Preservation Areas that include land areas adjacent to water bodies. Within the project area, the cities of Richmond, Colonial Heights, and Petersburg, as well as Chesterfield County, are subject to the Bay Act. The document (page 4-4) notes that Chapter 20 Section 9 VAC 10-20-150 of the Chesapeake Bay Preservation Area Designation and Management Regulations, "Nonconformities, exemptions, and exceptions," excludes public utilities, railroads, public roads, and facilities from the requirements of the Bay Act. The document concludes that the SEHSR project is subject to this exemption, provided that the project and related construction activities follow local, state, and federal water quality regulations. Agency Jurisdiction. OCR's Division of Chesapeake Bay local Assistance (DCBLA) administers the coastal lands management enforceable policy of the VCP which is governed by the Chesapeake Bay Preservation Act (Virginia Code §10.1-2100- 10.1-2114) and Chesapeake Bay Preservation Area Designation and Management Regulations (Regulations) (9 VAC 10-20 et seq.).	Compliance with the Chesapeake Bay Act is discussed in Section 4.1.1.2 of the Tier II DEIS.
b. Agency Findings. According to DCR-DCBLA, in the City of Richmond, the areas protected by the Bay Act, as locally implemented, require conformance with performance criteria. These areas include Resource Protection Areas (RPAs) and Resource Management Areas (RMAs) as designated by the local government. RPAs include: • tidal wetlands; • non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or perennial water bodies; • tidal shores; and • lands within a 100-foot vegetated buffer area located adjacent to and landward of the aforementioned features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include: • floodplains; • nontidal wetlands which are not included in the RPA; • highly erodible soils including steep slopes which are contiguous to an RPA; • highly permeable soils which are contiguous to an RPA; plus • a 500-foot wide land area located adjacent to any RPA.	Comment noted. The Chesapeake Bay Preservation Act is discussed in the Tier II DEIS in Sections 3.1.1.1.1 and 4.1.1.2.

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c. In Chesterfield County, the areas protected by the Bay Act, as locally implemented, require conformance with performance criteria. These areas include RPAs and RMAs. RPAs include: • tidal wetlands; • non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or water bodies with perennial flow; • tidal shores; and • a 100-foot vegetated buffer area located adjacent to and landward of the aforementioned features and along both sides of any water body with perennial flow. RMAs, which require less stringent performance criteria, include: • one hundred year floodplains; • highly erodible soils (including steep slopes); • highly permeable soils; and • nontidal wetlands not included in the RPA	Comment noted. The Chesapeake Bay Preservation Act is discussed in the Tier II DEIS in Sections 3.1.1.1.1 and 4.1.1.2.
d. In the City of Petersburg, the areas protected by the Bay Act, as locally implemented, require conformance with performance criteria. These areas include RPAs and RMAs as designated by the local government. RPAs include: • tidal wetlands; • non-tidal wetlands connected by surface flow and contiguous to tidal wetlands or perennial water bodies; • tidal shores; and • lands within a 100-foot vegetated buffer area located adjacent to and landward of the aforementioned features and along both sides of any water body with perennial flow that are within the Chesapeake Bay watershed. • RMAs, which require less stringent performance criteria, include: • floodplains; • nontidal wetlands which are not included in the RPA; • highly erodible soils including steep slopes which are contiguous to an RPA; • highly permeable soils which are contiguous to an RPA; and • a 100-foot land area located along any RPA where none of the components previously listed are present. For additional information and coordination, contact Joan Salvati, DCR-DCBLA, at (804) 225-3440.	Comment noted. The Chesapeake Bay Preservation Act is discussed in the Tier II DEIS in Sections 3.1.1.1.1 and 4.1.1.2.

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Comment	**Response**
6) **Coastal Zone Management Act and Federal Consistency.** Pursuant to the Coastal Zone Management Act of 1972, as amended, proponent agencies are required to determine the consistency of its activities affecting Virginia's coastal resources or coastal uses with the Virginia Coastal Zone Management Program (VCP) (previously called the Virginia Coastal Resources Management Program) (see § 307(c)(3)(A) of the Act and 15 CFR Part 930, Sub-part 0, § 930.50 et seq.). This involves an analysis of the activities in light of the Enforceable Policies of the VCP (see Attachment 1*), and submission of a Federal Consistency Certification (FCC) reflecting that analysis and committing the proponent agencies to comply with the Enforceable Policies. Section 930.58 gives content requirements for the consistency certification, or you may visit the DEQ Website at, http://www.deq.virginia.gov/eir/federal.html. We encourage the proponent agencies to consider the Advisory Policies of the VCP (see Attachment 2*). The FCC must be submitted and DEQ's concurrence obtained prior to any land disturbance with the Commonwealth's designated coastal zone. * See end of this table for these attachments.	The Coastal Zone Management Act and the Virginia Coastal Zone Management Program (VCP are discussed in the Tier II DEIS in Section 4.1.5.1. All relevant conditions of these acts will be followed during the permitting stage of the Project, before construction.
7) Federal Stormwater Management Commitments. a. The 1998 Federal Agencies' Chesapeake Ecosystem Unified Plan requires the signatories to fully cooperate with local and state governments in carrying out voluntary and mandatory actions to comply with the management of stormwater. The agencies also committed to encouraging construction design that: i. minimizes natural area loss on new and rehabilitated federal facilities; ii. adopts low impact development and best management technologies for stormwater, sediment and erosion control and reduces impervious surfaces; and iii. considers the Conservation Landscaping and Bay-Scapes Guide for Federal Land Managers. In addition, the Chesapeake 2000 Agreement committed the government agencies to a number of sound land use and stormwater quality controls. The signatories additionally committed the agencies to lead by example with respect to controlling nutrient, sediment and chemical contaminant runoff from government properties. In December 2001, the Executive Council of the Chesapeake Bay Program issued Directive No. 01-1, Managing Storm Water on State, Federal and District-owned Lands and Facilities, which includes specific commitments for agencies to lead by example with respect to stormwater control.	Comment noted. Compliance with stormwater permits is discussed in Section 4.1.5.2 of the Tier II DEIS.

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b. Requirements. Construction, installation, operation and maintenance of railroads and their appurtenant structures are conditionally exempt from the Regulations provided they are constructed in accordance with: i. Regulations promulgated pursuant to the Erosion and Sediment Control Law (§10.1-560 et seq. of the Code of Virginia) and the Stormwater Management Act (§10.1-603.1 et seq. of the Code of Virginia) ii. An erosion and sediment control plan and a stormwater management plan approved by the Virginia Department of Conservation and Recreation, or iii. Local water quality protection criteria at least as stringent as the above state requirements. Conclusion. DCR-DCBLA concurs that the proposed activity would be consistent with the Bay Act and Regulations, provided adherence to the above requirements.	Comment noted.
8) Air Quality. a. According to the Tier II DEIS (page ES-15), air quality impacts associated with the SEHSR project were assessed for both the proposed railroad engine operations and affected (i.e., diverted) motor vehicles. Air quality impacts from the project are not expected to substantially vary by alternative due to the Similarity in operation and design. An air quality analysis was performed for the locomotive operations subject to federal air quality conformity regulations (40 CFR 51.853). The document states that the calculated annual emissions for carbon monoxide (CO), oxides of nitrogen (NOx), particulate matter (PM), and hydrocarbons (HC) for all alternatives are well below the de minimis levels. Agency Jurisdiction. DEQ's Air Quality Division, on behalf of the State Air Pollution Control Board, is responsible to develop regulations that become Virginia's Air Pollution Control Law. DEQ is charged to carry out mandates of the state law and related regulations as well as Virginia's federal obligations under the Clean Air Act as amended in 1990. The objective is to protect and enhance public health and quality of life through control and mitigation of air pollution. The division ensures the safety and quality of air in Virginia by monitoring and analyzing air quality data, regulating sources of air pollution, and working with local, state and federal agencies to plan and implement strategies to protect Virginia's air quality. The appropriate regional office is directly responsible for the issue of necessary permits to construct and operate all stationary sources in the region as well as to monitor emissions from these sources for compliance. As a part of this mandate, the environmental documents of new projects to be undertaken in the state are also reviewed. In the case of certain projects, additional evaluation and demonstration must be made under the general conformity provisions of state and federal law.	Comment noted.

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Comment	**Response**
b. Agency Findings. According to the DEQ Air Division, the route for the SEHSR is located in ozone (03) attainment areas (Mecklenburg County, Brunswick County, Dinwiddie County) and in the Richmond Ozone Maintenance area (City of Petersburg, City of Colonial Heights, City of Richmond and Chesterfield County), an emission control area for the contributors to ozone pollution, which are volatile organic compounds (VOCs) and nitrogen oxides (NOx). DEQ-BRO anticipates that air quality issues will be construction-related (heavy equipment idling and fugitive dust) and that calculated locomotive emissions will be well below de minimis limits. Recommendations. All reasonable precautions should be undertaken to limit emissions of VOCs and NOx, principally by controlling or limiting the burning of fossil fuels, related to construction of the SEHSR project. DEQ-PRO recommends following all air quality standard and specifications to reduce or avoid the emissions of VOCs, especially during periods of high ozone.	Comment noted. Reasonable precautions will be undertaken to limit emissions.

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c. Requirements - The SEHSR project is subject to the following air regulations administered by the Department of Environmental Quality: i. Fugitive Dust - During construction, fugitive dust must be kept to a minimum by using control methods outlined in 9 VAC 5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution. These precautions include, but are not limited to, the following: • Use, where possible, of water or chemicals for dust control; • Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials; • Covering of open equipment for conveying materials; and • Prompt removal of spilled or tracked dirt or other materials from paved streets and removal of dried sediments resulting from soil erosion. ii. Open Burning - If construction activities include the burning of construction or demolition material, this activity must meet the requirements under 9 VAC 5-130 et seq. of the Regulations for open burning, and it may require a permit. The Regulations for open burning provide for, but do not require, the local adoption of a model ordinance concerning open burning. Some applicable provisions of the regulation include, but are not limited to: • All reasonable effort shall be made to minimize the amount of material burned, with the number and size of the debris piles; • The material to be burned shall consist of brush, stumps and similar debris waste and clean burning demolition material; • The burning shall be at least 500 feet from any occupied building unless the occupants have given prior permission, other than a building located on the property on which the burning is conducted; • The burning shall be conducted at the greatest distance practicable from highways and air fields, • The burning shall be attended at all times and conducted to ensure the best possible combustion with a minimum of smoke being produced; • The burning shall not be allowed to smolder beyond the minimum period of time necessary for the destruction of the materials; and • The burning shall be conducted only when the prevailing winds are away from any city, town or built-up area. For additional information and coordination, contact James Kyle (DEQ-PRO) at (804) 527-5047 or Jed Brown (DEQ-BRRO) at (434) 582-6210. Also, contact the appropriate locality for any local requirements on open burning.	Section 4.6 of the Tier II FEIS has been amended to specify the North Carolina and Virginia regulations that the Project will comply with to regulate construction air quality impacts from fugitive dust and open burning.

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Comment	**Response**
9) Solid and Hazardous Wastes and Hazardous Materials. a. The DEIS (page 3-174) states that municipalities along the SEHSR study area either manage their own solid waste collection program or contract with a private enterprise to manage a program for the municipality. The document (page 3-25) notes that Environmental Data Resources (EDR) conducted a review of records in several state and federal databases to gather data on sites that are listed in various hazardous waste inventories for the Petersburg to Raleigh corridor in 2004 and for the Richmond to Petersburg corridor in 2008. The purpose of this review was to determine if sites listed in these inventories were located within the proposed SEHSR corridor. According to the review, there were 254 sites in Virginia within 2,000 feet of the project corridor. The majority of the sites were located between Richmond and Petersburg (225 sites). Agency Findings. DEQ-BRRO finds that hazardous waste sites along the proposed alternative alignments (sections I-L) are minimal (2 or 3 sites, depending on the alignment) and principally related to underground storage tanks (USTs). Agency Recommendations. DEQ encourages all construction projects and facilities to implement pollution prevention principles, including the reduction, reuse, and recycling of all solid wastes generated for construction projects and facilities. All generation of hazardous wastes should be minimized and handled appropriately.	Comment noted. All generation of hazardous wastes will be minimized and handled appropriately.
b. Requirements. All solid waste, hazardous waste, and hazardous materials must be characterized and managed in accordance with all applicable federal, state, and local environmental regulations. Some of the applicable state laws and regulations are: • Virginia Waste Management Act (Code of Virginia Section 10.1-1400 et seq.); • Virginia Hazardous Waste Management Regulations (VHWMR) (9 VAG 20-60); • Virginia Solid Waste Management Regulations (VSWMR) (9 VAG 20-80); and • Virginia Regulations for the Transportation of Hazardous Materials (9 VAG 20-110). • Some of the applicable Federal laws and regulations are: • Resource Conservation and Recovery Act (RCRA) (42 U.S.C. Section 6901 et seq.); • Title 40 of the Code of Federal Regulations; and • U.S. Department of Transportation Rules for Transportation of Hazardous materials (49 CFR Part 107).	The DEIS described the hazardous waste impact assessments performed for the Project alternatives and listed the number of hazardous waste sites potentially impacted by each alternative. Chapter 4 of the Tier II FEIS contains further assessment of all impacted hazardous waste sites that could not be avoided by the Preferred Alternative. The FEIS is also updated to indicate the applicable federal, state, and local environmental regulations that will be followed prior to project construction, related to the management and disposal of solid waste, hazardous waste, and hazardous materials.

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Comment	**Response**
i. Database Search - DEQ's Waste Division notes that for each area in Virginia where any work is to take place, the proponent agencies must conduct an environmental investigation on and near the property to identify any solid or hazardous waste sites or issues before work can commence. This investigation should include a search of waste-related databases (attached). However, the Waste Division notes that the Tier II DEIS indicates that such research may already been conducted. ii. Contaminated Soil and Generated Waste - Any soil that is suspected of contamination or wastes that are generated during construction-related activities must be tested and disposed of in accordance with applicable federal, state, and local laws and regulations. It is the generator's responsibility to determine if a solid waste meets the criteria of a hazardous waste and be properly managed. iii. Asbestos-Containing Material - It is the responsibility of the owner or operator of a demolition activity, prior to the commencement of the demolition, to thoroughly inspect the affected part of the facility where the operation will occur for the presence of asbestos, including Category I and Category II nonfriable asbestos containing material (ACM). Upon classification as friable or non-friable, all waste ACM shall be disposed of in accordance with the Virginia Solid Waste Management Regulations (9 VAC 20-80-640), and transported in accordance with the Virginia regulations governing Transportation of Hazardous Materials (9 VAC 20-110-10 et seq.). Contact the DEQ Waste Management Program for additional information, (804) 698-4021, and the Department of Labor and Industry, Ronald L. Graham at (804) 371-0444. iv. Lead-Based Paint - If applicable, the proposed project must comply with the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA) regulations, and with the Virginia Lead-Based Paint Activities Rules and Regulations. For additional information regarding these requirements contact the Department of Professional and Occupational Regulation, David Dick at (804) 367-8588. For additional information and coordination, contact Kyle Winter (DEQ-PRO) at (804) 527-5052 or Aziz Farahmand (DEQ-BRRO) at (540) 562-6872.	

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10) **Herbicides and Pesticides**. DEQ recommends that the use of herbicides or pesticides for construction or landscape maintenance should be in accordance with the principles of integrated pest management. The least toxic pesticides that are effective in controlling the target species should be used. Contact the Department of Agriculture and Consumer Services at (804) 786-3501 for more information.	Comment noted.
11) Natural Heritage Resources. a. Evaluation. According to the Tier II DEIS (page 3-59), individual states may provide additional protections for rare plant and animal species, such as federal species of concern (FSC), which are not afforded federal protection under the Endangered Species Act. FSC species that are listed as endangered, threatened, or special concern (SC) on the Virginia Department of Conservation and Recreation Natural Heritage Program (NHP) list of Rare Plant and Animal Species are afforded protection under state laws (Endangered Plant and Insect Species Act of Virginia of 1979, the Virginia Wildlife Diversity and Fisheries Regulations). The document states that currently, these laws do not apply to state transportation projects. The U.S. Fish and Wildlife Service Virginia field office list 8 FSC species for the counties in the Virginia study area. Agency Jurisdiction. The mission of the Virginia Department of Conservation and Recreation is to conserve Virginia's natural and recreational resources. OCR supports a variety of environmental programs organized within seven divisions including the Division of Natural Heritage. The Natural Heritage Program's (OCR-ON H) mission is conserving Virginia's biodiversity through inventory, protection, and stewardship. The Virginia Natural Area Preserves Act, 10.1-209 through 217 of the Code of Virginia, was passed in 1989 and codified DCR's powers and duties related to statewide biological inventory: maintaining a statewide database for conservation planning and project review, land protection for the conservation of biodiversity, and the protection and ecological management of natural heritage resources (the habitats of rare, threatened, and endangered species, significant natural communities, geologic sites, and other natural features).	Comment noted.
b. Agency Findings. DCR-DNH searched its Biotics Data System for occurrences of natural heritage resources in the study area. The following resources were identified. i. Stream Conservation Units - According to the information currently in DCR-DNH files, the Nottoway River-Sturgeon Creek Stream Conservation Unit (SCU), the Stony Creek-Richardson Pond SCU and the Meherrin River-Shining Creek SCU are located within or immediately adjacent to the study area. SCUs identify stream reaches that contain aquatic natural heritage resources, including	See comment 12(b) with regards to field surveys and coordination.

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2 miles upstream and 1 mile downstream of documented occurrences, and all tributaries within this reach. SCUs are also given a biodiversity significance ranking based on the rarity, quality, and number of element occurrences they contain. a. Nottoway River-Sturgeon Creek SCU The Nottoway River-Sturgeon Creek SCU has been given a biodiversity ranking of B1, which represents a site of outstanding significance. Natural heritage resources associated with this site are: *Elliptio lanceoata* Yellow lance G2G3/S2S3/S0C/SC *Lampsilis cariosa* Yellow lampmussel G3G4/S2/NL/SC *Lampsilis radiate* Eastern lampmussel GS/S2S3/NL/SC *Fusconaia masoni* Atlantic pigtoe G2/S2/SOC/LT The Yellow lance occurs in mid-sized rivers and second and third order streams. To survive, it needs a silt-free, stable streambed and well-oxygenated water that is free of pollutants. This species has been the subject of taxonomic debate in recent years (NatureServe, 2009). Currently in Virginia, the Yellow lance is recognized from populations in the Chowan, James, York, and Rappahannock drainages. Its range also extends into Neuse-Tar river system in North Carolina. In recent years, significant population declines have been noted across its range (NatureServe, 2009). This species is currently classified as a species of concern by the U.S. Fish and Wildlife Service (USFWS) and a special concern species by the Virginia Department of Game and Inland Fisheries (DGIF). However, these designations have no official legal status. The Yellow lampmussel ranges from Nova Scotia to Georgia in Atlantic slope drainages (NatureServe, 2009). In Virginia, it is recorded from the Roanoke, Chowan, James, York, and Potomac drainages. It is found in larger streams and rivers where good currents exist over sand and gravel substrates and in small creeks and ponds (Johnson, 1970). The Eastern lampmussel is a freshwater mussel which inhabits river systems in areas with substrates composed of silt, sand, cobble, gravel and exposed bedrock (NatureServe,2009). This species has a wide range, from eastern Canada west to Ontario and Quebec and south to South Carolina (NatureServe, 2009). In Virginia, there are records from the Chowan and York River drainages. Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are	

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sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species. The Yellow lance may be particularly sensitive to chemical pollutants and exposure to fine sediments from erosion (NatureServe, 2009). The Atlantic pigtoe is a medium-sized freshwater mussel which ranges from the Ogeeshee drainage in Georgia north to Virginia (NatureServe, 2009). In Virginia, this species is known from the James, Chowan and Roanoke River basins (NatureServe, 2009). The Atlantic pigtoe prefers clear, swift waters with gravel or sand and gravel substrates. Many populations from the main stem of larger rivers have disappeared and the species is becoming limited to the headwater areas of drainages in which it occurs. This could have implications for populations being able to reestablish after a localized, catastrophic event and for genetic exchange. Threats to the Atlantic pigtoe include pollution, impoundments, clearcutting, and dredging (Gerberich, 1991). This species does not appear to be able to tolerate habitat changes and it appears to be very poor at recolonizing previously disturbed habitats (NatureServe, 2009). A recent study determined that the glochidia of the Atlantic pigtoe are extremely sensitive to pollution (Augspurger et al., 2003). This species is currently listed as threatened by DGIF and is also tracked as a species of concern by the USFWS. However, this designation has no official legal status.	
b. Stony Creek-Richardson Pond SCU The Stony Creek-Richardson Pond SCU has been given a biodiversity ranking of B2, which represents a site of very high significance. The natural heritage resource associated with this site is: *Percina Rex* Roanoke logperch G1G2/S1S2/LE/LE The Roanoke logperch is endemic to the Roanoke and Chowan River drainages in Virginia (Burkhead and Jenkins, 1991) and inhabits medium and large, warm and usually clear rivers with sandy to boulder spotted bottoms (NatureServe, 2009). The Roanoke logperch is threatened by channelization, siltation, impoundment, pollution, and de-watering activities (Burkhead & Jenkins, 1991). This species is currently classified as endangered by the USFWS and OGIF.	Comment noted. Consultation with USFWS has been undertaken to address potential impacts to the Roanoke logperch. Because logperch surveys are only valid for two years, logperch surveys will be conducted when the Project is approximately two years from construction.

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Comment	**Response**
c. Meherrin River-Shining Creek SCU The Meherrin River-Shining Creek SCU has been given a biodiversity ranking of B5, which represents a site of general significance. The natural heritage resource associated with this site is: *Lampsilis cariosa* Yellow lampmussel G3G4/S2/NL/SC	Comment noted.
ii. Chowanoke Crayfish The Chowanoke crayfish (Orconectes virginiensis, G3/S2S3/NL/NL) has been historically documented in the SEHSR study area. Chowanoke crayfish inhabit medium-sized rivers and creeks that flow through woodlands mainly in the Chowan River and Roanoke River systems in Virginia and North Carolina (NatureServe, 2009). They also inhabit rivers with low gradients and a sand or sparse gravel substrate (NatureServe, 2009). Little is known about its life history, though species in the genus Orconectes are considered tertiary burrows, indicating that they typically do not burrow, but seek out cover from rocks in the river. Threats likely include urban development and water pollution as well as alterations to its river habitats, including channelization (NatureServe, 2009).	Comment noted.
iii. Michaux's Sumac Michaux's sumac (Rhus michauxii, G2/S1/LE/LT) has been documented in the study area (Section E). Michaux's sumac is a dioecious shrub that grows up to 0.4 meter in height (TNC et. aI., 1999). This plant occurs in sandy or rocky, open, hardwood dominated forests and savannas (Smith and Van Alstine, 1995), sometimes in association with circumneutral soils. It is dependent upon some form of disturbance to maintain its open habitat (TNC et aI., 1999). Periodic, naturally occurring fires provided such disturbance historically. However, today many of this plant's occurrences are in areas artificially disturbed such as highway, powerline and railroad rights-of-way, edges of cultivated fields, and other cleared lands. In Virginia, the only known population is located in the impact area on Fort Pickett where it is maintained by frequent fires. The major threats to Michaux's sumac include fire suppression and habitat degradation (TNC et. al., 1999). This species is currently classified as endangered by the USFWS and listed as threatened by the Virginia Department of Agriculture and Consumer Services (see section 8(c)).	Comment noted. The Richmond to Raleigh Project is continuing to coordinate with USFWS regarding the population of Michaux's sumac in Section D of the Project.
iv. Threatened and Endangered Species Waters The Nottoway River, Stony Creek 1 and Sappony Creek in Virginia have all been designated by DGIF as Threatened and Endangered Species Waters. The species associated with these waters are the Atlantic pigtoe, the Roanoke logperch and the Dwarf wedgemussel (Alasmidonta heterdon, G1G2/S1/LE/LE).	Comment noted.

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Comment	**Response**
c. Summary Recommendation - Recommended inventories of the Yellow lance, Yellow lampmussel, Eastern mussel, Atlantic pigtoe, Chowanoke crayfish, the Dwarf wedgemussel and Roanoke logperch, Michaux's sumac may be coordinated with J. Christopher Ludwig, DCR-DNH Natural Heritage Inventory Manager, at chris.ludwig@dcr.virginia.gov or 804-371-6206. Coordination, due to the legal status of the Roanoke logperch and Dwarf wedgemussel, may be made with USFWS and Amy Ewing, DGIF at (804) 367-2211. Due to the legal status of Michaux's sumac, proponent agencies should coordinate with the USFWS and Keith Tignor, VDACS at (804) 786-3515.	See response to comment 12(b) with regards to field surveys and coordination.
12) State-listed Plant and Insect Species. a. The Endangered Plant and Insect Species Act of 1979, Chapter 39 §3. 1-1 020 through 1030 of the Code of Virginia, as amended, authorizes the Virginia Department of Agriculture and Consumer Services (VDACS) to conserve, protect, and manage endangered and threatened species of plants and insects. The VDACS Virginia Endangered Plant and Insect Species Program personnel cooperates with the U.S. Fish and Wildlife Service (USFWS), DCR-DNH and other agencies and organizations on the recovery, protection or conservation of listed threatened or endangered species and designated plant and insect species that are rare throughout their worldwide ranges. In those instances where recovery plans, developed by USFWS, are available, adherence to the order and tasks outlined in the plans are followed to the extent possible. Agency Findings. According to VDACS, the 2001 Tier I review for the Southeast High Speed Rail Project indicates the state-listed threatened New Jersey bulrush (Juncus caesariensis) occurs in close proximity to the proposed project area. Currently there are no known populations of this plant that would be adversely affected by this project. A population of the federal- and state-protected Michaux's sumac (Rhux michauxii, FE/ST) occurs in close proximity to a proposed railroad alignment alternative in the vicinity of Rawlings, Virginia. There are four known populations of this imperiled plant species known in the Commonwealth. State Natural Area Preserves. OCR files do not indicate the presence of any State Natural Area Preserves under the agency's jurisdiction in the project vicinity.	Comment noted.

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Comment	**Response**
b. Recommendations. DCR-DNH recommends that project proponents perform the following: • Conduct an inventory of the Yellow lance, Yellow lampmussel, Eastern mussel, Atlantic pigtoe, Chowanoke crayfish, the Dwarf wedgemussel and Roanoke logperch, due to the potential for the area to support populations of these resources. With the survey results DCR-DNH can more accurately evaluate potential impacts to natural heritage resources and offer specific protection recommendations for minimizing impacts to the documented resources. • Conduct a survey for Michaux's sumac by a certified surveyor before October 1, 2010. For any selected alternative, the railway should be kept as far away from the plant population as possible. Maintenance activities should be adapted to protect the rare plant population including targeted woody plant management by a qualified contractor/consultant. OCR does not support translocation of plants off-site. However, if plants will be taken by the project, OCR recommends the collection of seeds. • Implement and strictly adhere to applicable state and local erosion and sediment control/storm water management laws and regulations to minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities. • Coordinate with the USFWS and DGIF due to the legal status of the Roanoke logperch and Dwarf wedgemussel, to ensure compliance with protected species legislation. • Coordinate with the USFWS and VDACS due to the legal status of Michaux's sumac, to ensure compliance with protected species legislation. • Contact Rene Hypes at (804) 371-2708 for an update on natural heritage information if a significant amount of time passes before the proposed project is initiated since new and updated information is continually added to Biotics. • Conduct a survey of the study area, as recommended by VDACS, to determine the size and distribution of the Michaux's sumac population, and the potential effects of construction and rail line maintenance on the individual plants. DCR-DNH biologists are qualified and available to conduct inventories for rare, threatened, and endangered species. A list of other individuals who are qualified to conduct inventories may be obtained from the USFWS.	The Project Team met with Steve Hardwick of VDEQ on April 19, 2011, to discuss alignment options in the vicinity of the existing Michaux's sumac population. All agencies agreed that Alternative VA4 was acceptable and this alternative is listed as the preferred alternative in the Tier II FEIS. Mussel and Roanoke logperch surveys were undertaken on the James River, Appomattox River, Sappony Creek, Nottoway River, Meherrin River, and the Tar River and Neuse River in North Carolina. All streams surveyed contained mussel fauna (18 species noted overall), but the listed mussels were not encountered. However, the Appomattox River and Nottoway River had excellent mussel habitat and the Meherrin River had rare species (Triangle floater, creeper, and Green floater). The presence of state listed/federal species of concern mussels in the Appomattox River, Nottoway River, and Meherrin River were considered as impacts to protected species to avoid future project delays. The Roanoke Logperch was observed in the Nottoway River and suitable habitat for the logperch was found in the Meherrin River. Consultation with USFWS was undertaken to address potential impacts to this species. Based on the information provided, the Chowanoke crayfish (*Orconectes virginiensis*, G3/S2S3/NL/NL) does not have federal protection and generally field surveys are only conducted for federally listed species. A pre-construction survey for protected species will be conducted at all locations where listed species were located during these efforts. Additionally, state wildlife agencies should be consulted on appropriate measures to protect mussel fauna before and during project construction.

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13) Wildlife Resources and Protected Species. a. According to the Tier II DEIS (page 4-61), nine federally protected species for counties in the study area. The Roanoke logperch is presumed to occur within the study corridor as it crosses over Nottoway River and Stony Creek. The DEIS concludes that construction should not impact Roanoke logperch populations in Nottoway River or Stony Creek if instream activities and sedimentation are appropriately minimized. Additional surveys for listed freshwater mussels will be scheduled prior to project construction for Sappony Creek, Nottoway River, Tar River, Neuse River, and Cedar Creek in order to determine potential project impacts to the dwarf wedgemussel, Tar River spinymussel, and James River spinymussel. According to the Tier II DEIS, FRA has determined that the VA2 alternative within Section D of the project would have no effect on the Michaux's sumac, based on Section 7 consultation with USFWS (page 4-63). A pair of bald eagles was observed on September 14, 2005, along the Appomattox River, just west of the City of Petersburg and two potential nests were found. However, because project alternatives will be located more than 1,000 feet from the nests, the Tier II DEIS concludes that the project will have no effect on the bald eagle.	Comment noted.

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Comment	**Response**
b. Agency Jurisdiction. The Department of Game and Inland Fisheries (DGIF), as the Commonwealth's wildlife and freshwater fish management agency, exercises enforcement and regulatory jurisdiction over wildlife and freshwater fish, including state or federally listed endangered or threatened species, but excluding listed insects (Virginia Code Title 29.1). The DGIF is a consulting agency under the U.S. Fish and Wildlife Coordination Act (16 U.S.C. sections 661 et seq.), and provides environmental analysis of projects or permit applications coordinated through DEQ and several other state and federal agencies. DGIF determines likely impacts upon fish and wildlife resources and habitat, and recommends appropriate measures to avoid, reduce, or compensate for those impacts. Agency Findings. DGIF has identified the following species under its jurisdiction that are found within the study corridor. • Kerr Reservoir and Gaston Lake support an important recreational fishery, including a reproducing population of striped bass. • The Meherrin River is a Threatened and Endangered Species Water due to the Atlantic pigtoe (federal species of concern/state-listed threatened (FS/ST). The yellow lampmussel (FS/state special concern (SS)) and Roanoke bass (FS/SS) have also been documented there. • Two eagle nests have been recorded in the vicinity of the Route 1 crossing of the Roanoke River at Gaston Lake. • The Nottaway River is a Threatened and Endangered Species Water due to the presence of the Roanoke logperch (federally-listed endangered/state-listed endangered (FE/SE), dwarf wedgemussel (FE/SE), and Atlantic pigtoe (FS/ST). The Nottoway River is a Confirmed Anadromous Fish Use Area. • Sturgeon Creek and Sappony Creek are Threatened and Endangered Species Waters due to the presence of the Atlantic pigtoe (FS/ST). • Tea Branch is a Threatened and Endangered Species Water due to the presence of the whitemouth shiner (ST). • Waqua Creek, Butterwood Creek, Stony Creek, and the James River are Confirmed Anadromous Fish Use Areas. • The state-listed threatened loggerhead shrike has been documented in the vicinity of Petersburg.	The Project Team coordinated with Ernie Aschenbach of the Virginia Department of Game & Inland Fisheries on April 16, 2010, with regards to potential natural resource impacts associated with the SEHSR Corridor. Surveys were conducted for all species federally listed as threatened or endangered, as well as for Bald Eagle impacts (Under the Bald and Golden Eagle Protection Act). Also, see response to comment 12(b).

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Comment	**Response**
c. Recommendations. DGIF requests detailed information regarding the proposed route, any new construction (e.g. new right-of-way and stations), and stream crossings. Upon review of the additional information, DGIF will provide comments regarding potential adverse impacts upon fish and wildlife resources and recommendations to mitigate for any impacts. Contact Amy Ewing, DGIF at (804) 367-2733, for additional information regarding these comments.	The Project Team has coordinated with Ernie Aschenbach of VDGIF on April 16, 2010, with regards to Clean Water Act Section 401/404 permitting for Virginia sections of the Richmond to Raleigh Project. At that time, information on potential impacts was shared with the agency and Virginia Joint Permit Application requirements were discussed. Coordination with DGIF will continue throughout the Tier II FEIS, ROD, and final design/permitting phase of the Project.
14) Forest Resources. a. According to the Tier II DEIS (page 4-59) terrestrial communities in the study corridor would be impacted permanently by project construction from clearing and paving and loss of the terrestrial community area. Destruction of natural communities within the study corridor would result in the loss of foraging and breeding habitats for the various animal species that utilize the area. Agency Jurisdiction. The mission of the Virginia Department of Forestry (VDOF) is to protect and develop healthy, sustainable forest resources for Virginians. VDOF was established in 1914 to prevent and suppress forest fires and reforest bare lands. Since the Department's inception, it has grown and evolved to encompass other protection and management duties including: protecting Virginia's forests from wildfire, protecting Virginia's waters, managing and conserving Virginia's forests, managing state-owned lands and nurseries, and managing regulated incentive programs for forest landowners. b. Agency Findings. VDOF finds that the proposed project will have a significant impact on the forest resources of the Commonwealth. The development of a mitigation plan for project impacts to forest resources may be coordinated with Todd Groh, DOF at (434) 220-9044 or todd.groh@dof.virginia.gov.	Comment noted. Also see response to comment 14 (c) below.

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c. Recommendations. VDOF recommends that the proposed clearing of nearly 1,163 acres of timberland in the four-county area for the railroad right-of-way corridor be mitigated. Potential opportunities for mitigation include but are not limited to: • Planting open company lands within the Commonwealth of Virginia to create a forested stand. • Working with the VDOF to develop a cost share program to assist private landowners within the four-county area or statewide to reforest harvested timberlands or plant open lands with pine or hardwood seedlings. This program would be funded by USDOT/Federal Railroad Administration for mitigation. • Working with the VDOF or other Virginia conservation agency or group to create a forest land conservation fund that would be used for the purchase of conservation easements or property acquisitions of forested lands. These purchases could be within the four-county area or statewide and would ensure that the forested lands are managed and be retained as working forest lands. Due to the great value of forests and forestland to the Commonwealth, VDOF recommends a mitigation ratio in excess of 1 to 1; more than one acre of land reforested or protected to every one acre cleared for the right-of-way. This would result in the conservation, reforestation or purchase of at least 1,163+ acres within the four-county area or statewide. VDOF is available to meet representatives from the proponent agencies to discuss potential mitigation strategies for this project. For additional information and coordination, contact Todd Groh, VDOF at (434) 220-9044 or todd.groh@dof.virginia.gov.	Detailed mitigation methods will be determined during the permitting phase and will specified in construction documents based on final design and following consultation with the Virginia Department of Forestry and other regulatory and advisory agencies participating in the Virginia Joint Permit Application process.
15) Water Supply. a. The DEIS (page 3-8) states that surface waters that could be especially sensitive to impacts by the proposed SEHSR project include those used for water supplies and include Ashton Creek, Timsbury Creek, Swift Creek, Lieutenant Run, Float Creek, Little Genito Creek, Parham Creek, Hewey Creek, Roanoke River, Smith Creek, Reedy Branch and Anderson Swamp Creek. Agency Jurisdiction. The Virginia Department of Health (VDH), Office of Drinking Water (ODW) reviews projects for the potential to impact public drinking water sources (groundwater wells, springs and surface water intakes).	Comment noted. These public water supply streams have been identified in the Tier II DEIS in Table 3-3 and include any unnamed tributaries flowing into the listed waters. It is assumed that Float Creek listed in the comment is the “Flat Creek” listed in Table 3-3 of the Tier II DEIS.

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b. Agency Findings. VDH finds that there were no significant differences among the three alternatives related to public water sources. The following groundwater wells are within a 1,000 foot radius of the study corridor: Well Owner — Milepost Marker (Approx.) Southside Elementary School — S-32.5/S-33 Food Lion — S-36.25 Dinwiddie Elementary School — S-37 Hoagie Bob's — S-38.5 Home Place Restaurant — S-38.5 Town of McKinney-North Well — S-47 Town of McKinney-South Well — S-47 Town of McKinney-Well 01 — S-48.5 Hillcrest Mobile Home Park — S-77/S-78 No surface water intakes are located within a 5 mile radius of the study corridor. The study area does not fall within Zone 1 (up to 5 miles into the watershed» of any public surface water sources. Project falls within Zone 2 (greater than 5 miles into the watershed) of the following surface water intakes: River Basin — Surface Water Intake Owner — Water Source James — Virginia-American Water Co — Appomattox Chowan — Greensville County WSA- — Jarratt Nottoway Chowan — Town of Lawrenceville — Meherrin Chowan — Town of Lawrenceville — Great Creek Chowan — City of Emporia — Meherrin Chowan — City of Norfolk — Nottoway Roanoke — City of Norfolk- Left VB Intake — Lake Gaston Roanoke — City of Norfolk- Right VB Intake — Lake Gaston	Section 3.15.1 of the Tier II FEIS has been amended to include the VDH groundwater well information provided in these comments. The surface water intakes described here have also been added to this discussion. A new Section 4.15.1 (Groundwater Wells) has been added to the Tier II FEIS to address potential direct well impacts from the Preferred Alternative along with a discussion of potential impacts to public water supply intakes.

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Comment	**Response**
c. Recommendations. VDH recommends that Best Management Practices should be employed along the rail corridor, including erosion and sediment controls and Spill Prevention Controls and Countermeasures. Proponent agencies should notify groundwater well and surface water intake owners of the scope of this project and solicit their comments. Requirement. Potential impacts to public water distribution systems must be verified with the local utility. Proponent agencies must contact the appropriate local utility where potential impacts may occur. Conclusion. VDH concludes that there are potential impacts to public drinking water sources due to this project Contact Diedre Forsgren, VDH at (804) 864-7241 for additional information.	The Project designs are not anticipated to impact any public groundwater wells in Virginia; therefore, specific coordination with well owners was not initiated. (Coordination was undertaken with the manager of the Hillcrest Mobile Home Park in Brodnax, VA, but it was determined that potential impacts to one of their two wells could be mitigated by establishing another well within the property limits.) The Richmond to Raleigh Project will employ best management practices in both Virginia and North Carolina to control erosion and sedimentation, and to prevent spills. Section 4.1.6 of the Tier II FEIS lists all mitigation and minimization techniques that will be followed to minimize water quality impacts from the Project. Potential impacts to public water distribution systems will be verified during final design and local utilities will be contacted during the ROW phase of the Project, if necessary. As noted above, a discussion of potential impacts to public water supplies has been added to the Tier II FEIS (Section 4.1.1.4).

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Comment	**Response**
16) Historic Structures and Archaeological Resources. a. According to the DEIS (page 4-132), the effects of the SEHSR project on archaeological resources will be determined after the selection of the preferred alternative per 36 CFR 800.4(b)(2). This regulation permits a phased process to conduct identification and evaluation efforts on projects where alternatives under consideration consist of corridors or large land areas. Both the Virginia Department of Historic Resources (DHR) and North Carolina State Historic Preservation Office (HPO) have agreed with this approach for the SEHSR project. The document (page 4-133) states that where the SEHSR project has been determined to have an adverse effect on historic resources, Section 106 of the National Historic Preservation Act of 1966 requires that efforts be undertaken to avoid, minimize, or mitigate the adverse effects. As part of this process, consultation has taken place and is ongoing with DHR and other "consulting parties," such as the National Park Service, local historic societies, and property owners. This consultation will result in Memorandums of Agreement (MOAs) for both Virginia and North Carolina, which outline the agreed-upon measures that the SEHSR project will take to avoid, minimize, or mitigate the adverse effects. Agency Jurisdiction. The Department of Historic Resources conducts reviews of projects to determine their effect on historic structures or cultural resources under its jurisdiction. DHR, as the designated State's Historic Preservation Office (SHPO), ensures that federal actions comply with Section 106 of the National Historic Preservation Act of 1966 (NHPA), as amended, and its implementing regulation at 36 CFR Part 800. The NHPA requires federal agencies to consider the effects of federal projects on properties that are listed or eligible for listing on the National Register of Historic Places. Section 106 also applies if there are any federal involvements, such as licenses, permits, approvals or funding.	Comment noted. The Richmond to Raleigh Project continues to coordinate with VDHR about potential impacts to historic resources.

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Comment	**Response**
b. Agency Comments. According to DHR, the FRA and Virginia Department of Rail and Public Transportation (DRPT), through the North Carolina Department of Transportation, have been consulting with the DHR on this project since 2001 pursuant to Section 106 of the NHPA. The agencies are in the early stages of drafting a Memorandum of Agreement on "the undertaking which, when complete, will conclude the Section 106 process. DHR anticipates that such consultation will continue and DHR will make comments under the federal process. According to DHR, the FRA and DRPT are aware of DHR concerns and issues. Recommendation. In accordance with Section 106 of the National Historic Preservation Act, as amended, and its implementing regulation 36 CFR 800, FRA and DRPT must continue to coordinate with DHR on the development of an MOA addressing impacts to historic and archaeological resources. For additional information and coordination, contact Marc Holma, DHR at (804) 367-2323, ext. 114.	The Richmond to Raleigh Project will continue to coordinate with VDHR through the successful completion of the MOA.
17) Recreational Resources. a. According to the DEIS (page 5-4), the project would not use land from any recreation area or wildlife refuge. However, it would cross five publicly-owned trails in six locations, require a small amount of right-of-way from three public parks (two local and one national park), and come in close proximity to three public parks. Agency Jurisdiction. DCR's Division of Planning and Recreational Resources (DPRR) administers the Virginia Scenic Rivers, Virginia Byways, and state trails programs and is responsible for developing the Virginia Outdoors Plan (VOP), the state's comprehensive outdoor recreation and open space plan. The VOP recognizes the importance of scenery to Virginians.	Comment noted.

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Comment	**Response**
b. Agency Findings. According to the Department of Conservation and Recreation Division of Planning and Recreation Resources (DPRR), none of the recreation facilities listed in the document are protected by the Land & Water Conservation Fund (Section 6(f) Land and Water Conservation Fund Act of 1965). Many battlefields are listed in the Section 4(f) (U.S. Department of Transportation Act of 1966) evaluation section of the document and project impacts are denoted as de minimis. However, if any of the battlefields were assisted with Land & Water Conservation Fund through the Federal American Battlefield Protection Program or some other means, there may be Section 6(f) impacts which would need to be addressed. The project corridor crosses the proposed corridor of the statewide Beaches to Bluegrass trail. The Tobacco Heritage Trail (THT), a subsection of the Beaches to Bluegrass Trail, is currently under development in Brunswick and Mecklenburg counties. There are two alignments of the THT that cross the SEHSR corridor at Alberta and La Crosse, both of which should connect into the proposed alignment for the East Coast Greenway parallel to the SEHSR. The project corridor also crosses several scenic resources. The scenic resources this project crosses are: Scenic River Crossings - • Historic Falls of the James • Appomattox River • Nottoway River [potential] • Meherrin River Scenic Byway Crossings - • Route 903 • Route 46-Christianna Highway	Comment noted.

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Comment	**Response**
c. Recommendations. DCR-DPRR offers the following recommendations addressing potential project impacts to recreational resources - • The proponent agencies should contact the National Park Service to determine if any 6(f) impacts may occur as a result of this project. • The proponent agencies should coordinate with DCR-DPRR regarding Tobacco Heritage Trail crossings at Alberta and La Crosse. • Crossings at scenic rivers and byways should take into account the scenic values of the areas and enhance the scenic qualities of the crossings. If possible, proponent agencies should provide water access at all crossings of scenic rivers. The proponent agencies may contact Elizabeth S. Ries, National Park Service at (202) 354-2215 or Elizabeth Ries@contractor.nps.gov, to determine if any Section 6(f) impacts may occur as a result of this project. Coordination of this project with regard to Tobacco Heritage Trail crossings at Alberta and La Crosse may be accomplished by contacting Jennifer Wampler, DCR-DPRR at Jennifer.Wampler@dcr.virginia.gov. Any questions regarding scenic resources may be directed to Lynn Crump, DCR-DPRR at (804) Lynn.Crump@dcr.virginia.gov.	Section 6(f) properties described in the Tier II DEIS were identified through a search of the Land and Water Conservation Fund website of state grants. In response to this comment, the Project Team coordinated with Elizabeth Ries and Jack Howard of the National Park Service (NPS), who verified that there are no NPS Section 6(f) resources within the Project Study Area. The Project Team is coordinating with both the Town of Alberta and the Town of La Crosse regarding the Richmond to Raleigh Project crossings of the Tobacco Heritage Trail as described in the Section 4(f) Evaluation for the Richmond to Raleigh Project. Coordination with the DCR-DPRR is also taking place as it relates to the development of the Greenway Corridor Plan, parallel to the Richmond to Raleigh Project. As noted in the Tier II DEIS, the Richmond to Raleigh Project would cross the James River on a new bridge adjacent to the existing single track bridge. At the Appomattox River, a new parallel bridge is proposed for high speed passenger trains, located to the east of the existing single track bridge. The project alternatives propose to utilize the existing bridge piers and substructure of the bridges at the Nottaway and Meherrin Rivers. The superstructure (girders, decking and track) would be replaced at the Nottoway River, while the existing girders and decking would be retained at the Meherrin River. There is no conflict with the Wild and Scenic Rivers Act of 1968; however, coordination with the Virginia Scenic Rivers Board will be required to comply with the Virginia Scenic Rivers Act of 1970 for the new structures on the James and Appomattox Rivers. This coordination will take place during the final design stage of the Project. Regarding the request for water access, there are existing public access points at both the James River and Appomattox River. It is not possible to provide additional access points from the rail corridor because the corridor is not accessible to vehicles or pedestrians (unlike a highway project).
18) Aviation Impacts. a. Agency Jurisdiction. The Virginia Department of Aviation's Airport Services Division provides airport sponsors and managers with technical assistance on a wide range of projects and issues, including the planning, design, construction and maintenance of airport facilities. The division manages funding programs for capital improvements, facilities and equipment, airport maintenance projects, and airport security; the General Aviation Voluntary Security Certification Program; the licensing program for public-use airports; and the registration program for private-use airports. This division conducts statewide aviation system planning and maintains the Virginia Air Transportation System Plan. Agency Comments. According to the Department of Aviation (DoAv) the proposed project may be located within 20,000 linear feet of a public use airport or a portion of the route may penetrate an existing or proposed Part 77 surface or approach path as defined in Federal Aviation Administration (FAA) Advisory Circular 150/5300.	Chapters 3 and 4 of the Tier II FEIS have been updated to identify and address potential impacts to all applicable airport runways within 20,000 linear feet of the Preferred Alternative.

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Comment	**Response**
b. Requirements. In accordance with Federal Aviation Regulations Part 77, the proponent agencies must submit Form 7460, Notice of Proposed Construction or Alteration, to the Federal Aviation Administration Eastern Region for its review for potential hazards to air navigation. Submittal of this form may be made to Chad Carper, FAA Eastern Region at (703) 661-1358. The review will ensure that the proposed rail line will not create a hazard to air navigation. For further information, contact S. Scott Denny, DoAv at (804) 236-3632.	Chapter 4 of the Tier II FEIS has been amended to address all requirements for Form 7460 to be submitted prior to project construction.

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19) Pollution Prevention. Pollution Prevention. DEQ advocates that principles of pollution prevention be used in all construction projects as well as in facility operations. Effective siting, planning, and on-site Best Management Practices (BMPs) will help to ensure that environmental impacts are minimized. However, pollution prevention techniques also include decisions related to construction materials, design, and operational procedures that will facilitate the reduction of wastes at the source. Recommendations. We have several pollution prevention recommendations that may be helpful in future construction projects and in the operation of rail line: • Consider development of an effective Environmental Management System (EMS). An effective EMS ensures that operations are committed to minimizing environmental impacts, setting environmental goals, and achieving improvements in its environmental performance. DEQ offers EMS development assistance and it recognizes organizations with effective Environmental Management Systems through its Virginia Environmental Excellence Program. • Consider environmental attributes when purchasing materials. For example, the extent of recycled material content, toxicity level, and amount of packaging should be considered and can be specified in purchasing contracts. • Consider contractors' commitment to the environment (such as an EMS) when choosing contractors. Specifications regarding raw materials and construction practices can be included in contract documents and requests for proposals. • Choose sustainable materials and practices for infrastructure construction and design. These could include asphalt and concrete containing recycled materials, and integrated pest management in landscaping, among other things. • Integrate pollution prevention techniques into the facility maintenance and operation, to include the following: inventory control (record-keeping and centralized storage for hazardous materials), product substitution (use of nontoxic cleaners), and source reduction (fixing leaks, energy-efficient HVAC and equipment). Maintenance facilities should be designed with sufficient and suitable space to allow for effective inventory control and preventative maintenance. DEQ's Office of Pollution Prevention provides information and technical assistance relating to pollution prevention techniques and EMS. For more information, contact DEQ's Office of Pollution Prevention, Sharon Baxter at (804) 698-4344.	Comments noted.

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Comment	**Response**
20) Local Comments. a. City of Richmond - Comments from the Richmond Department of Planning and Development Review, Land Use Administration Division and Department of Economic and Community Development are included below. Additional contact information for departments and divisions that will be involved in construction plan reviews and code enforcement is attached to this response.	Comment noted.
1) Department of Planning and Development Review, Land Use Administration Division According to the Department of Planning and Development Review, Land Use Administration Division, one of the vision statements for the implementation of the City of Richmond's Downtown Master Plan (page 4.61) is that Main Street Station should be restored as an inter-modal transportation center. The plan recognizes that, "Main Street Station remains underutilized" and "the City should take advantage of this great asset by restoring its role as the center of the community." The plan states that utilizing Main Street Station as an inter-modal transportation center, "would provide a tremendous benefit to Downtown." "Main Street Station", the plan continues, "is an excellent choice for such a transportation center, as the station is a grand entrance to the city, and its location provides direct access to the City Center and Downtown neighborhoods." Lastly, the plan states that, if it were to happen, "increased rail service could serve the station, making Main Street Station a local and regional transportation destination."	Comment noted.
The DEIS notes that a new bridge would have to be constructed over the James River heading into Main Street Station. The James is one of the seven "Foundations" of the Master Plan. One of the guidance items for this foundation is to "allow residents and visitors to fully enjoy this unique natural feature by creating a series of clear connections to the riverfront. Under this guidance item the plan (page 3.14) notes that "one obstacle to accessibility is the layering of infrastructure that lines the riverfront, including the canals that George Washington surveyed, the railroad lines built on top of the canal tow-paths, and the recently constructed floodwall."	The proposed new bridge over the James River leading into Main Street Station will be located immediately adjacent to the existing single track CSX S-line bridge in use today. Similar to the current rail bridge, the new one will span the existing canal walls and flood walls that parallel the riverfront. This existing railroad line/bridge is perpendicular to the river front and its proposed expansion through a new bridge will not worsen the existing obstacles to public riverfront accessibility, as access to the riverfront is entirely blocked in this location by the existing canal walls and floodwalls that currently line the river's edge.

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The Land Use Administration Division supports of the use of Main Street Station as a hub in the proposed high-speed rail network. When an alternative is chosen and more information is provided regarding the impact of the alternative on Main Street Station and other affected properties, Land Use Administration will provide detailed comments. For questions regarding Land Use Administration Division comments, contact Lory Markham at (804) 646-6309, or Lory. Markham @Richmondgov.com.	Regarding the selection of a Preferred Alternative in the vicinity of Main Street Station, as indicated in the Tier II DEIS, all three alternatives in Section AA are on common alignment and maximize the use of existing rail ROW to build double track where only single track currently exists. To see any rail design changes associated with the Preferred Alternative in this location, along with any associated roadwork, refer to the Map Book Appendix of the Tier II FEIS. Although the Main Street Station site was evaluated in the Richmond to Raleigh Project Tier II DEIS and Tier II FEIS to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility and maximize ridership for the larger transportation network, this study does not evaluate the specific impacts of any station improvements. Decisions regarding improvements planned for Main Street Station as well as the land around it are under the control of the City of Richmond. Assuming federal funding will be used for the construction of or improvement to the Main Street Station, compliance with NEPA will be required for its implementation, including an evaluation of direct, indirect, and cumulative impacts. All comments regarding Main Street Station collected in this Project have been noted by staff and will be provided to the City of Richmond, who may be required to perform separate NEPA environmental evaluations and will be responsible for making final decisions on Main Street Station improvements at a later date.
2) Department of Economic and Community Development The Richmond Department of Economic and Community Development applauds the Virginia Department of Rail and Public Transportation, North Carolina Department of Transportation and the Federal Railroad Administration for their dedicated efforts in developing the DEIS. Connecting multi-state urbanized areas with improved passenger rail service and eventual high speed passenger rail infrastructure will provide competitive travel alternatives, enhance the environment, attract jobs, promote tourism and bolster economic vitality. Passenger rail service provides safe and highly reliable transportation service between the downtown areas of multiple cities for all segments of the population. This type of transportation service is extremely desirable and in many cases rail travel is quicker, more convenient, reliable, comfortable and less expensive than air or automobile travel. A city connected by quality passenger rail service coupled with convenient public transportation services becomes a more attractive destination and the areas near downtown stations become prime locations for investment. Such stations invite transit oriented development and present the opportunity to improve the livability and sustainability of the communities that they serve. In this way passenger rail service fosters economic development for the city, state and nation. The DEIS details the improvements to the passenger rail corridor between Richmond	Support for the Project, including its funding, has been noted. See an expanded Chapter 1 of the Tier II FEIS for additional project Purpose and Need (including expanded cost/benefit) information.

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Virginia and Raleigh North Carolina. The document includes Richmond's downtown Main Street Station multimodal transportation center as the terminus and/or origination point for all passenger rail services. Main Street Station is also the designated Richmond train station in the Southeast High Speed Rail Corridor, Tier l EIS (2002 Record of Decision and Implementation Plan) and the draft Hampton Roads High Speed Passenger Rail Study, Tier I EIS. Currently the Main Street Station is served by only four trains a day along the Newport News to Boston corridor with Amtrak's northeast regional service. Main Street Station is positioned to serve as the hub for Virginia's passenger rail network with 32 trains per day from the north, south, east and west. The eight Southeast high speed trains are a component of the state rail network and vital to the connectivity within the Commonwealth. The City of Richmond strongly supports the planning and implementation of the studied Richmond to Raleigh high speed rail corridor as well as the overall Southeast high speed rail corridor linking Washington DC to urbanized areas and states to the south. The location of the Southeast high speed corridor directly connected to Amtrak's existing successful Northeast high speed rail corridor provides a tremendous opportunity and further enhances the rail infrastructure investment. Federal and state agencies along with high speed rail supporters should continue their efforts to make the implementation of the Southeast high speed rail corridor project a priority and a reality. For questions regarding the Department of Economic and Community Development comments, contact Viktoria Badger at 804-646-5871, or Viktoria.badger@ richmondgov.com.	
b. Chesterfield County - Chesterfield County has no comments on the DEIS.	Comment noted.
21) **Regional Comments** - Planning District Commissions. In accordance with the Code of Virginia, Section 15.2-4207, planning district commissions encourage and facilitate local government cooperation and state-local cooperation in addressing, on a regional basis, problems of greater than local significance. The cooperation resulting from this is intended to facilitate the recognition and analysis of regional opportunities and take account of regional influences in planning and implementing public policies and services. Planning district commissions promote the orderly and efficient development of the physical, social and economic elements of the districts by planning, and encouraging and assisting localities to plan, for the future.	Comment noted.

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a. Crater Planning District Commission (CPDC) - The CPDC is supportive of efforts by North Carolina and Virginia to establish high speed passenger rail service within the federally designated Southeast High Speed Rail Corridor. Several local governments within the Tri-Cities are on record supporting the VA 1 alternative and opposing pursuing the further development of alternatives VA2 and VA3. The CPDC also supports VA1 and the conclusion reached in the DEIS regarding alternatives through Petersburg. VA 1 offers significant cost and impact advantages over both alternatives VA2 and VA3 in the Petersburg vicinity.	This statement appears to relate to alternatives that were considered, but dropped from further consideration. The VA1 alternative described here is the preferred alternative in the Tier II FEIS.
The CPDC and the Tri-Cities Area Metropolitan Planning Organization (MPO) are interested in further exploring the potential development of a new rail station that would offer better roadway access for future passenger service. The DEIS (page 2-49) indicates three potential station sites have been evaluated by study sponsors from an access perspective only. The draft document does not provide much detail or guidance on how this evaluation may be carried forward to the next step. The CPDC and the Tri-Cities MPO are interested in expanding this evaluation to include additional factors. The prospect of a new passenger rail station along the SEHSR corridor offering better service to area population is desired. A new station could be developed to better compliment the proposed Norfolk to Richmond conventional passenger service currently programmed by the Commonwealth Transportation Board and the potential development of a Richmond to Hampton Roads higher speed passenger service utilizing the Norfolk Southern rail corridor paralleling U.S. Route 460. It is most important that these potential future rail service development plans be effectively coordinated, especially with regard to potential future station location. For additional information contact Dennis K. Morris, CPDC at (804) 861-1666.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations or design needs, because the development of stations is a unique undertaking at an individual location. As noted, generalized sites within the Petersburg area were evaluated, but only to the level to ensure that a station placed along the Project in this general location would provide sufficient accessibility to the larger transportation network. All public and agency comments received regarding specific station locations have been noted and will be provided to transportation planning organizations in each station location. Those governments at the individual station locations will perform separate environmental evaluations and make the final decision on the station location and design at a later date. The Tri-Cities Area Passenger Rail Station Study evaluated two potential future HSR stations: the existing station in Ettrick and a location in north Collier Yard near Halifax and Squirrel Level Roads in Petersburg. Both locations were found to be suitable for HSR with varying levels of improvement. An Environmental Assessment (EA) is currently underway to evaluate these as well as additional alternative station locations. The study is sponsored by Crater Planning District Commission (CPDC) and FRA is the Lead Federal Agency. Regarding the Hampton Roads HSR connection, it has been studied through a separate project, given its independent utility (as authorized by NEPA). The ROD for the Hampton Roads Tier I study was signed by FRA in December 2012. For more information on the "Richmond to Hampton Roads Tier I" study or plans for the next phase (Tier II EIS), as well as public involvement opportunities for that separate project, please go to http://www.drpt.virginia.gov/projects/hamptonpassenger.aspx. The two projects are being designed to ensure compatibility and connectivity in the Petersburg, VA, area. The FEIS for the Richmond to Raleigh Project has been updated to include additional information on the Richmond to Hampton Roads project, specifically addressing the compatibility of designs as the status of that separate study.
b. Richmond Regional Planning District Commission (RRPDC) - The RRPDC reviewed the DEIS and has no comments on the project as proposed. For additional information contact Jackie Stewart, RRPDC at (804) 323-2033.	Comment noted.

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c. Southside Planning District Commission (SPDC) – The SPDC supports the project. For additional information contact Carol Corker, SPDC at (434) 447-7101.	Comment noted.

22) Attachment 1 - Enforceable Regulatory Programs comprising Virginia's Coastal Resources Management Program (VCP)

a. Fisheries Management - The program stresses the conservation and enhancement of finfish and shellfish resources and the promotion of commercial and recreational fisheries to maximize food production and recreational opportunities. This program is administered by the Marine Resources Commission (VMRC); Virginia Code 28.2-200 to 28.2-713 and the Department of Game and Inland Fisheries (DGIF); Virginia Code 29.1-100 to 29.1-570.

The State Tributyltin (TBT) Regulatory Program has been added to the Fisheries Management program. The General Assembly amended the Virginia Pesticide Use and Application Act as it related to the possession, sale, or use of marine antifoulant paints containing TBT. The use of TBT in boat paint constitutes a serious threat to important marine animal species. The TBT program monitors boating activities and boat painting activities to ensure compliance with TBT regulations promulgated pursuant to the amendment. The VMRC, DGIF, and Virginia Department of Agriculture Consumer Services (VDACS) share enforcement responsibilities; Virginia Code. 3.1-249.59 to 3.1-249.62.

b. Subaqueous Lands Management - The management program for subaqueous lands establishes conditions for granting or denying permits to use state-owned bottom lands based on considerations of potential effects on marine and fisheries resources, tidal wetlands, adjacent or nearby properties, anticipated public and private benefits, and water quality standards established by the Department of Environmental Quality (DEQ). The program is administered by the Marine Resources Commission; Virginia Code. 28.2-1200 to 28.2-1213.

c. Wetlands Management - The purpose of the wetlands management program is to preserve wetlands, prevent their despoliation, and accommodate economic development in a manner consistent with wetlands preservation.

1) The tidal wetlands program is administered by the Marine Resources Commission; Virginia Code. 28.2-1301 through 28.2-1320.
2) The Virginia Water Protection Permit program administered by DEQ includes protection of wetlands --both tidal and non-tidal; Virginia Code §62.1-44.15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act. Attachment 1 continued

d. Dunes Management - Dune protection is carried out pursuant to The Coastal Primary Sand Dune Protection Act and is intended to prevent destruction or alteration of primary dunes. This program is administered by the Marine Resources Commission; Virginia Cod~ 28.2-1400 through 28.2-1420.

e. Non-point Source Pollution Control –

1) Virginia's Erosion and Sediment Control Law requires soil-disturbing projects to be designed to reduce soil erosion and to decrease inputs of chemical nutrients and sediments to the Chesapeake Bay, its tributaries, and other rivers and waters of the Commonwealth. This program is administered by the Department of Conservation and Recreation; Virginia Code .10.1-560 et seg.).
2) Coastal Lands Management is a state-local cooperative program administered by the OCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater (see i) Virginia; Virginia Code § 10.1-2100 -10.1-2114 and 9 VAC10-20 et seq.

f. Point Source Pollution Control - The point source program is administered by the State Water Control Board (DEQ) pursuant to Virginia Code. 62.1-44.15. Point source pollution control is accomplished through the implementation of:

1) the' National Pollutant Discharge Elimination System (NPDES) permit program established pursuant to Section 402 of the federal Clean Water Act and administered in Virginia as the Virginia Pollutant Discharge Elimination System (VPDES) permit program.

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2) The Virginia Water Protection Permit (VWPP) program administered by DEQ; Virginia Code §62.1-44. 15:5 and Water Quality Certification pursuant to Section 401 of the Clean Water Act.

g. Shoreline Sanitation - The purpose of this program is to regulate the installation of septic tanks, set standards concerning soil types suitable for septic tanks, and specify minimum distances that tanks must be placed away from streams, rivers, and other waters of the Commonwealth. This program is administered by the Department of Health (Virginia Cod~ 32.1-164 through 32.1-165).

h. Air Pollution Control - The program implements the federal Clean Air Act to provide a legally enforceable State Implementation Plan for the attainment and maintenance of the National Ambient Air Quality Standards. This program is administered by the State Air Pollution Control Board (Virginia Code. 10-1.1300 through §10.1-1320). '

i. Coastal Lands Management is a state-local cooperative program administered by the OCR's Division of Chesapeake Bay Local Assistance and 84 localities in Tidewater, Virginia established pursuant to the Chesapeake Bay Preservation Act; Virginia Code § 10.1-2100 -10.1-2114 and Chesapeake Bay Preservation Area Designation and Management Regulations; Virginia Administrative Code 9 VAC10-20 et seq.

23) Attachment 2 –

Advisory Policies for Geographic Areas of Particular Concern

a. Coastal Natural Resource Areas - These areas are vital to estuarine and marine ecosystems and/or are of great importance to areas immediately inland of the shoreline. Such areas receive special attention from the Commonwealth because of their conservation, recreational, ecological, and aesthetic values. These areas are worthy of special consideration in any planning or resources management process and include the following resources:

i. Wetlands
ii. Aquatic Spawning, Nursery, and Feeding Grounds
iii. Coastal Primary Sand Dunes
iv. Barrier Islands
v. Significant Wildlife Habitat Areas
vi. Public Recreation Areas
vii. Sand and Gravel Resources
viii. Underwater Historic Sites.

b. Coastal Natural Hazard Areas - This policy covers areas vulnerable to continuing and severe erosion and areas susceptible to potential damage from wind, tidal, and storm related events including flooding. New buildings and other structures should be designed and sited to minimize the potential for property damage due to storms or shoreline erosion. The areas of concern are as follows:

i. Highly Erodible Areas
ii. Coastal High Hazard Areas, including flood plains.

c. Waterfront Development Areas - These areas are vital to the Commonwealth because of the limited number of areas suitable for waterfront activities. The areas of concern are as follows:

i. Commercial Ports
ii. Commercial Fishing Piers

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iii. Community Waterfronts

Although the management of such areas is the responsibility of local government and some regional authorities, designation of these areas as Waterfront Development Areas of Particular Concern (APC) under the VCRMP is encouraged. Designation will allow the use of federal CZMA funds to be used to assist planning for such areas and the implementation of such plans. The VCRMP recognizes two broad classes of priority uses for waterfront development APC:

i. water access dependent activities;
ii. activities significantly enhanced by the waterfront location and complementary to other existing and/or planned activities in a given waterfront area.

Advisory Policies for Shorefront Access Planning and Protection

a. Virginia Public Beaches - Approximately 25 miles of public beaches are located in the cities, counties, and towns of Virginia exclusive of public beaches on state and federal land. These public shoreline areas will be maintained to allow public access to recreational resources.

b. Virginia Outdoors Plan - Planning for coastal access is provided by the Department of Conservation and Recreation in cooperation with other state and local government agencies. The Virginia Outdoors Plan (VOP), which is published by the Department, identifies recreational facilities in the Commonwealth that provide recreational access. The VOP also serves to identify future needs of the Commonwealth in relation to the provision of recreational opportunities and shoreline access. Prior to initiating any project, consideration should be given to the proximity of the project site to recreational resources identified in the VOP.

c. Parks. Natural Areas and Wildlife Management Areas - Parks, Wildlife Management Areas, and Natural Areas are provided for the recreational pleasure of the citizens of the Commonwealth and the nation by local, state, and federal agencies. The recreational values of these areas should be protected and maintained.

d. Waterfront Recreational Land Acquisition - It is the policy of the Commonwealth to protect areas, properties, lands, or any estate or interest therein, of scenic beauty, recreational utility, historical interest, or unusual features which may be acquired, preserved, and maintained for the citizens of the Commonwealth.

e. Waterfront Recreational Facilities - This policy applies to the provision of boat ramps, public landings, and bridges which provide water access to the citizens of the Commonwealth. These facilities shall be designed, constructed, and maintained to provide points of water access when and where practicable.

f. Waterfront Historic Properties - The Commonwealth has a long history of settlement and development, and much of that history has involved both shorelines and near-shore areas. The protection and preservation of historic shorefront properties is primarily the responsibility of the Department of Historic Resources. Buildings, structures, and sites of historical, architectural, and/or archaeological interest are significant resources for the citizens of the Commonwealth. It is the policy of the Commonwealth and the VCRMP to enhance the protection of buildings, structures, and sites of historical, architectural, and archaeological significance from damage or destruction when practicable.

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DEQ has reviewed early coordination information provided by Michael Baker Engineering Inc., for the above-referenced project. The project as addressed in the Tier II Environmental Impact Statement (EIS) entails constructing a high speed rail (HSR) service from Richmond, Virginia to Raleigh. North Carolina. This letter provides water quality comments for the proposed alignments VA1, VA2, and VA3 within Sections AA through L which include approximately 97 miles of mainline track starting in Richmond and terminating at the Virginia/North Carolina state line	Comment noted.
1) Sections AA. BB. CC. a. C and F have the same proposed alignment between VA1, VA2, and VA3 with no difference in wetlands or stream impacts. For these sections the following general comments apply: Improvements should be designed to avoid and minimize impacts to surface waters to the greatest extent practicable. Where the project involves a bridge or culvert installation or replacement, the applicant should determine if natural stream channel design measures can be employed. Address the feasibility of installing: instream structures such as a crossvane or constructing bankfull benches or recreating pre-existing streambanks. The design should attempt to eliminate or reduce the amount of riprap to the greatest extent possible.	It will be determined during final design and permitting if natural stream channel design measures can be employed during bridge or culvert installation.
b. Restore temporary impact areas to their original contours and revegetate with the same or similar species. If necessary, consider using a work bridge rather than a causeway to reduce temporary impacts.	These steps will be taken during final design, permitting, and construction.
c. For any work that is performed instream such as the construction of a box culvert or new bridge piers, the applicant should utilize cofferdams to perform all work in the dry. Observe strict adherence to and monitoring of erosion and stormwater management practices to ensure that these practices are adequately preventing sediment and pollutant migration into adjacent surface waters.	Stream work will be performed in the dry as per standard permit conditions.
2) Sections DD, A, B, D, E, G, H, I, J, K and L. Sections DD, A, B, D, E, G, H, I, J, K and L propose different alignments between options VA1 VA2 and VA3. For these sections the above general comments apply in addition to the following comments: a. Section DD - VA3 is the least environmentally damaging alignment. There is only a nominal difference between stream and wetland impacts between the three alignments, However, VA3 has a Positive Operability/Constructability rating versus neutral for VA1 and negative for VA2, VA3 is also the least expensive of the three alignments.	Alternative VA3 is the preferred alternative in Section DD.

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b. Section A - VA2 is the least environmentally damaging alignment. VA2 has the least wetland and stream impacts and also the best Operability/Constructability rating.	Alternative VA2 is the preferred alternative in Section A.
c. Section B - VA2 is the least environmentally damaging alignment of the three proposed with 496 linear feet of stream impacts and 0.62 acres of wetlands impacts versus 940 linear feet of streams and 0.9 acres of wetlands impacts for Al and A3. However DEQ recognizes that VA2 results in a negative Operability/Constructability rating versus neutral ratings for VA1 and VA3 due to a 20 mile per hour reduction in the top speed allowed using VA2. Alignment VA1and/or VA3 are practicable provided that the appropriate mitigation is provided for the increased impacts.	Alternative VA1 is the preferred alternative in Section B. Alternative VA1 has greater impacts to water resources, forested uplands, and prime and other important farmland; two more residential relocations; and a larger total cost compared to Alternative VA2. However, Alternative VA2 has a much lower limiting speed and a negative rating for operability and constructability. In addition, Alternative VA2 has five more potential noise and vibration impacts (compared to Alternative VA1) and one business relocation (whereas Alternative VA1 has none). It should be noted that the difference in stream and wetland impacts between the alternatives has been significantly reduced from what was presented in the Tier II DEIS. In the Tier II DEIS, Alternative VA1 had approximately 450 additional feet of stream impacts and 0.35 acres of wetland impacts compared to Alternative VA2. Of these, more than 300 feet of stream impacts and 0.3 acres of wetland impacts associated with Alternative VA1 were attributed to the proposed new access road that intersects Carson Road. This road has been re-designed in such a way as to minimize or negate the stream and wetland impacts. Any remaining stream and wetland impacts will be fully mitigated, and the design work will include coordination with the USACE. The revised stream and wetland impacts for Alternative VA1 appear in the Tier II FEIS. With these reductions, the stream and wetland impacts for Alternative VA1 are comparable with Alternative VA2.
d. Section D – i. VA1/VA3 is the least environmentally damaging alignment. VA1/VA3 results in 2,050 linear feet of stream impacts and 0.99 acres of wetland impacts. VA2 would impact 2,575 linear feet of stream and 7.37 acres of wetlands impacts, an increase of 6.38 acres of wetlands and 525 linear feet of streams over VA1/VA3. In addition to the increased direct impact to wetlands and streams, VA2 would effectively bisect a large contiguous wetland complex and introduce rail traffic that would have an unknown negative secondary effect on the wild1ife functions and values of that forested wetland system. V2's recommending factors are the avoidance of a Section 106 Adverse Effect, the avoidance of a potential impact to a population of the federally threatened species Michaux's sumac and lower construction costs. ii. The adverse effect determination to the Section 106 resource associated with VA1/VA3 results from an anticipated degradation of the overall historic value of the entire property, but does not involve a direct impact to the historic home on the property. Based on the proposed distance of the VA1/VA3 alignment from the historic home, the project proponent should explore viable options that	Alternative VA4 is the preferred alternative in Section D. It was developed after the completion of the public comment period for the Tier II DEIS, through coordination and consultation with the US Army Corps of Engineers (USACE), Virginia Department of Historic Resources (VDHR), US Fish and Wildlife Service (USFWS), and the Virginia Division of Environmental Quality (VDEQ). Alternative VA4 does not require a Section 4(f) use of the Wynnhurst historic property, avoids impacts to the delineated population of the Michaux's Sumac, and minimizes wetland impacts (compared to Alternative VA2). This alternative was determined to be an acceptable preferred alternative by USACE, VDHR, USFWS, and VDEQ at an interagency meeting held on April 12, 2011.

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would mitigate the adverse effect of the proximity of the railway to the historic home, including the establishment of a wooded buffer between the home and the railway. iii. The currently proposed alignment for VA1/VA3 has not been shown to result in a complete impact to the Michaux's sumac population. However, there is concern that future maintenance of the VAIN A3 alignment, including the application of herbicides within the railway right of way, will impact the population. Consider the feasibility of establishing a no-spray zone through the use of signage, fencing or a combination of methods that would prevent impacts from herbicides. Also, the Department of Conservation and Recreation and the Fish and Wildlife Service have established that Michaux's sumac thrives in open areas and cannot persist in forested areas. The current Michaux's sumac population is located in the open areas along the original CSX S-line, which is maintained to prevent the establishment of shrubs or trees. The population thins as it moves deeper into the forested area. Should VA2 be chosen in part1 to avoid the sumac population the resulting lack of ongoing vegetation maintenance at the current sumac location would ultimately result in shrubs and eventually trees outcompeting the sumac and the probable loss of the population despite the avoidance of a direct impact. iv. The ideal alignment in Section D would be a hybrid alignment that avoids the Section 106 resource and the Michaux's sumac population while skirting the large forested wetland complex that results in 7.37 acres of impacts and unknown negative effects to that systems wildlife function and values. Preliminary discussions in the field seem to indicate that such an alignment may be feasible.	
e. Section E - VA1/VA3 is the least environmentally damaging alignment as it results in 2.13 less acres of wetlands impacts than VA2. VA1/VA3 also maintains a positive Operability/Constructability rating versus a neutral rating for VA2	Alternative VA1 is the preferred alternative in Section E.

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f. Section G - VA3 is the least environmentally damaging alignment VA3 results in a reduction of 0.28 acres wetland impacts and 414 linear feet in stream impacts over VA2 and 154 linear feet of stream impacts over VA1. VA1 and VA3 both have Section 106 adverse effect determination due to their passage through the property that includes the "Tourist House." The "Tourist House" is located immediately adjacent to a country road with and includes a multi-acre property that extends away from the road frontage in a rectangular wooded lot. The historic relevance of the this resource involves its relationship to the development of the American automobile and its function as a rest stop for early automobile tourists. Due to the fact that VA1/VA3 alignments pass a considerable distance from the "Tourist House" through a wooded lot that provides existing screening and considering that the house and its relationship to the roadway provides the primary historic relevance of this resource, VA3 is the recommended alignment. Furthermore, VA2, which is proposed solely to provide a total avoidance of the "Tourist House" results in a negative Operability/Constructability rating versus a positive rating for VA3.	Alternative VA3 is the preferred alternative in Section G.
g. Section H - VA1/VA3 is the least environmentally damaging alignment. VA1/VA3 results in a slight reduction to stream impacts versus VA2 and also has a positive Operability / Constructability rating versus neutral for VA2.	Alternative VA1 is the preferred alternative in Section H.
h. Section I - VA2 is the least environmentally damaging alignment. The three proposed alignments have identical, nominal stream impacts and no wetland impacts. However, VA2 results in a reduction of 4.57 acres of forested upland versus VA1/VA3.	Alternative VA1 is the preferred alternative in Section I. The statement from VDEQ appears to have mistaken Alternative VA1/VA3 with Alternative VA2; Alternative VA2 has greater impacts to forested uplands, not fewer.
i. Section J - VA2 is the least environmentally damaging alignment. VA2 results in a 1,363 linear foot reduction in stream impacts over VA1.VA3 and results in only 0.10 acre of wetland impacts. VA2 is also the only alignment that doesn't result in a Section 106 adverse effect.	Alternative VA2 is the preferred alternative in Section J.
j. Section K - VA1/VA3 is the least environmentally damaging alignment. VA1/VA3 results in 520 fewer linear feet of stream impacts and 0.56 acre fewer wetland impacts versus VA2. VA2 results in a Section 106 adverse effect and also carries a negative Operability/Constructability rating.	Alternative VA1 is the preferred alternative in Section K.

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k. Section L - VA2/NC2 is the least environmentally damaging alignment. VA2/NC2 results in 1,387 fewer linear feet of stream impacts and 0.56 acre fewer wetland impacts versus VA1/NC1 and VA3/NC3. However DEQ recognizes that VA2/NC2 results in a negative Operability/Constructability rating versus neutral for VA1/NC1 and VA3/NC3 due to a 10 mile per hour reduction in top speed allowed sing VA2. Alignment VA1/NC1 and/or VA3/NC3 are practicable provided that the appropriate mitigation is provided for increased impacts. This section has cumulative wetland and stream impacts that are partially located within North Carolina. Please note that the Virginia State Law requires that wetland and stream impacts occurring in Virginia must be mitigated in Virginia.	Alternative VA1/NC1 is the preferred alternative in Section L. Alternative VA1/NC1 is the Section 4(f) avoidance alternative in Section L. Alternative VA1/NC1 has greater stream and wetland impacts compared to VA2/NC2, but fewer impacts to prime and important farmlands, less residential relocations, fewer noise and vibration impacts, and a lower total cost. In addition, it has a neutral constructability and operability rating (compared to a negative rating for Alternative VA2/NC2) and has better support from the public. Seven public comments indicated a preference for Alternative VA1/NC1 compared to two for Alternative VA2/NC2. During project coordination, USACE expressed concerns regarding the greater stream and wetland impacts on Alternative VA1/NC1 (2,809 feet of stream impacts and 0.57 acres of wetland impacts compared to 1,422 feet of stream impacts and 0.01 acres of wetland impacts for Alternative VA2/NC2). In a letter to USACE dated January 6, 2011, the Project Team explained the differences between the alternatives. Based on the information in the letter, as well as previously submitted related information, USACE stated on January 13, 2011, that if the Project Team assessed that Alternative VA2/NC2 is "not practicable due to residential displacements, cost, and operability, then [USACE] can concur with your assessment based on the information submitted." Due to residential displacements, cost, and operability, as well as public sentiment, noise and vibration impacts, and impacts to prime and important farmlands, the Project Team finds that Alternative VA2/NC2 is not practicable. The impacts to streams and wetlands will be fully mitigated, and the design work will include coordination with USACE.

AG 17 & AG42 NC State Environmental Review Clearinghouse (Combined 8/24/10 and 9/15/10 Letters, Chrys Baggett) and DENR/DWQ (Rob Ridings, Transportation Permitting Unit)	
Comment	**Response**
The above referenced environmental impact information has been submitted to the State Clearinghouse under the provisions of the National Environmental Policy Act. According to G.S. 113A-10, when a state agency is required to prepare an environmental document under the provisions of federal law, the environmental document meets the provisions of the State Environmental Policy Act. Attached to this letter for your consideration are the comments made by agencies in the course of this review. If any further environmental review documents are prepared for this project, they should be forwarded to this office for intergovernmental review.	Comment noted.

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Comment	**Response**
1) DENR (NC Dept of Environment and Natural Resources) a. Melba McGee (DENR Project Review Coordinator) - There are a number of concerns that need to be addressed prior to finalizing project plans. We ask that the Department of Transportation work directly with our commenting agencies during the NEPA Merger Process. This will help avoid delays at the permit phase.	Given that Virginia does not have a Merger counterpart, FHWA, FRA, DRPT and DOT decided early in the process that a single, consistent process in both states should be used to obtain agency input on the Richmond to Raleigh Project. The Project Team coordinated with USACE and both state water quality agencies in selection of the LEDPA for each section of the Project. In North Carolina, the Project Team met with Rob Ridings of NCDWQ on April 27, 2010, to present alternatives and seek input on LEDPA. Subsequently, the Project Team has coordinated with Mr. Ridings when instances have occurred where Section 4(f) or other issues have led to selection of an alternative that does not minimize impacts to streams or wetlands.
b. Rob Ridings (Division of Water Quality) – This office has reviewed the referenced document dated received May 28, 2010. The Division of Water Quality (DWQ) is responsible for the issuance of the Section 401 Water Quality Certification for activities that impact Waters of the U.S., including wetlands. It is our understanding that the project as presented will result in impacts to numerous jurisdictional wetlands, streams, buffers and other surface waters. The DWQ offers the following comments based on review of the aforementioned document: i. Most of the streams in the project corridor are class Nutrient Sensitive Waters (NSW) of the State. DWQ is very concerned with sediment and erosion impacts that could result from this project. DWQ recommends that highly protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to class NSW streams and their tributaries. DWQ requests that design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of *NC DWQ Stormwater Best Management Practices.*	Project design plans will specify treatment of stormwater runoff through best management practices as detailed in the most recent version of the *NCDWQ Stormwater Best Management Practices*.
ii. Several streams in the project corridor are on the 303(d) list of impaired waters of the State. DWQ is very concerned with sediment and erosion impacts that could result from this project. DWQ recommends that the most protective sediment and erosion control BMPs be implemented to reduce the risk of nutrient runoff to 303(d) listed waters. DWQ requests that design plans provide treatment of the storm water runoff through best management practices as detailed in the most recent version of NC DWQ Stormwater Best Management Practices.	The Project Team will investigate and implement appropriate stormwater BMPs as detailed in the most recent version of the *NCDWQ Stormwater Best Management Practices.*

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iii. Much of this is within the Neuse and Tar-Pamlico River Basins. Riparian buffer impacts should be avoided and minimized to the greatest extent possible pursuant to ISA NCAC 2B.0233 and 15A NCAC 2B.0259. New development activities located in the protected 50-foot wide riparian areas within the basin shall be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0233 and 15C NCAC 28.0259. Buffer mitigation may be required for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or require a variance under the Buffer Rules. A buffer mitigation plan, including use of the NC Ecosystem Enhancement Program, must be provided to DWQ prior to approval of the Water Quality Certification.	Riparian buffer impacts have been avoided and minimized to the greatest extent practicable pursuant to 15A NCAC 2B.0233 and 15A NCAC 2B.0259. Project activities located in the protected 50-foot wide riparian areas will be limited to "uses" identified within and constructed in accordance with 15A NCAC 2B.0233 and 15C NCAC 2B.0259. Buffer mitigation for buffer impacts resulting from activities classified as "allowable with mitigation" within the "Table of Uses" section of the Buffer Rules or required variance under the Buffer Rules will be provided through a buffer mitigation plan, including use of the North Carolina Ecosystem Enhancement Program, will be provided to DWQ prior to approval of the Water Quality Certification.
iv. The environmental documents should provide a detailed and itemized presentation of the proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it is preferable to present a conceptual (if not finalized) mitigation plan with the environmental documentation. Appropriate mitigation plans will be required prior to issuance of a 401 Water Quality Certification.	The FEIS provides information on proposed impacts to wetlands and streams with corresponding mapping. If mitigation is necessary as required by 15A NCAC 2H.0506(h), it will be provided through the North Carolina Ecosystem Enhancement Program, and will be provided to NCDWQ prior to approval of the 401 Water Quality Certification.
v. Environmental assessment alternatives shall consider design criteria that reduce the impacts to streams and wetlands from storm water runoff. These alternatives shall include road designs that allow for treatment of the storm water runoff through best management practices as detailed in the most recent version of NCDWQ Stormwater Best Management Practices Manual, July 2007, such as grassed swales, buffer areas, preformed scour holes, retention basins, etc.	The Project Team will investigate and implement appropriate stormwater treatment measures as detailed in the most recent version of the *NCDWQ Stormwater Best Management Practices* in the final design phase, which may include grassed swale treatment, preformed scour holes, pipe end-treatments, and level spreaders to the extent practicable. The project will coordinate with regulatory agencies throughout the design process to ensure compliance with applicable environmental regulations.
vi. After the selection of the preferred alternative and prior to an issuance of the 401 Water Quality Certification, the USDOT and NCDOT are respectfully reminded that they will need to demonstrate the avoidance and minimization of impacts to wetlands, buffers, and streams to the maximum extent practical. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 1 acre to wetlands. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as wetland mitigation.	Comments noted.

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vii. In accordance with the Environmental Management Commission's Rules {15A NCAC 2H.0506(h)}, mitigation will be required for impacts of greater than 150 linear feet to any single jurisdictional stream. In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The NC Ecosystem Enhancement Program may be available for use as stream mitigation.	In the event that mitigation is required, the mitigation plan shall be designed to replace appropriate lost functions and values. The North Carolina Ecosystem Enhancement Program may be available for use as stream mitigation.
viii. Future documentation, including the 401 Water Quality Certification Application, shall continue to include an itemized listing of the proposed wetland, buffer, and stream impacts with corresponding mapping.	Proposed impacts to jurisdictional wetlands and streams for the Preferred Alternative, with corresponding mapping, are provided in the Tier II FEIS and will also be included in the 401 Water Quality Certification Application.
ix. DWQ is very concerned with sediment and erosion impacts that could result from this project. NCDOT shall address these concerns by describing the potential impacts that may occur to the aquatic environments and any mitigating factors that would reduce the impacts.	Impacts to aquatic communities as a result of the proposed project are discussed in Section 4.10.1.2 in the Tier II DEIS and in this document. In addition, Section 4.10.1.3 in the Tier II DEIS and in this document include measures to optimize sediment and erosion control during construction to protect water quality for aquatic organisms.
x. An analysis of cumulative and secondary impacts anticipated as a result of this project is required. The type and detail of analysis shall conform to the NC Division of Water Quality Policy on the assessment of secondary and cumulative impacts dated April 10, 2004.	Due to the Richmond to Raleigh Project spanning two states, FRA, DRPT and DOT decided early in the process that a single, consistent process in both states should be used to evaluate the environmental impacts of the proposed project. Therefore, state-specific guidance was not applied to the evaluation of secondary/cumulative impacts. In response to the concern about the level of analysis of these potential impacts, Sections 4.11 and 4.17 of the Tier II FEIS have been amended to include additional discussion of secondary/cumulative impacts, as well as potential mitigation.
xi. NCDOT is respectfully reminded that all impacts, including but not limited to, bridging, fill, excavation and clearing, to jurisdictional wetlands, streams, and riparian buffers need to be included in the final impact calculations. These impacts, in addition to any construction impacts, temporary or otherwise, also need to be included as part of the 401 Water Quality Certification Application.	Impacts, are described in this document and will also be included as part of the 401 Water Quality Certification Application.
xii. Where streams must be crossed, the DWQ prefers bridges be used in lieu of culverts. However, we realize that economic considerations often require the use of culverts. Please be advised that culverts should be countersunk to allow unimpeded passage by fish and other aquatic organisms. Moreover, in areas where high quality wetlands or streams are impacted, a bridge may prove preferable. When applicable, DOT should not install the bridge bents in the creek, to the maximum extent practicable.	Bridges have been included in the designs where practicable. However, a key difference should be noted regarding the design of bridges for passenger HSR projects compared to highway projects due to restrictions on grade (generally 1%). To raise the grade to carry rail up and over a bridge can result in impacts along the rail line for a long distance on the approach and departure from the bridge. Due to these impacts and associated costs, culverts are often a more practicable option. For new culverts constructed in streams, the inverts will be buried at least one foot below the bed of the stream for culverts greater than 48 inches in diameter. For culverts 48 inches in diameter or smaller, the inverts will be buried below the bed of the stream to a depth equal to or greater than 20 percent of the diameter of the culvert.

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	Comment	**Response**
xiii.	Sediment and erosion control measures should not be placed in wetlands, buffers or streams.	Sediment and erosion control measures will not be placed in wetlands or streams to the maximum extent practicable. If placement of sediment and erosion control devices in wetlands or streams is unavoidable, they shall be removed and the natural grade restored once the Project is complete and fill slopes have been stabilized.
xiv.	Borrow/waste areas should avoid wetlands to the maximum extent practical. Impacts to wetlands in borrow/waste areas will need to be presented in the 401 Water Quality Certification and could precipitate compensatory mitigation.	Contract standard specifications prohibit a contractor from selecting borrow/waste sites that are in wetland areas. However, unanticipated unavoidable impacts to wetlands in borrow/waste areas will be included in the 401 Water Quality Certification application.
xv.	The 401 Water Quality Certification Application will need to specifically address the proposed methods for stormwater management. More specifically, storm water shall not be permitted to discharge directly into streams or surface waters.	The 401 Water Quality Certification Application will specify stormwater management methods. The Richmond to Raleigh Project will develop a stormwater management plan and use appropriate stormwater BMPs to control and/or treat stormwater runoff.
xvi.	Based on the information presented in the document, the magnitude of impacts to wetlands and streams may require an Individual Permit (lP) application to the Corps of Engineers and corresponding 401 Water Quality Certification. Please be advised that a 401 Water Quality Certification requires satisfactory protection of water quality to ensure that water quality standards are met and no wetland or stream uses are lost. Final permit authorization will require the submittal of a final application by the NCDOT and written concurrence from the NCDWQ. Please be aware that any approval will be contingent on appropriate avoidance and minimization of wetland and stream impacts to the maximum extent practical, the development of an acceptable stormwater management plan, and the inclusion of appropriate mitigation plans where appropriate.	It is understood that the magnitude of impacts to wetlands and streams will require an Individual Permit (lP) application to the Corps of Engineers and corresponding 401 Water Quality Certification. NCDOT has initiated preliminary pre-application coordination with NCDWQ in a meeting with Rob Ridings on April 23, 2010.
xvii.	Bridge supports (bents) should not be placed in the stream when possible.	The project will avoid installing bridge bents in streams to the maximum extent possible.
xviii.	Whenever possible, the DWQ prefers spanning structures. Spanning structures usually do not require work within the stream or grubbing of the streambanks and do not require stream channel realignment. The horizontal and vertical clearances provided by bridges allow for human and wildlife passage beneath the structure, do not block fish passage and do not block navigation by canoeists and boaters.	Comment noted.
xix.	Bridge deck drains shall not discharge directly into the stream. Stormwater shall be directed across the bridge and pre-treated through site-appropriate means (grassed swales, pre-formed scour holes, vegetated buffers, etc.) before entering the stream. Please refer to the most current version of NCDWQ Stormwater Best Management Practices.	The Richmond to Raleigh Project will investigate and implement appropriate stormwater treatment measures as detailed in the most recent version of NCDWQ *Stormwater Best Management Practices* in the final design phase. The project will restrict the use of bridge deck drains on bridges, wherever practicable. Stormwater will be directed across the bridge and pre-treated through site-appropriate means, wherever practicable.

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xx.	If concrete is used during construction, a dry work area shall be maintained to prevent direct contact between curing concrete and stream water. Water that inadvertently contacts uncured concrete shall not be discharged to surface waters due to the potential for elevated pH and possible aquatic life and fish kills.	These recommendations follow the NCDOT's standard design practices.
xxi.	If temporary access roads or detours are constructed, the site shall be graded to its preconstruction contours and elevations. Disturbed areas shall be seeded or mulched to stabilize the soil and appropriate native woody species shall be planted. When using temporary structures the area shall be cleared but not grubbed. Clearing the area with chain saws, mowers, bush-hogs, or other mechanized equipment and leaving the stumps and root mat intact allows the area to re-vegetate naturally and minimizes soil disturbance.	Where temporary access roads and detours are required, the Project will consider re-grading to preconstruction contours and elevations on a case-by-case basis and will do so where reasonable. Disturbed areas will be reseeded following construction. Where temporary bridge structures are required, the area will be cleared but not grubbed.
xxii.	Placement of culverts and other structures in waters, streams, and wetlands shall be placed below the elevation of the streambed by one foot for all culverts with a diameter greater than 48 inches, and 20 percent of the culvert diameter for culverts having a diameter less than 48 inches, to allow low flow passage of water and aquatic life. Design and placement of culverts and other structures including temporary erosion control measures shall not be conducted in a manner that may result in dis-equilibrium of wetlands or streambeds or banks, adjacent to or upstream and downstream of the above structures. The applicant is required to provide evidence that the equilibrium is being maintained if requested in writing by DWQ. If this condition is unable to be met due to bedrock or other limiting features encountered during construction, please contact the NC DWQ for guidance on how to proceed and to determine whether or not a permit modification will be required.	Comments noted. Placement of culverts and other structures in waters, streams, and wetlands will be countersunk as indicated above. The Project Team will continue to work with NCDWQ and USACE through the 401 Water Quality Certification process.
xxiii.	If multiple pipes or barrels are required, they shall be designed to mimic natural stream cross section as closely as possible including pipes or barrels at flood plain elevation and/or sills where appropriate. Widening the stream channel should be avoided. Stream channel widening at the inlet or outlet end of structures typically decreases water velocity causing sediment deposition that requires increased maintenance and disrupts aquatic life passage.	The Project Team will review drainage design with NCDWQ and USACE prior to applying for 401 Water Quality Certification.
xxiv.	If foundation test borings are necessary; it shall be noted in the document. Geotechnical work is approved under General 401 Certification Number 3687INationwide Permit No.6 for Survey Activities.	It is anticipated that foundation test borings will be necessary. During the final design stage of the Project, the Project will obtain any required permits pertaining to foundation test borings prior to beginning the construction phase of the Project.

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Comment	**Response**
xxv. Sediment and erosion control measures sufficient to protect water resources must be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.	Sediment and erosion control measures sufficient to protect water resources will be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.
xxvi. All work in or adjacent to stream waters shall be conducted in a dry work area. Approved BMP measures from the most current version of NCDOT Construction and Maintenance Activities manual such as sandbags, rock berms, cofferdams and other diversion structures shall be used to prevent excavation in flowing water.	All current approved and appropriate BMPs will be followed.
xxvii. While the use of National Wetland Inventory (NWI) maps, NC Coastal Region Evaluation of Wetland Significance (Ne-CREWS) maps and soil survey maps are useful tools, their inherent inaccuracies require that qualified personnel perform onsite wetland delineations prior to permit approval.	Wetlands in the Project Study Area were identified by qualified personnel performing onsite surveys and delineations.
xviii. Heavy equipment should be operated from the bank rather than in stream channels in order to minimize sedimentation and reduce the likelihood of introducing other pollutants into streams. This equipment shall be inspected daily and maintained to prevent contamination of surface waters from leaking fuels, lubricants, hydraulic fluids, or other toxic materials.	These recommendations follow the NCDOT's standard design practices.
xxix. Riprap shall not be placed in the active thalweg channel or placed in the streambed in a manner that precludes aquatic life passage. Bioengineering boulders or structures should be properly designed, sized and installed.	These recommendations follow the NCDOT's standard design practices.
xxx. Riparian vegetation (native trees and shrubs) shall be preserved to the maximum extent possible. Riparian vegetation must be reestablished within the construction limits of the project by the end of the growing season following completion of construction.	The project will include language in the construction contract to address minimizing the amount of vegetation that is removed and reestablishing the riparian vegetation to the amount practical within the Project limits.
xxxi. Any anticipated bank stabilization associated with culvert installations or extensions should be addressed in the permit application. An adequate amount of bank stabilization should be applied for in the permit application, to prevent the need of future permit modifications.	Anticipated bank stabilization associated with culvert installations or extensions will be addressed in the permit application. An adequate amount of bank stabilization will be applied for in the permit application, to prevent the need of future permit modifications.

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Comment	**Response**
c. Harry LeGrand (Natural Heritage Program) – The Natural Heritage Program has a scattering of records of significant natural resources and conservation areas close to the very large project area. However, only the crossing of the Tar River appears likely to potentially impact such resources. In this stretch of the river, along the Vance/Franklin county line, are at least nine rare aquatic animal species: • yellow lampmussel (Lampsilis cariosa), State Endangered and Federal Species of Concern • Atlantic pigtoe (Fusconaia masoni), State Endangered and Federal Species of Concern • yellow lance (Eliptio lanceolata), State Endangered and Federal Species of Concern • triangle floater (Alasmidonta undulato), State Threatened • creeper (Strophitus undulatus), State Threatened • Carolina madtom (Noturus furiosus), State Threatened and Federal Species of Concern • Roanoke bass (Ambloplites cavifrons), State Significantly Rare and Federal Species of Concern • Neuse River waterdog (Necturus lewisi), State Special Concern • North Carolina spiny crayfish (Orconectes carolinensis), State Special Concern It is extremely important that proper sedimentation controls be in place during construction of the rail in the vicinity of the Tar River.	Sediment and erosion control measures sufficient to protect water resources will be implemented and maintained in accordance with the most recent version of North Carolina Sediment and Erosion Control Planning and Design Manual and the most recent version of NCS000250.
d. Raleigh Regional Office – After review of this project it has been determined that the ENR permit(s) and/or approvals indicated may need to be obtained in order for this project to comply with North Carolina Law - i. Permit to construct and operate wastewater treatment facilities, sewer system extensions and sewer systems not discharging into state surface waters.	The project is not anticipated to construct or operate any wastewater treatment facilities or sewer systems.
ii. Any open burning associated with subject proposal must be in compliance with 15 A NCAC 2D.1900.	Any open burning associated with the Project will be in compliance with all regulatory requirements, including 15 A NCAC 2D.1900.
e. Jim McRight (Division of Environmental Health / Public Water Supply Section) – i. Water Supply source must be protected from potential contamination.	Section 4.1.1.4 of the Tier II FEIS discusses potential impacts to public water supplies. Section 4.1.6 of the Tier II FEIS lists all mitigation and minimization techniques that will be followed to minimize water quality impacts from the Project.

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Comment	**Response**
ii. Direct impacts on existing water systems is not mentioned. Are there expected impacts?	Section 4 .15 of the Tier II DEIS discusses the utility impacts of each project alternative, including water systems, and provides projected costs associated with these impacts. Also, Appendix N of the Tier II DEIS provides a breakdown of utility impacts by type and Project Section. Section 4.15 of the Tier II FEIS has been amended to summarize the projected utility costs associated with the Preferred Alternative. Coordination with local utility agencies will take place during final design to adequately mitigate, relocate, and/or replace affected systems. There will be no long-term impacts to utilities from the Project.
f. Travis W. Wilson (Habitat Conservation Program) – Staff biologists with the N. C. Wildlife Resources Commission have reviewed the subject DEIS and are familiar with habitat values in the project area. The purpose of this review was to assess project impacts to fish and wildlife resources in North Carolina. Our comments are provided in accordance with certain provisions of the National Environmental Policy Act (42 U.S.C. 4332(2)(c)) and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661•667d). i. The 2002 Tier I EIS identified a preferred corridor from Washington, DC to Charlotte, NC, the subject Draft Tier II EIS is intended to represent a detailed analysis of impacts as a result of constructing the section of the SEHSR from Petersburg, VA to Raleigh, NC. Although the preferred corridor minimizes impacts by predominately following existing rail corridors there are cumulative direct impacts ranging from 11,774 to 18,292 linear feet of stream, 22.79 to 33.54 acres of Tar-Pamlico and Neuse Riparian Buffer, and 1.65 to 5.31 acres of wetlands as well as hundreds of acres of forested uplands. These totals represent substantial impacts to natural resources. Alternatives presented in each designated section should be selected to avoid these impacts to the greatest extent practicable.	Alternatives presented in each of the 26 sections of the Project were selected to avoid these impacts to the greatest extent practicable. Where an alternative was selected with greater stream or wetland impacts, it was due to the need to avoid impacts to other resources (e.g., resources protected by Section 4(f) of the Department of Transportation Act) or because the difference in impacts was not substantial and another alternative better met the Purpose and Need for the Project (e.g., provided faster travel times).

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Comment	**Response**
ii. Furthermore, linear transportation projects can act as a barrier to certain fish and wildlife species, further fragmenting habitat as well as increasing predation of these species. Acknowledgement of this impact is documented in the Draft Tier I EIS, as well as a commitment for considering larger hydraulic structures to accommodate wildlife movement. The Tier II EIS however, neglected to address the fragmentation effect of the project. Extensive use of existing rail corridors will greatly reduce the quantity of newly fragmented habitat. However, wider corridors, additional sidings, and increased rail activity will amplify the barrier effects of the existing corridor; therefore wildlife permeability should be addressed in the development and design of this project. Herpetofauna constitute the primary species that should be the focus of these efforts. Impacts to these species can be minimized by constructing longer bridges, larger culverts, and additional culverts at stream and wetland crossings, these structures should be designed to allow for "dry" passages through the riparian zone.	All stream and wetland crossings/culverts will consider high and low flow passage consistent with NCDWQ requirements. Where practicable, multiple culverts set at different elevations to address floodplain flow or high flow (in addition to low flow) will provide "dry" passage for herpetofauna through the riparian zone during normal flow conditions.
iii. We have reviewed the data provided in the DEIS. We look forward to continued coordination during the development of this segment and future components of the SEHSR in North Carolina. At this time we concur with the DEIS for this project.	Comment noted.
2) NC Department of Public Safety / Division of Emergency Management a. <u>John Gerber NC Floodplain Mapping Unit</u> – i. Each candidate alternative includes crossing a significant number of regulated special hazard flood areas. A floodplain development permit should be obtained from the local jurisdiction and include a no-rise/impact certification for each floodway and non-encroachment area crossing or a submittal for a CLOMR per 44 CFR Section 65.12. ii. If federal funding is used, E.O. 11988 applies.	Section 4.1.3 of the Tier II FEIS has been expanded to discuss the requirement for floodplain development permits and the applicability of Executive Order 11988 (Floodplain Management).

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Comment	**Response**
3) North Carolina Department of Agriculture and Consumer Services/Agricultural Services a. Vernon Cox (Environmental Programs Specialist) – i. The Environmental Scoping document indicates that this project has the potential to result in a significant loss of prime farm and forest land in North Carolina. Farm and forest lands are important for both economic and environmental reasons. Appropriately managed agricultural lands can provide groundwater recharge, wastewater filtration, flood prevention, and wildlife habitat protection. Agricultural land enhances the quality of life for citizens within a community by offering scenic landscapes, open space, and a variety of outdoor recreational activities. In addition, loss of productive farmland has the potential for irreversible damage to the agricultural sector of our economy. Agricultural production incomes from locally grown products have a considerable multiplier effect. It is estimated that for every 40 acres converted from agricultural production, one agribusiness job and its associated economic activity is lost indefinitely. Overall, farmland consumes fewer services relative to the taxes generated, compared 10 other types of development. Careful review of activities that result in loss of farm and forest land is warranted when consideration is given for the loss of environmental amenities, the loss of local tax revenue, the value of agricultural products no longer produced, and the decrease of agribusiness jobs associated with the loss of the land. When considering specific alternatives, every effort should be made to utilize the existing rail rights of way so as to prevent adverse impacts to prime farm and forestland. Where this is not possible, proposed alternatives should seek to minimize impacts to farm and forestland by minimizing division of land units and providing convenient travel corridors to allow for adequate mobility for agricultural operations.	Numerous alternative designs were evaluated for the Preferred Corridor in an effort to minimize all project impacts, including those to prime farm and forest land. The primary means of doing so was the substantial use of existing rail ROW. However, the Project's designs were sometimes constrained by the existing curvature in the rail ROW (which required new alignments that straightened the track for higher speeds) and/or the need to avoid developments, wetlands and riparian areas, or other resources, such as Section 4(f) uses. Efforts will be made to minimize impacts from the rail and road work during the final design stage of the Project when survey level data is available.

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Comment	**Response**
4) North Carolina Department of Cultural Resources / State Historic Preservation Office (State Number 10-E-0000- 0417; ER 03-1507) a. Peter Sandbeck (for Renee Gledhill-Earley) – i. With regard to archaeological resources, the document correctly states that consideration of these resources is to be done under a phased approach. Phase I studies have been completed and more intensive studies are underway. Appropriate consultation has been undertaken with us and will continue as the project progresses.	Comment noted.
ii. We look forward to working with you and your consultants on the next phases of the project. In terms of historic properties located in North Carolina, we have checked our files against the information contained in the DEIS and believe that the document correctly identifies the historic properties that are within the undertaking's Area of Potential Effects as well as the effects of the three project alternatives on those resources. Given that some of the findings of No Adverse Effect are "conditional" and, in turn, the Section 4(f) findings dependent on a final effects determination, we look forward to further refinement of the project plans and issuance of the Final Environmental Impact Statement with its final Section 106 and 4(f) determinations for the undertaking.	Comment noted.
iii. In terms of historic properties located in North Carolina, we have checked our files against the information contained in the DEIS and believe that the document correctly identifies the historic properties that are within the undertaking's Area of Potential Effects as well as the effects of the three project alternatives on those resources. Given that some of the findings of No Adverse Effect are "conditional" and, in turn the Section 4(f) findings dependent on a final effects determination, we look forward to further refinement of the project plans and issuance of the Final Environmental Impact Statement with its final Section 106 and 4(f) determinations for the undertaking.	Comment noted.

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Comment	**Response**
iv. In light of the Adverse Effects resulting from the selection of any of the three alternatives in North Carolina, we understand that consultation under Section 106 is needed to develop a Programmatic Agreement for the undertaking. We will be pleased to enter into formal consultation with the consulting and interested parties, as identified in the DEIS or as they self-identify and ask to enter into the consultation, to address the effects of the undertaking and explore ways to avoid, minimize or mitigate adverse effects upon the historic properties. The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.	Comment noted.

AG23 NC Department of Cultural Resources, State Historic Preservation Office, Peter Sandbeck (Renee Gledhill-Early, point of contact,; Tracking Number ER 03-1507	
Comment	**Response**
1) With regard to archaeological resources, the document correctly states that consideration of these resources is to be done under a phased approach. Phase I studies have been completed and more intensive studies are underway. Appropriate consultation has been undertaken with us and will continue as the project progresses. We look forward to working with you and your consultants on the next phases of the project.	Comment noted.
2) In terms of historic properties located in North Carolina, we have checked our files against the information contained in the DEIS and believe that the document correctly identifies the historic properties that are within the undertaking's Area of Potential Effects as well as the effects of the three project alternatives on those resources. Given that some of the findings of No Adverse Effect are "conditional" and, in turn, the Section 4(f) findings dependent on a final effects determination, we look forward to further refinement of the project plans and issuance of the Final Environmental Impact Statement with its final Section 106 and 4(f) determinations for the undertaking.	Comment noted.
3) In light of the Adverse Effects resulting from the selection of any of the three alternatives in North Carolina, we understand that consultation under Section 106 is needed to develop a Programmatic Agreement for the undertaking. We	The Project Team appreciates the NC-HPO's involvement in the Project and looks forward to working with them towards completion of a MOA for the Adverse Effect of the Project.

AG23 NC Department of Cultural Resources, State Historic Preservation Office, Peter Sandbeck (Renee Gledhill-Early, point of contact,; Tracking Number ER 03-1507	
Comment	**Response**
will be pleased to enter into formal consultation with the consulting and interested parties, as identified in the DEIS or as they self-identify and ask to enter into the consultation, to address the effects of the undertaking and explore ways to avoid, minimize or mitigate adverse effects upon the historic properties.	
4) The above comments are made pursuant to Section 106 of the National Historic Preservation Act and the Advisory Council on Historic Preservation's Regulations for Compliance with Section 106 codified at 36 CFR Part 800.	Comment noted.

AG32 Virginia Department of Transportation Richmond District - Samuel Hayes	
Comment	**Response**
1) Sheet #5 (VA1, VA2, VA3) I spoke with Chesterfield County (Barb Smith) and I agree with her that there are concerns with the proposed Centralia Road grade separation. I think we need to look at that further to ensure we have the best possible solution. I have studied it some more, but I admit I am currently at a loss for a better solution. However, I am certainly willing to sit down with both you guys and Chesterfield to try and come up with something different.	Comment noted. The Project Team has continued to work with Chesterfield County and VDOT to improve upon the proposed Centralia Road grade separation design.
2) Sheet #7 (VA1, VA2, VA3) I also spoke with Chesterfield (Barb Smith) about the proposed road connecting Pine Forest Drive to Woods Edge Road along the east side of the "A" line. I agree with Chesterfield's recommendation to eliminate this proposed road. I further suggest that the proposed Pine Forest Drive grade separation be shifted slightly southward in order to maintain traffic on Pine Forest Drive during construction of the bridge.	These changes have been accommodated in the Tier II FEIS designs.
3) Sheet #12 (VA1, VA2, VA3) Recommend shifting the Squirrel Level Road grade separation slightly to the east in order to maintain traffic during construction. This same comment applies to all other locations where we are replacing a grade crossing with a grade separation in the same general vicinity as the existing crossing.	Detour routes throughout the Project Study Area have been analyzed for the Tier II FEIS. Coordination with VDOT regarding roadway design changes is ongoing.
4) Sheet #13 (VA, VA2, VA3) Recommend converting the service road into the Shell property from state maintained to a privately maintained entrance. This is based on input from the Shell family (who owns the land) before and after the public hearing.	This change has been accommodated in the Tier II FEIS designs.
5) Sheet #15 (VA1, VA3) How do we address MOT during construction for Carson Road? Should we show a larger temporary easement in order to maintain traffic during construction? This same comment applies to all other grade separation locations where we have a new railroad alignment crossing an existing highway.	Additional coordination with VDOT was undertaken, and is reflected in the designs. Detour routes, including maintenance of traffic, throughout the Project Study Area have been analyzed for the Tier II FEIS and described in Chapter 2.
6) Sheet #17 (VA1, VA2, VA3) Recommend the use of roundabouts at both proposed four way intersections on either side of the proposed Glebe Road grade separation. Roundabouts would be better solutions given the unbalanced flow of traffic at each of these intersections.	Through additional coordination with VDOT the Project Team determined that roundabouts would be needed in these locations.
7) Sheet #21 (VA2) Recommend that Lovely Zion Road tee into Rawlings Road as opposed to the "old" Rawlings Road. Have the "old" Rawlings Road tee into Lovely Zion Road.	The designs for the preferred alternative VA4 in Section D do not impact Lovely Zion Road, or change the existing intersection with the “old” Rawlings Road alignment. Therefore, the requested changes fall outside the scope of the Project.
8) Sheet #22 (VA1, VA2, VA3) Recommend showing a cul-de-sac on both ends of Zero Road.	As a result of additional coordination, the designs for the preferred alternative VA4 in Section D include tee-turns for Zero Road on both sides of the railroad. Tee-turns provide adequate movement for service vehicles with a smaller footprint compared to cul-de-sacs.

AG32 Virginia Department of Transportation Richmond District - Samuel Hayes	
Comment	**Response**
9) Sheet #28 (VA2) Recommend a four way intersection for the two roads shown connecting to Tanner Town Road.	In Section H VA1 is the recommended preferred alternative, which accommodates this request.
10) One other item that I noticed in my review (not sure why I didn't say something before) is that the CSX right of way that has been sold off (all in Dinwiddie, I believe) was shown as existing right of way (purple) on the maps. Shouldn't these be shown as private property?	Former railroad property that has been sold to private individuals is now indicated as such in the Tier II FEIS mapping,

Local Governments and Planning Organizations

AG1 City of Richmond Traffic Engineering, Travis Bridewell	
Comment	**Response**
These are our comments from a traffic operations standpoint for Roll 1 and 2 of 58. These comments are based on the concept plans only thereby as construction plans are underway we will have more detailed comments. 1) Provide adequate cul-de-sacs on public roads where closures are planned	The following changes have been made to the designs and are shown in the Map Book Appendix of the Tier II FEIS. Please note that to minimize impacts, T-turns rather than cul-de-sacs have been included in the designs. 1) 1st Street at Maury Street: a T-turn has been added. 2) Commerce Road: a T-turn has been added on the west side of railroad; pavement will be removed from existing alignment on the east side of the railroad, and driveway access worked out during final design. 3) Meridian Avenue: a T-turn has not been added to the designs at this location due to the property impacts that would result. Note that this is in keeping with the existing context of the surrounding neighborhood where many of the streets terminate without cul-de-sacs or T-turns. 4) Dale Avenue: T-turns have been added on both sides of the railroad.
2) Review each entrance in the areas where proposed grade separation roadways are planned for adequate tie-ins and grades to existing land usages	Access will be evaluated during the ROW process, and designs for driveways will be developed during the final design stage of the Project.
3) Bells Road – there might be some tie-in issues with the new roadway and commercial entrances	Access will be evaluated during the ROW process, and designs for driveways will be developed during the final design stage of the Project.

AG1 City of Richmond Traffic Engineering, Travis Bridewell	
Comment	**Response**
4) Ruffin Road – check the circulation in the apartment parking lot on the NW side of the RR given a closure on Ruffin Road	The project will commit to ensure that adequate access is provided to the apartment complex on the NW side of railroad and Ruffin Road. Current designs provide access along the western edge of the complex via an extension of Lynhaven Avenue. In addition, during final design, when survey level data is available, it may prove possible that access to Ruffin Road can be maintained. However, it cannot be stated with certainty at this time.
5) Commerce Road – The current widening project for Commerce Road (UPC #15958) includes improving the existing RR crossing 623545B. It does not include a grade separation as planned under the SEHSR.	The project designs have been coordinated with the City of Richmond regarding the typical section and design speed provided by the City for this location. The City is proposing to widen Commerce Road to a three-lane roadway with a flush median to the south and across the existing CSX tracks, and a raised median to the north, with a design speed of 45 mph. The Richmond to Raleigh Project designs for Commerce Road propose to grade separate the crossing of the CSX rail corridor with a bridge, and will include a slight realignment of Commerce Road to the south of its current location. In order to minimize impacts to businesses, the proposed bridge and approaches meet the road classification standards for local roads rather than arterial roads, thus requiring a design speed of 35 mph. This realigned portion of Commerce Road, including the bridge and approaches, will be posted with a warning sign with the maximum safe speed to compensate for the lower design speed on this portion of Commerce Road.
6) Deepwater Terminal Road – I feel this road will be more utilized in the future and a better alignment should be considered for the right angle curve just east of the RR.	The designs for the road realignment and intersection with Goodes Street represent an improvement to the existing conditions, and will accommodate turning movements of large commercial vehicles (i.e., will adequately accommodate trucks with a 50-foot wheel base (WB-50).
7) The planned closure located just south of the I-95 ramps at Maury concerns me as to how the traffic will access the site east of the RR	In response to this comment, the design team evaluated access for two locations near the I-95 ramps: 1) Tank farm east of the railroad/south side of Maury Street - The designs have been modified for the Tier II FEIS to include a service road off of Maury Street to provide access to the property. A map of the design changes can be seen in the Map Book Appendix of the Tier II FEIS. 2) Williams Bridge Company – Designs for driveways throughout the Project will be developed during the final design stage of the Project. In this case, however, coordination has taken place with the property owner as part of Section 106 coordination regarding access. Preliminary designs have been developed to the point where it has been determined that a driveway connection to Deepwater Terminal Road can be developed in final design that will allow ingress/egress of the long tractor trailers (in excess of WB-50) used by the business.

AG1 City of Richmond Traffic Engineering, Travis Bridewell	
Comment	**Response**
8) Maury St – there will be tie-in and grade issues to access some of the land uses in this area. Area streets should be considered for improving such as Everett St given the future grade issue at 1st St.	The designs have been modified for the Tier II FEIS to show a road closure for 1st Street at the edge of the proposed Maury Street ROW, as well as an extension of 3rd St. to give access to the tank farm. In addition, the intersection at 4th St and Maury St. would be modified to a roundabout to improve mobility through the area. Given the grid work nature of the surrounding streets, it is anticipated that traffic will be adequately handled by the surrounding streets; therefore, improvements to Everett Street are not included as they would be considered outside the scope of the Project. A map of the design changes can be seen in the Map Book Appendix of the Tier II FEIS.

AG3, AG27 & AG40 **Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10))** **Also includes additional requests/comments from County based on on-going coordination with the Project Team.**	
Comment	**Response**
1) Location: Between S-6 and S-7, Property Number: 10355(?) Chesterfield County's Falling Creek Wastewater Treatment Plant is served by several 18 wheel-tractor trailer trucks and chemical tankers a day. Allowances must be made for "18-wheeler" type trucks to access the Plant, which would involve both road and bridge design as well as access throughout the period of construction. While not sure of the maximum loads these vehicles carry, the plant indicates that some carriers routinely deliver payloads of 80,000 pounds. Our concerns are as follows: a. We are unsure of the ultimate width of the road/overpass but assume at least a double lane. b. Elevation and grade of both approaches need to consider both the size and weight of large vehicles. c. Turning radius of the trucks - While only upon rare occasions during normal plant operations, would two trucks likely be on the overpass at the same time, we suggest this be looked at closely to ensure there is sufficient width with consideration given to ..... d. Seasonally we have trucks that are "less than successful" when leaving the plant and crossing back over the existing private crossing towards Station Road. Due to sleet, ice, and snow issues, we routinely have drivers that need to get a good running start" to make it up our existing exit back onto Station Road even with scraping by the plant's bobcat and a good sprinkling of sand. Show that tractor-trailers can be accommodated with the reconstruction of Station Road. Also - show access for HKK Brisbane Properties (including grade). e. We are assuming that the portion of the road currently considered private along the east side of the crossing (including the crossing itself) will ultimately be maintained by the state. We also assume that it will be highly unlikely that priority to maintaining this crossing will be afforded us by the state so we will be somewhat on our own during bad weather. f. We are curious to know whether jersey-walls and/or guard rails will be provided in the event of an incident. g. In summary, elevation and grade of both approaches need to be considered, with particular concerns of the forward momentum of heavily loaded trucks attempting to negotiate a turn in excess of 90 degrees on a potentially icy surface.	The road and bridge designs at both Station Road (which provides access to the Falling Creek wastewater treatment plant) and Pine Forest Drive (which provides access to the Timsbury Creek pump station) meet ASHTO and VDOT standards, which consider both width and grade. The volume and type of use (including payload of trucks serving the plant and pump station) will be taken into account during final design, as well as during development of construction detours. Barrier rail is included as part of standard bridge design, and guard rails will be provided along the approaches according to VDOT standards during the final design stage of the Project. The road has been designed as a public road, to be maintained by VDOT. Once the Project has been constructed and the road has been taken into the VDOT system of roads, the standard VDOT process for prioritizing maintenance of roads during inclement weather will be followed. This process allows for input from the County with regard to local priorities for essential operations. HKK Brisbane Properties, Falling Creek Warehouse Associates, and Ryder Truck Rental will all retain access via the existing alignment of Station Road.

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
2) Allowances must be made for "18-wheeler" type trucks to access the Timsbury Creek Wastewater Pump Station. This would involve both road and bridge design as well as access throughout the period of construction.	
3) While we are not in a position to speak for our neighbor, Token Tower, LLC, (10360) we do note and are not clear on how they will access their facilities since the toe of the incline appears to go all the way to the creek. In addition, Token Tower, LLC uses guyed towers; it appears that these guy wires may need to be relocated and/or consideration given to the overhead clearance above the new overpass since these guys extend out well from the base of the towers. We are also unsure if the purpose of the third short leg "T" immediately east of the overpass. Is this for vehicles to "pull over" or for a barricade in the event a truck exiting from the plant is "unsuccessful" in negotiating the turn onto the overpass in a timely fashion?	The short "T" was added to the designs to allow public vehicles to turn around. Access to the Token Tower, LLC property will be handled during the ROW stage of the Project. Construction issues related to the guy wires for the towers located on the property owned by Token Tower, LLC, will be handled during the final design stage of the Project.
4) Recordation of a trail/pedestrian easement and ingress/egress easement is needed underneath current and proposed tracks at Falling Creek Ironworks Park between GPINS 7926850003 and 793680882.	The Richmond to Raleigh Project rail designs are located within the existing CSX railroad corridor where it crosses through Falling Creek Ironworks Park. The Richmond to Raleigh Project alternatives would cross Falling Creek on the existing structure and would not require any new ROW. The existing rail lines in this area have daily freight and passenger rail traffic that can be heard and seen from the Falling Creek Ironworks Park. The Richmond to Raleigh Project should not alter the character, setting, or use of the trail. Therefore, the Richmond to Raleigh Project would have no effect on this resource and would not constitute a Section 4(f) use of the resource.
5) The county is currently in negotiations to acquire the eastern portion of GPIN 7916855178 to be used as a park. The proposed roadway/ROW in this area will impact access and development of this site, please consider alternatives such as using existing Station Rd.	The design for the grade separation of Station Road has been altered to avoid impacts to the proposed "Resource Protection Area" for the park as shown on the rendered site plan provided by the County in June 2012.
6) Recordation of a trail/pedestrian easement is needed on the north side of Kingsland Creek, between GPINs 7916749474 and 7916749730. This will accommodate the planned development of the James River Greenway trail system.	The Richmond to Raleigh Project would add an additional railroad track within the existing CSX railroad corridor in the location where the proposed trail would cross. Chesterfield County has not yet obtained a legal crossing of the active railroad corridor in this area. Therefore, the proposed changes associated with the Richmond to Raleigh Project would not create a barrier to the development of the trail (because that barrier already exists). The existing rail lines in this area have daily freight and passenger rail traffic that can be heard and seen from the proposed location of the trail. The addition of the Richmond to Raleigh Project track should not alter the character, setting, or use of the trail. Therefore, the Richmond to Raleigh Project would have no effect on this resource and would not constitute a Section 4(f) use of the resource.

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
7) Recordation of a trail/pedestrian easement is needed where Chester Linear Park intersects with the existing railroad ROW. This will accommodate the planned development of the James River Greenway trail system. Location: between GPINS 7876560516 and 7886585164.	The Richmond to Raleigh Project would add an additional railroad track within the existing CSX railroad corridor in the location where the planned expansion of Chester Linear Park would cross. Chesterfield County has not yet obtained a legal crossing of the active railroad corridor in this area. Therefore, the proposed changes associated with the Richmond to Raleigh Project would not create a barrier to the expansion of Chester Linear Park (because that barrier already exists). The existing rail lines in this area have daily freight and passenger rail traffic that can be heard and seen from the proposed location of the expanded Chester Linear Park. The addition of the Richmond to Raleigh Project track should not alter the character, setting, or use of the trail. Therefore, the Richmond to Raleigh Project would have no effect on this resource and would not constitute a Section 4(f) use of the resource.
8) Proposed ROW will result in loss of parkland at Kiwanis Park, GPINS 7916530773 and 7906549007, which will affect the scope and development of the future park facilities.	This issue was addressed in the Tier II DEIS. As stated in the Section 4(f) Evaluation, the Richmond to Raleigh Project would require ROW from the parcel along Curtis Street and Richmond Street planned for the Chester Kiwanis Historical Park. However, Chesterfield County made the acceptance of the donated land conditional upon reserving the necessary ROW for the Richmond to Raleigh Project (100 feet from the centerlines of both Curtis Street and Richmond Street) for non-park uses. Therefore, the Richmond to Raleigh Project would have no effect on this resource and would not constitute a Section 4(f) use of the resource.
9) Recordation of a trail/pedestrian easement is needed just north of and parallel to the Appomattox River. This will accommodate the planned development of the VSU/Ettrick Riverside Trail.	This issue was addressed in Chapter 5 of the Tier II DEIS, which stated that the Richmond to Raleigh Project would construct a new rail bridge over the Appomattox River, immediately adjacent to the existing rail bridge near Virginia State University. The bridge would be located just to the east of the existing bridge and would require a small amount of ROW under the span of the bridge to allow for access and maintenance. In addition, it may be necessary to provide Virginia State University with an access drive under the bridge. Included in the ROW needed for the Richmond to Raleigh Project is approximately 0.8 acres of the planned Appomattox Riverfront Trail. The existing rail bridge has daily freight and passenger rail traffic that can be heard from the surrounding area; therefore, the new bridge should not alter the character, setting, or use of the planned trail. The Chesterfield County Department of Parks and Recreation, as the official with jurisdiction over the planned Appomattox Riverfront Trail, in a correspondence dated January 5, 2010, concurred that the Project would not adversely affect the activities, features, and attributes that qualify the resource for protection under Section 4(f), with the stipulation that the Richmond to Raleigh Project not impede access for pedestrians and bicyclists to traverse the full length of the trail without interruption at the railroad bridge. Therefore, FRA has made a *de minimis* determination for this resource.

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
10) Please consider adding hardpoints and constructing a pedestrian foot bridge suspended from the railroad trestle at the Appomattox River crossing.	There is no existing pedestrian crossing of the Appomattox River in this location. It has been the standard practice of the Project to provide or replace existing, legal pedestrian crossings where impacted. The request is, therefore, outside the scope of this Project.
11) Chippenham Parkway Comments – a. Staff Comment – There is a crossing that currently exists north of Chippenham Parkway that accesses a tank farm owned by Motiva Enterprises. This seems to be the only access to the tank farm from the public road, and appears to be scheduled for elimination. How will that tank farm be accessed if this crossing is closed? Show access for Motiva Enterprises (including grade). b. Staff Comment - Show access for Motiva Enterprises, HKK Brisbane Properties, Falling Creek Warehouse Associates and Ryder Truck Rental (including grade).	Access to the Motiva Property will be further evaluated during the final design stage of the Project. If it is determined at that time that access cannot be provided, then the property will be purchased. HKK Brisbane Properties, Falling Creek Warehouse Associates, and Ryder Truck Rental will all retain access via the existing alignment of Station Road. In addition, the HKK and Falling Creek Warehouse properties will be provided access to their loading docks under the proposed bridge for the Station Road realignment.
12) Do we know the timing of the closure of the existing crossings at Kingsland Road, Centralia Road, Woods Edge Road, and Pine Forest Drive? Our Fire Dept Planning unit will need to re-evaluate our fire station districts prior to that work beginning.	The timing of the construction of the Project has not been established as a funding source is not yet in place. The Project Team will coordinate with the County to ensure that emergency services are aware of any road closures.
13) Pine Forest Drive Comments – a. Staff Comment - We still have no information on how access to the trailer park at the end of will be maintained during construction. b. Commissioner Comments - The extensions of Pine Forest Drive must be eliminated.	The extension of Walthall Industrial Parkway has been removed from the designs. The grade separation of Pine Forest Drive remains because of the need to provide access to residences and VDOT. During construction, the existing crossing will be used to access to the mobile home park (since proposed Pine Forest Drive will be realigned).
14) Are there currently any plans for access to the rail line for emergency purposes? How will emergency response units be able to access these areas?	Emergency response procedures are determined by the owner of the railroad corridor. In Chesterfield County, CSX will maintain ownership of the Richmond to Raleigh Project corridor. CSX provides emergency responder training and education information on their website (http://www.csx.com/index.cfm/community/community-safety-programs/emergency-responder-training-and-education/).

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
15) Hampton Roads Comments – a. Staff Comments - On a non-critical note, are there any plans to have a branch of this rail services that goes to Hampton Roads, and if so, where will it intersect this line? b. Commissioner Comments - SEHSR must accommodate the proposed Petersburg to South Hampton Roads rail service.	The extension of the SEHSR Corridor to Hampton Roads is coordinated with the Raleigh-to-Richmond designs. A turn-out for Hampton Roads service was shown on the Tier II DEIS designs, just south of Petersburg, which was constructed by DRPT under a separate project in 2012. The segment of the corridor between Richmond Main Street Station and the NS connection to Hampton Roads south of Petersburg, VA includes the construction of a new HSR track adjacent to the active CSX tracks to provide additional capacity to support the introduction of the four round-trip (8 total) SEHSR Corridor trains for the Richmond to Raleigh Project only. Where this segment of the corridor is also planned to support the six additional round-trip (12 additional) SEHSR Corridor trains for the Richmond to Hampton Roads Project, any additional track capacity required to support that service will be considered in a future Richmond to Hampton Roads Tier II EIS document.
16) To properly assess the overall economic impact of the project, additional information will be needed beyond the proposed right of way alignment.	The Project Team has continued to coordinate with Chesterfield County to provide additional information, where available. Detailed information about ROW and relocations will not be available until the final design stage of the Project.
17) There are concerns about industrially zoned property that may be negatively impacted by the proposal.	The Project Team will continue to coordinate with Chesterfield County to address access and other concerns related to potential development sites. However, detailed information about ROW and relocations will not be available until the final design stage of the Project.
18) Woods Edge Road Comments – a. The closing of the crossing at Woods Edge Road would negatively impact access to some industrial property. b. No traffic analysis was provided for the proposed Woods Edge Road closure c. Do not close Woods Edge Road crossing; provide a grade-separated crossing d. Widen Woods Edge between Route 1 and existing four-lane section e. Construct turn lanes and signalize Jefferson Davis Highway/Pine Forest Drive f. Provide second access for Millside subdivision.	A Woods Edge Road grade separation has been added to the designs. Widening of Woods Edge Road is outside the scope of the Richmond to Raleigh Project. The Project designs have been developed to be consistent with the long range transportation plans, and through our on-going, and extensive, coordination with the local municipalities. The designs are such that they will not preclude future widening, when needed (e.g., we are providing sufficient vertical clearance or horizontal clearance for future road widening). The design concept has been revised and the Project does not alter volumes on Pine Forest Drive. Therefore, neither turn lanes nor signalization will be provided as part of the Project designs. The design for the grade separation of Pine Forest Drive provides a single access to the Millside subdivision to replace the closure at Landsmill Drive. Any additional access would have additional property impacts and is outside the scope of the Richmond to Raleigh Project.

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
19) Provide a list of all commercial and residential displacements	Detailed information about ROW and relocations will not be available until the final design stage of the Project. The designs included in the Tier II FEIS provide sufficient information to identify potential displacements. During final design, efforts will be made to minimize needed ROW and reduce the number of displacements.
20) No such city limits: Bensley, Bellwood, Chester, Ettrick	Comment noted. Maps in the Tier II FEIS are corrected.
21) Provide sufficient design details to demonstrate that: a. Bridges and underpasses will accommodate future road widening b. Bike and pedestrian accommodations are included. Specifically, provide pedestrian access at future Chester Linear Park, West Street, Ettrick Station to Ettrick Park. c. Landscaping and screening will be provided especially in residential areas d. Tractor-trailers will be able to safely access water treatment facilities	The Project designs have been developed to be consistent with the long range transportation plans and through on-going, extensive coordination with local municipalities. The designs are such that they will not preclude future widening when needed (e.g., the designs provide sufficient vertical clearance or horizontal clearance for future road widening). New bridges will have sufficient width so as not to create a hazard for pedestrian/cyclist movement. Where sidewalks currently exist, they will be provided. At other locations, accommodations will be evaluated during final design based on the current VDOT pedestrian and complete streets policies. A pedestrian accommodation at West Street has been added to the designs. Pedestrian access at future Chester Linear Park and Ettrick Park have not been provided in the Project designs because the County has not obtained a legal access across the CSX rail corridor in these locations. Therefore, the proposed changes associated with the Richmond to Raleigh Project would not create a barrier to pedestrian activity (because that barrier already exists). Along the rail alignment, landscaping will be consistent with what currently exists. Along the road work, landscaping will be addressed during final design. Details for landscaping in historic districts may be specified under the Section 106 MOA (with input from property owners and historic societies). The design for the realignment of Station Road accommodates a standard WB-50, which will allow tractor-trailers to safely access water treatment facilities.
22) Show locations of security fencing.	Locations of security fencing will be determined during the final design stage of the Project in coordination with the County and CSX.
23) Provide adequate traffic analyses to ensure the proposals will accommodate anticipated traffic	Traffic studies for Chesterfield County have been completed to ensure that the Project designs address future traffic needs.

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
24) Conduct noise studies for new road alignments and widening along with specific plans for abatement	The FEIS assesses all proposed new grade separations along the Project for potential noise impacts and evaluates mitigation using standard FHWA and VDOT practices. In discussions with FHWA, it was determined that noise studies did not need to be completed for other aspects of the proposed road work as they did not meet the threshold for analysis (i.e., Type I improvements). It should be noted that the entire project is not a FHWA Type I project because it is an FRA undertaking subject to FRA noise regulations. FHWA recommended using their Type I improvement description to identify the road components of the Project that should be evaluated for noise impacts and mitigation. The individual sections of road work would not be undertaken as a single project as they have no connection to one another without the rail improvements.
25) Construct turn lanes and signalize major intersections (as noted below).	See responses below for location-specific information.
26) Provide a financing plan to show how and when necessary road improvements will be accomplished by this project.	It is intended for the roadway and rail aspects of the Project to be funded together.
27) Provide specific plans showing how access will be provided to and from developed and undeveloped properties impacted by grade-separations, new road alignments and crossing closures. Access to properties must be considered at this stage in order to establish the right-of-way footprint and determine the impact to properties. Access issues especially critical at grade separations where the road elevation will limit available locations for access and could impact development potential of the property.	This level of detail will be provided during the final design stage of the Project (post-FEIS). However, all affected property owners will be "made whole" through either provision of access or purchase of "land locked" properties. It should be noted that impacts to private crossings of the rail corridor will only be mitigated where the current access is legal. It should be noted that multiple outcomes are possible for the same piece of property based on its current use and the desires of the property owner. It is not possible or advantageous to develop specific plans prior to negotiating ROW. We will continue to discuss the process with property owners and answer their questions at the upcoming Project Update Meetings.
28) Incorporate county tunnel safety guidelines (attached) at all underpasses.	County tunnel safety guidelines will be utilized during the final design of underpasses.
29) Show siding locations and confirm that impacts at sidings have been addressed. Due to noise and property impacts, siding locations need to be determined and accounted for with this document.	Future potential HSR passing and industrial freight siding locations will be determined during the final design stage of the Project in coordination with the County, CSX, and the property owner to be served by the siding. All planned passing sidings and existing industrial spurs are shown in the plans and impacts were considered along with main lines.
30) Kingsland Rd / Chester Rd Comments – a. Realign Chester Road at Perrymont Road so Chester Road is a through road to Jefferson Davis Highway and Perrymont Avenue is a stop condition. b. Construct turn lanes and signalize Norcliff Avenue/Jefferson Davis Highway. c. Allow Kingsland Road Extended to be the through street with stop conditions for Perrymont Avenue. d. Provide a cul-de-sac for Kingsland Road near existing crossing proposed to be closed.	a. The realignment of Chester Road at Perrymont Road was evaluated. However, the requested change was determined to have the following issues: a) The realigned Chester Road would cross the planned Kingsland Creek trail (potential Section 4(f) issue); b) The realigned Chester Road would require a new bridge across Kingsland Creek and take out the existing bridge on Perrymont Road that was recently improved by VDOT (resulting in greater cost); and c) The realigned Chester Road would have a greater impact to a tributary to Kingsland Creek. For these reasons, the design change was not accommodated.

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e. Provide turn lanes at Dorsey Road/Kingsland Road intersection. f. Provide turn lanes and signalization at Chester Road/Normandale Avenue intersection. g. Provide turn lanes and signalization at the "Thurston to Chester connector"/Chester Road intersection. h. Construct the Kingsland Extended and the "Thurston to Chester connector" bridges to accommodate four lanes. i. Maximize distance between new "Thurston-to-Chester connector" road and Route 288 (i.e., don't line up with Park Road if spacing from Route 288 can be improved). j. Construct Chester Road as a 4-lane road. k. Improve Dorsey Road between Brinkley Road and Thurston Road	b. The traffic analysis completed for Norcliff Avenue/Jefferson Davis Highway shows that this intersection would function at an acceptable level of service if signalized. If warranted at the time of construction, a signal will be considered. The analysis shows that adding an eastbound left-turn lane appears to fit within the existing asphalt; therefore, no additional impacts were accounted for in the Project designs because the turn lane can be handled with paint striping. c. The Project traffic analysis suggests the Kingsland Road Extended/ Perrymont Avenue intersection works with either stop condition. d. A “T”-turnaround has been provided Kingsland Road near the existing crossing proposed to be closed. e. The traffic modeling does not show that turn lanes at the Dorsey Road/Kingsland Road intersection are needed; therefore, they have not been included. f. The Richmond to Raleigh Project is expected to have minimal effect on traffic at the Chester Road/Normandale Avenue intersection; therefore, no improvements have been provided. g. Turn lanes have been provided on the connector at the “Thurston to Chester connector”/Chester Road intersection. If warranted at the time of project construction, a signal will be evaluated at that time. h. The Kingsland Road Extended and the "Thurston to Chester connector" bridges are proposed to be built as two-lane roadways, as that matches their existing condition. The proposed designs do not preclude widening these bridges by an additional lane on the north and/or south side, or adding a new, separate bridge parallel to the proposed Richmond to Raleigh Project bridge in order to accommodate future widening. i. The request to maximize the distance between the new “Thurston-to-Chester connector” road and Route 288 was considered, but was not pursued further due to resulting impacts to existing, developed properties. This issue was discussed with County staff during meetings subsequent to the Tier II DEIS public hearings. j. The Richmond to Raleigh Project does not create the need for Chester Road to be constructed as a four-lane road. k. The Richmond to Raleigh Project does not create the need for the requested improvement of Dorsey Road between Brinkley Road and Thurston Road.

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31) Old Lane Comments – a. Staff Comments - Improve alignment of Old Lane at Hopkins Road between Old Lane and Jaymont Drive. Alternate suggestion: Do not close the Old Lane crossing, realign Old Lane with Hamlin Creek Parkway, grade separate with an underpass, construct turn lanes and signalize Old Lane at Chester Road. b. County Commissioner Comments - Relocate the Old Lane crossing and provide a grade separation to align Hamlin Creek Parkway. If this cannot be accomplished, provide additional road improvements to accommodate the increased traffic using Hopkins Road and Centralia Road.	The Richmond to Raleigh Project does not create the need for the requested improvement of Old Lane at Hopkins Road between Old Lane and Jaymont Drive. A similar concept to the alternate suggestion was considered and determined not feasible due to multiple design constraints. A grade separation in the vicinity of Old Lane could not be provided due to several design constraints, most notably the location of the rail interlocking that trains use to switch between the CSX A-line and S-line. Traffic accommodations have been designed at the Hopkins Road-Centralia Road intersection.
32) Centralia Road Comments – a. Request details and renderings for the proposed Centralia Road Loop b. Construct turn lanes and signalize Centralia Road/Hopkins Road c. Construct turn lanes and signalize Centralia Road/Chester Road d. Show how Centralia Station (future subdivision adjacent to the west of the tracks) access Centralia Road e. Construct the Centralia Road bridge to accommodate four lanes for Centralia Road and Chester Road in the future f. Show right-of-way limits for Centralia Road loop bridge g. Construct loop as four-lane road h. Extend four-lane typical for Chester Road, 1000' south of Centralia Road/Chester Road intersection, then transition to two lanes i. Confirm that the road north of Centralia Road and west of the railroad will be state maintained j. Include grade separation for future E-W roadway, south of Great Branch Drive. This roadway is included on the county thoroughfare plan and construction of the road is a condition of zoning for the property commonly referred to as "Branners Station." k. Provide the lane configuration for the new Chester/Centralia intersection and under the bridge.	a. Renderings for a portion of the Centralia Road designs were completed as part of the Section 106 (National Historic Preservation Act) coordination with property owners along Centralia Road, and were included in an appendix for the Tier II DEIS. The Project Team provided Chesterfield County with Synchro (traffic) model outputs to assist the County in evaluating the proposed Centralia Road designs. b. The intersection of Centralia Road and Hopkins Road was analyzed under signal control for the design year. The decision to signalize this intersection will be finalized during the final phase of the Project. This intersection will be evaluated for turn lanes; however, their provision is limited by impacts to historic resources. c. The new intersection of Centralia and Chester Road was analyzed under signal control for the design year and turn lanes are provided. The intersection will require signalization after construction unless one of the southbound left-turn lanes is stripped out to provide only one southbound left-turn lane initially. This will be evaluated before construction. The Richmond to Raleigh Project does not intend to remove the signal at the existing Centralia/Chester Rd intersection. d. Access to Centralia Station will be evaluated during final design based on existing conditions at that time. e. The proposed bridge design for Centralia Road accommodates the projected traffic on the road (three lanes). However, the vertical clearance and other design elements do not prohibit future bridge widening. The designs will accommodate future widening of Chester Road to five lanes beneath the bridge. f. ROW limits for the Centralia Road loop bridge appeared on the Tier II DEIS public hearing maps; however, the property under the bridge to be acquired was not highlighted. This correction has been made for future public hearing maps. g. The Richmond to Raleigh Project does not create the need for Centralia Road to be widened to four lanes. h. The request to extend a four-lane typical section for Chester Road cannot be

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	accommodated. While Chester Road currently transitions to a two-lane facility south of the existing Chester Road and Centralia Road intersection, the traffic analyses indicate that the new intersection of Centralia Road and Chester Road will perform at a better level of service than the No Build Chester Road and Centralia Road (i.e., future condition without the Richmond to Raleigh Project). Also, the Richmond to Raleigh Project does not create the need for a four-lane Chester Road. i. According to VDOT, the road north of Centralia Road and west of the railroad will be state maintained. j. The Richmond to Raleigh Project does not change the existing condition south of Great Branch Drive (i.e., there is no existing, legal crossing of the CSX ROW); therefore, the request cannot be accommodated. k. The Project Team provided the lane configuration for the new Chester Road/Centralia Road intersection and under the bridge to Chesterfield County.
33) Lengthen RR bridge/overpass over Jefferson Davis Highway (Route 1)	The Project designs do not alter the existing structure over Route 1.
34) Marina Drive crossing must be provided a grade separation and not be closed as currently proposed.	Marina Drive, which currently passes under the existing Falling Creek railroad bridge, was not proposed to be altered by the Richmond to Raleigh Project. Thus, Marina Drive is not affected, and will remain open.
35) Branders Bridge and Dupuy Road comments – a. Construct Branders Bridge Road bridge to accommodate four lanes in the future b. Confirm that the new road west of Weldon Street will be state maintained c. Construct the Dupuy Road bridge to accommodate four lanes in the future d. Show driveway access and grades to realigned Branders Bridge and Dupuy Roads	The Richmond to Raleigh Project does not increase traffic volumes along Branders Bridge Road; therefore, a two-lane bridge is provided in the Project designs. However, the design will not preclude the provision of a future four-lane bridge. According to VDOT, the new road west of Weldon Street will be state maintained. The Richmond to Raleigh Project does not increase traffic volumes along Dupuy Road; therefore, a two-lane bridge is provided in the Project designs. However, the design will not preclude the provision of a future four-lane bridge. Driveway connections will be provided during final design based on the existing conditions at the time of construction.
36) The extension of Walthall Industrial Parkway must be eliminated.	The extension of Walthall Industrial Parkway has been removed from the designs.

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37) As Ettrick Station is the default station location in the Tri-Cities area, study and implement necessary infrastructure improvements to support its use. Passenger rail service at the Ettrick Station must continue regardless of high speed rail service.	The Richmond to Raleigh Project EIS does not recommend station locations. The Tri-Cities Area Passenger Rail Station Study evaluated two potential future HSR stations: the existing station in Ettrick and a location in north Collier Yard near Halifax and Squirrel Level Roads in Petersburg. Both locations were found to be suitable for HSR with varying levels of improvement. An Environmental Assessment (EA) is currently underway to evaluate these as well as additional alternative station locations. The study is sponsored by Crater Planning District Commission (CPDC) and FRA is the Lead Federal Agency.
38) Funds used for SEHSR should not be diverted from highway improvements.	Funds for the development of high-speed intercity rail, or the SEHSR Corridor, are not diverted from highway improvements. Federal funding for high-speed or intercity passenger rail comes from FRA and not FHWA, with the exception of eligible roadway safety improvements.
39) Impact of the changes to the proposed at-grade crossings must be eliminated.	Grade separations, pedestrian-only crossings, and traffic accommodations have been provided along the Project corridor to mitigate for the changes to existing at-grade crossings. These provisions have been developed in coordination with local governments throughout the Project Study Area.
40) The following water and sewer lines may be impacted by the project - a. MAP 005- There is a thirty (30) inch sewer trunk line extending along Grindall Creek (Stream SO15) which may be impacted by any stream or right-of-way adjustments on the west side of the existing railroad right-of-way (6102-7B-I). b. MAP 006 - The existing thirty (30) inch sewer trunk line along Grindall Creek extends into the existing railroad right-of-way under the "Dupont" bridge at the end of Cogbill Road (6102-7B-I). c. An existing thirty (30) inch sewer trunk line extends across the existing portion of the railroad right-of-way that is designated as the old "Richmond and Petersburg Electric Railway. This sewer line extends from the southern boundary of the Dupont property parallel to the existing railroad right-of-way to the northern boundary of West Pocahontas Pkwy. (6102-7B-I and S88-145D). d. A privately owned and maintained eight (8) inch sewer line serving "Air Liquide Industrial US, LP" extends across the existing railroad right-of-way and connects to the county sewer system in the right-of-way of West Pocahontas Pkwy. (S74-4ICD). e. The proposed Station Road Bridge and road re-alignment will impact the existing forty-eight (48) inch sewer trunk line that carries	The Project Team appreciates the information provided on potential utility impacts. This information will be shared with utility coordinators and project designers during the final design stage of the Project.

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wastewater to the Falling Creek Wastewater Treatment Plant (6102-3). f. Two (2) eight (8) inch sewer collector lines extend across Station road west of the existing railroad right-of-way to serve adjacent business (S70-20D, S76-68D). g. There is an existing twelve (12) inch water line extending along the north side of Station Road which crosses the existing railroad right-of-way, and extends as an eight (8) inch north along the access road to serve the Falling Creek Wastewater Treatment Plant. This line will be impacted by the proposed Station Road re-alignment and bridge (W70-16CD, W71-37D, W73-75D, and W74-7C). h. Additional railroad right-of-way on the east side, south of Falling Creek, will impact the existing twenty (20) inch sewer trunk line extending along the east boundary of the existing railroad right-of-way (6102-1). i. MAP 007- Additional railroad right-of-way on the west side of the existing railroad right-of-way from Marina Drive to south of Sherbourne Road will impact the existing twenty-one (21) inch sewer trunk line crossing of the railroad adjacent to Marina Drive (S64-17D). j. An existing twelve (12) inch waterline extends along Marina Drive and passes under the existing railroad bridge across Falling Creek. This line will be impacted by the additional railroad right-of-way (AC379). k. Additional railroad right-of-way on the east side of the existing railroad right-of-way south of Falling Creek and opposite Sherbourne Road will impact the existing twenty (20) inch sewer trunk line (6102-1) and the existing eighteen (18) inch sewer line crossing from Alfalfa Lane (6102-1). l. Approximately seven hundred fifty (750) feet of existing eighteen (18) inch sewer trunk line extends into the existing railroad right-of-way along the western boundary adjacent to Merriewood Ridge Road. An existing eight (8) inch sewer collector line extends from this trunk line to Merriewood Ridge Road (6102-1). m. An existing eight (8) inch waterline extends across the existing railroad right-of-way at Merriewood Ridge Road (A363).	

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n. Approximately seven hundred (700) feet of existing eighteen (18) inch sewer trunk line extends into the western side of the existing railroad right-of-way in the vicinity of Gwynn Avenue (6102-1). o. A twelve (12) inch waterline extends across the existing railroad right-of-way approximately two-hundred (200) feet south of Gayland Avenue (W81-67B). p. MAP 008- Additional railroad right-of-way on the west side of the existing railroad right-of-way from south of the Jefferson Davis Highway overpass to Gettings Lane will impact the existing ten (10) inch sewer line (6511-19C) and possibly the existing sixteen (16) inch water line crossing of the railroad south of Jefferson Davis Highway (W96-173CD Phase 3). q. Additional railroad right-of-way on the east side at the Jefferson Davis Highway crossing may impact the existing water line crossing (W96-173 CD Phase 3). r. A sixteen (16) inch waterline extends across the existing railroad right-of-way approximately two hundred fifty (250) feet south of the Jefferson Davis Highway crossing (W96-173CDPH3). s. A thirty-three (33) inch sewer trunk line extends along Kingsland Creek (Stream S035) and crosses the existing railroad right-of-way approximately eight hundred (800) feet north of Kingsland Road (7032-18). t. KINGSLAND ROAD- The proposed re-alignment of Kingsland road with the proposed bridge across both the railroad right-of-way and Chester Road, and the new road connection with Perrymont Road at Norcliff Road will impact the existing Pressure Reducing Valve (PRV) at Kingsland Road and Dorsey Road (5907-8). A twelve (12) inch sewer trunk line extends along a tributary of Kingsland Creek (stream S038) and will be impacted by the relocated Kingsland Road (S74-42C). An eight (8) inch sewer collector line adjacent to Ferncliff Street may also be impacted by the road relocation (S90-538D). Existing eight (8) inch water lines extend along Perrymont Road and Norcliff Road and will have to be evaluated for impact (PB 53/54, W74-85C). u. A twelve (12) inch waterline extends along the north side of Kingsland Road and crosses the existing railroad right-of-way. This	

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line may be impacted by the proposed abandonment of the existing Kingsland Road grade crossing (5907-8). v. CHESTER ROAD (NORTH OF KINGSLAND ROAD)- A twelve (12) inch waterline extends along the northwest side of Chester Road from the existing Kingsland Road crossing to Perrymont Road. This water line as well as the existing eight (8) inch water line along the west side of Perrymont Road will be impacted by the Chester Road improvements (5907-8, PB 53/54). w. MAP 009- The relocation of Chester Road with the expanded right-of-way will impact the existing twelve (12) inch water line along Chester Road from Kingsdale Road to the point north of Park Road where the realignment of Chester Road ends (00-0368 and 564). The proposed extension of Park Road to Thurston Road and the proposed bridge, will impact the existing twelve (12) inch line in Chester Road and the existing eight (8) inch water line in Park Road (U89-614D and W86-61C). x. The additional railroad right-of-way on the west side of the Route 288 overpass will impact an existing forty-eight (48) inch sewer force main that extends along the north side of Proctors creek (Stream S040) and crosses the existing railroad right-of-way (S87-76R). An existing thirty 30) inch sewer trunk line extends along Proctors Creek (stream S040), crosses Route 288 adjacent to the existing railroad right-of-way, and then crosses the existing railroad right of- way to the south side of Route 288. This trunk line will be impacted by the additional railroad right-of-way (7032-14, S86-18C). y. A twelve (12) inch sewer trunk line extends across the existing railroad right-of-way adjacent to the north side of Route 288 to serve the parcels north of Route 288 and east of the railroad. This line could be impacted by any widening of the railroad right-of-way in this area (S87-76R). z. MAP 010- The additional railroad right-of-way on the east side of the existing railroad right-of-way between Route 288 and a point approximately 700 feet north of Centralia Road will potentially impact an existing eight (8) inch water line (W89-5120, UOI-I040) and an existing eight (8) inch sewer collector line (U89-3150, U02-750) that extends through the properties east of the railroad right-of-way.	

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Impact will be dependent upon the amount of additional right-of-way acquired. aa. The relocation of Centralia Road and proposed bridge across both the railroad right-of-way and Chester Road will impact the existing sixteen (16) inch water line in Centralia Road (W77-77C), the existing eight (8) inch sewer collector line along the south side of Centralia Road, and an existing eight (8) inch collector line that extends south from Centralia Road along the eastern boundary of the existing railroad right-of-way (U05-2060, U93-147C, UOI-1870). bb. The proposed bridge and additional right-of-way will impact an existing sixteen (16) inch water line along the west side of Chester Road (U93-1470) and the thirty (30) inch Hamlin Creek Sewer Trunk Line that extends along the east side of Chester Road (7032-15). The new Centralia Road loop and connection with Chester Road will impact the thirty (30) inch Hamlin Creek Sewer Trunk Line (7032-15) and the existing eight (8) inch water line along Chester Road (U93-147C). cc. MAP 011 AND 012- The thirty (30) inch Hamlin Creek Sewer Trunk Line (7032-15) crosses the existing railroad right-of-way north of stream S041 and will impacted by the new rail line. dd. The thirty (30) inch Hamlin Creek Sewer Trunk Line extends along the western boundary of the railroad right-of-way from stream S041 to West Hundred Road (7032-15 and 6102-41). Any change in the existing railroad right-of-way along this section will impact that sewer trunk line. ee. Additional right-of-way on the east side of the existing railroad right-of-way at Chester Station Drive will impact the existing eight (8) inch sewer line crossing from Coastline Circle (S78-7lD). ff. A portion of the eighteen (18) inch sewer trunk line (7032-15) extends into the existing railroad right-of-way for approximately 240 feet at a point opposite Chester Village Circle. An eight (8) inch sewer collector line extends from Chester Village Circle and ties-into the eighteen (18) inch line in the existing railroad right-of-way (U02-192D). gg. Additional railroad right-of-way on the east side of the existing railroad right-of-way, starting at a point approximately 1,000 feet	

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north of West Hundred Road and continuing to a point approximately 500 feet north of Curtis Street, will impact the existing sixteen (16) inch water line crossing approximately 700 feet north of West Hundred Road (W98-190CO), and an eight (8) inch sewer line crossing of the railroad right-of-way approximately 1,300 feet north of West Hundred Road (S63-18C, 6102-41, and S89-917R). The existing twelve (12) inch water line crossing at Dodomeade Street (C346A) will be impacted as will the existing ten (10) inch sewer line crossing at Railroad Street (7032-27). hh. CURTIS STREET CROSSING- A bridge is proposed to carry the railroad over Curtis Street and the existing road will tunnel under the tracks. The existing water lines in Curtis Street (Sixteen (16) inch - W86-IB and six (6) inch - A-3 and 292) and sewer lines (eight (8) inch - 7032-27 A) will be impacted as well as the existing water (six (6) inch - 292) and sewer lines (ten (10) inch - 7032-27) along a portion of Richmond Street. ii. MAP 013- Additional railroad right-of-way starts at Curtis Street and continues south to Ashton Creek. This will impact the existing thirty (30) inch Ashton Creek trunk line (6511-9A). jj. Between milepost A-14.5 and milepost A-15 two (2) eight (8) inch sewer collector lines extend across the existing railroad right-of-way. One is adjacent to Stockleigh Drive (S97-249CD) and serves Stockleigh Subdivision. The other, adjacent to Oxley Court serves Oxley Subdivision (S97-249CD). kk. MAP 014- Additional railroad right-of-way on the east side of the existing railroad right-of-way, opposite Stockleigh Drive, will impact an existing eight (8) inch sewer line (S97-249CD). The existing sewer collector lines that serve both Stockleigh and Oxley subdivisions extend into existing railroad property on the north side of the existing right-of-way. This section of sewer line is approximately 1,050 feet in length and is located south of milepost A-14.5 (S97-249CD). ll. MAP 015- Additional railroad right-of-way on the east side of the existing railroad right-of-way approximately 1500 feet southeast of Bankwood Court, will impact the existing fifteen (15) inch sewer trunk line crossing (S83-92CD). mm. Additional railroad right-of-way on the east side of the existing	

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railroad right-of-way from approximately 400 feet north of Jefferson Davis Highway to approximately 250 feet south of Ruffin Mill Road will impact water project W96-175R (a twenty-four (24) inch line) sewer project S77-89CD (an eight (8) inch line), S73-24T (a fifteen (15) inch line) and U96-33C (a twelve (12) inch line). nn. Existing water and sewer lines cross the existing railroad right-of-way at Jefferson Davis Highway. An eight (8) inch sewer collector line crosses on the northwest side of Jefferson Davis Highway (S77-89CD) along with an existing eight (8) inch water line (PB 53/54). On the southeast side of Jefferson Davis Highway, an existing twenty-four (24) inch water line crosses the railroad right-of-way (W96-175R). oo. MAP 016- Additional right-of-way is being added to the east side of the existing railroad right-of-way starting approximately 800 feet north of Woods Edge Road, north of milepost A-17, and continuing to a point approximately 800 feet south of Woods Edge Road. This will impact project S73-30T (a fourteen (14) inch sewer force main) and project 04-0180 (a sixteen (16) inch sewer force main) that will be constructed prior to the high speed rail project. pp. WOODS EDGE ROAD- The May 4, 2010 revisions delete the proposed relocation of Woods Edge Road and bridge, and now propose closing that railroad crossing. There is an existing thirty (30) inch water line (W97-119C) and an existing sixteen (16) inch water line (AC353 and U96-33C) that extend along the south side of Woods Edge Road that will be impacted by the crossing closure and additional railroad right-of-way. qq. WALTHALL INDUSTRIAL PKWY- The May 4, 2010 revisions propose realigning and extending Walthall Industrial Parkway to connect to a proposed extension of Pine Forest Drive. An existing twelve (12) inch water line (U99-195D) and an existing twelve (12) inch sewer collector line extends along the existing portion of Walthall Industrial Parkway and will be impacted by the road extension. rr. The existing thirty (30) inch Timsberry Creek Sewer Trunk Line extends along Timsberry Creek (Stream S063) and crosses the existing railroad right-of-way approximately 1,700 feet north of	

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
milepost A-18 (S73-31T). ss. MAP 017-Additional right-of-way is being added to the east side of the railroad right-of-way from a point approximately 2,300 feet north of Pine Forest Drive and continuing south to Swift Creek. This will impact the existing six (6) inch water line at the Pine Forest Drive crossing (W83-53D) and the existing (8) inch water line (W96-167R), an existing (8) inch sewer line (S74-38T) that crosses the existing railroad right-of-way at the end of Aldridge Avenue and project 04-0180 (a sixteen (16) inch sewer force main) that will be constructed prior to the high speed rail project. tt. PINE FOREST DRIVE- The May4, 2010 revisions propose a road realignment of Pine Forest Drive with a bridge over the railroad right-of-way. Pine Forest Drive will also be extended to the east to connect with the Walthall Industrial Parkway extension. The proposed Pine Forest Drive extension will impact the existing thirty-three (33) inch Timsberry Creek Sewer Trunk Line and fourteen (14) inch sewer force main, approximately 1,950 feet east of the railroad right-of-way near stream S063 (S73-30T). A privately owned and maintained eight (8) inch sewer collector line serving 2103 Pine Forest drive, near the southern right-of-way line for the proposed Pine Forest Drive extension, may be impacted by the road improvements (S81-72D). uu. MAP 019 - The new bridge proposed at Branders Bridge Road with the additional road right-of-way and the New Pine Grove Avenue will impact the existing thirty (30) inch Appomattox River Water Authority (A.R.W.A.) transmission line and the County's existing sixteen (16) inch waterline along Brander's Bridge Road (W73-32CD). vv. The existing thirty (30) inch A.R.W.A water transmission line enters the west side of the existing railroad right-of-way at a point approximately 450 feet north of River Road and continues north within the existing railroad right-of-way to a point approximately 650 feet south of Branders Bridge Road. This water transmission line re-enters the railroad right-of-way on the north side of Branders Bridge Road and continues with the right-of-way to the Colonial Heights/Chesterfield county line. Proposed railroad improvements may impact this water line.	

AG3, AG27 & AG40 Chesterfield County, VA, Consolidated Comments (including Anne Wright (Utilities), Rachael Lumpkin (Utilities), Stuart Connock (Parks/Design/Construction), James (Robby) Dawson (Fire/EMS), Will Davis (Economic Dev), Barb Smith (Transportation) & Chesterfield County Commissioners (County Resolution 8-25-10)) Also includes additional requests/comments from County based on on-going coordination with the Project Team.	
Comment	**Response**
ww. The new bridge and road realignment of DuPuy Road will impact the thirty (30) inch-AR.W.A. transmission line and an existing eight (8) inch water line (C483 and 555) and existing eight (8) inch sewer lines along DuPuy Road (S74-8C and S65-21D). Additional right-of-way and road improvements may impact existing water and sewer lines in Piedmont Avenue (six (6) inch water line - project: C483 and an eight (8) inch sewer collector line project: S75-58C) and in Roosevelt Avenue (six (6) inch water line - project 514A and an eight (8) inch sewer collector line - project S84-109C). xx. MAP 020- Additional railroad right-of-way is proposed for the east side of !he existing railroad right-of-way. from a point approximately 1,100 feet south of Branders Bridge Road and continuing to the County line. This will impact an existing eight (8) inch sewer line crossing approximately 550 feet south of DuPuy Road (S74-8C). Existing water lines are at River Road/Chesterfield Avenue (twelve (12) inch line - W79-\06C, eight (8) inch line - U88-ICD, twelve (12) inch line - W89-79B, and the existing County meter station off the AR.W.A.line). yy. An existing twelve (12) inch sewer line crossing approximately 1700 feet south of River Road will be impacted (S72-58CD).	

AG4 & AG30 City of Henderson, NC, James D. O'Geary, Mayor Letter & Council Resolution	
Comment	**Response**
The City of Henderson is highly supportive of this project; however, several concerns merit attention as the Project's Plan is fine tuned. The Henderson City Council has unanimously approved Resolution 10—74 concerning the fine tuning it thinks is necessary and appropriate in order to make the high speed rail project work well as it traverses Henderson. The current and proposed railroad tracks bisect the city of Henderson. The Resolution articulates points of support and/or concern as follows: 1) Full support for the Southeast High Speed Rail Project. From RESOLUTION 10-74 – *WHEREAS, the Henderson City Council (Council) identified eight Key Strategic Objectives (KSO) at its 2010 Strategic Planning Retreat; and* *WHEREAS, one of the Key Strategic Objectives is addressed by this Resolution as follows: KSO 3: Enhanced Economic Development: To create new jobs and investment, expand the tax base and increase the per capita income. Action Plan 3-3: High Speed Rail: Locate the High Speed Rail Passenger Station in Downtown; and* *WHEREAS, the City of Henderson (City) is highly supportive of the Southeast High Speed Rail Project (HSRP) and believes its implementation will help revive the local economy as did the construction of I-85 did in the 1960's and 1970's,*	As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there have been several detailed cost/benefit analyses prepared for the SEHSR Corridor, including one for the entire national HSR system (which the SEHSR Corridor is only one segment) prepared in 1997, as well as a detailed feasibility study specifically for the Washington, DC, to Charlotte SEHSR corridor completed in 1999, as well as other studies that demonstrate the benefits of the Richmond to Raleigh Project. These studies have repeatedly concluded that there will be substantial long term economic benefits from development of the Project, including: creation of jobs in railroad construction and operation; induced development of office, retail, hotel and higher density housing near planned rail stations; increased manufacturing jobs in the rail passenger transportation industry, including car, equipment and part manufacturers; increased tourism; reduction in use of carbon fuel; reduced need to widen highways; and, many other benefits, as noted in Chapter 1 of the Tier II FEIS.
2) Strongly urge the location of a passenger rail station with daily service in downtown Henderson. From RESOLUTION 10-74 – *WHEREAS, Henderson is the largest regional population and commercial retail center in North Central North Carolina along the proposed HSRP route, and is one of two rural stops planned on the HSRP between Petersburg, Virginia and Raleigh, North Carolina, with the other rural stop being La Crosse, Virginia; and* *WHEREAS, the location of a passenger rail station in downtown Henderson would be a significant boost to the redevelopment of the local economic base that has been devastated by the loss of the traditional economic stalwarts of textiles and tobacco in the early part of the decade as well as the lingering negative effects of the current Recession; and*	As stated in the Section 2.2 of the Tier II DEIS, evaluation and ridership-revenue modeling support one daily round-trip train stop in Henderson, NC. The DEIS also noted that the development of stations is a unique undertaking at an individual location and station sites were evaluated only to the level to ensure that a station placed along the Project corridor in a general location would provide sufficient accessibility to the larger transportation network.
3) The impacts of the new High Speed Rail Project will serve to divide the city into two halves as a result of the fencing and closure of 12 of the current 17 rail crossing locations. Thus, the proper planning and design of the new rail crossings is of upmost concern to us. From RESOLUTION 10-74 – *WHEREAS, the proposed high speed rail line will run along the same right-of-way that currently provides for the current north/south rail line as it traverses Henderson, and said rail line DIVIDES AND BISECTS the city, thus providing*	Through additional coordination with the City of Henderson following the Tier II DEIS and in response to these comments, several revisions to roadwork within the City were developed. The revised roadwork has been reviewed by the City Council, and two resolutions in full support of the revised roadwork were passed by the City of Henderson City Council. The resolutions reflect that there are no outstanding issues that need to be resolved related to the proposed roadwork related to the Project in the City of Henderson. Refer to Appendix A in the Tier II FEIS for a copy of City of Henderson Resolution 11-84 and Resolution 12-42. Maps of the revised roadwork can be viewed in the Map Book Appendix of the Tier II FEIS.

AG4 & AG30 City of Henderson, NC, James D. O'Geary, Mayor Letter & Council Resolution	
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for unique challenges and opportunities to address cross-city transportation connectors in a way that meets the current and future needs of the City and its residents, businesses and visitors. *NOW, THEREFORE BE IT RESOLVED BY THE HENDERSON CITY COUNCIL that it does hereby:* *AFFIRMS that Henderson is a city with a population of approximately 16,000 and the railroad right-of-way DIVIDES AND BISECTS the city in half. Cross-city connectors that are functional and effective for traffic flow and delivery of public safety services is critical for the public health, safety and welfare and is also critically vital to the City's future economic growth and development. The proposed reconfigurations of the local and State streets and roads to accommodate the HSRP crossings are not well designed and do not think about current and/or future needs of the City's transportation network in a logical and systematic manner.* *4) This is particularly true given the fact that 12 of the existing 17 crossings within the City and its Extraterritorial Jurisdiction are slated to be closed. (See Attachment No. 5). Thus, leaving the City with only 5 existing crossings.* *a. The addition of the Alexander Ave/Dabney Dr./Raleigh Rd. intersection would bring the crossing number to 6.* *The addition of the requested Chavasse Ave. underpass would bring the total crossings to 7.* 5) Full support for a pedestrian crossing in the vicinity of Peachtree Street. 6) Request and full support for the inclusion of bike lanes and sidewalks on both sides of any new bridges, underpasses and reconfigurations of local streets designed to accommodate the new rail crossings. *7)* Major concerns and objections to the planned crossings and the local street and road reconfigurations planned to accommodate the crossings. From RESOLUTION 10-74 – *WHEREAS, the Council has MAJOR CONCERNS ABOUT AND OBJECTIONS to the proposed reconfiguration of local streets and State roads designed to support the planned bridge crossings of the HSRP at –* *a. Main St. and North Garnett St.* *Main Street Crossing: The City Council appreciates the plan aligning with the Thoroughfare Plan; however, the proposed termination of direct north/south traffic flow along the N. Chestnut St.—Rt. 1, N. Garnett St. corridor is neither satisfactory nor acceptable. This corridor carries a significant amount of traffic that bypasses the core downtown area as well as provides a direct access for police, fire and other public safety delivery services that provide service to the Northern sector of the city. The City Council STRONGLY OBJECTS to the*	

AG4 & AG30 City of Henderson, NC, James D. O'Geary, Mayor Letter & Council Resolution	
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proposed design and respectfully requests that the proposed realignment of local and State streets be redesigned to maintain and provide for the north-south N. Chestnut St.—Rt. 1, N. Garnett St. Corridor traffic flow. (See Attachment No. 1 for current HSRP design); *b. Andrews Ave. at N. Garnett St.* *Andrews Avenue Crossing: This avenue is a main connector between I-85 and US Rt. 1 Bypass and has four lanes from I-85 to N. Chestnut Street and three and four lanes from Booth Avenue to Rt. 1 Bypass. The City Council STRONGLY OBJECTS to the construction of a two lane bridge crossing and it respectfully requests that the bridge be widened to provide for future traffic needs and to meet the needs of the bridge crossing as articulated in the City's Thoroughfare Plan—or 4 lanes. Further, the reconfiguration of local streets with this construction does not provide for convenient access from N. Garnett Street in downtown onto Andrews Avenue. The City Council respectfully requests that on/off ramps be provided from the new Andrews Avenue Bridge Crossing to N. Garnett Street. Further, it is requested that Williams Street not be closed at Andrews Avenue on the East side of the rail road right-of-way. (See Attachment No. 2 for current HSRP design);* *c. Chavasse Ave.* *Chavasse Avenue Crossing: The current plan is to permanently close the Chavasse Avenue crossing. The City Council STRONGLY OBJECTS to the permanent closure of the Chavasse Avenue Crossing. While a bridge would not be appropriate due to the historic eligible nature of the residential neighborhood on the East side of the railroad right-of-way, the City Council respectfully requests and proposes that an underpass be provided for Chavasse Avenue in a manner similar to the underpass provided at Charles Street in downtown. This crossing is seen as being critically necessary for the effective delivery of fire services from the Dabney Drive Fire Station into East Henderson as well as the effective access for police personnel. This crossing is extremely important given the fact that the current plans would otherwise leave approximately a 1 mile gap between crossings in a heavily traveled part of the city and where four other downtown crossings are planned to be eliminated. Thus, the only crossings for this heavily populated area of the city without the Chavasse Ave. crossing would be Charles St. Underpass at the northern edge of the Business District and Dabney Dr./Alexander Ave. crossing which is almost at the end of the city limits. (See Attachment No. 3 for current HSRP design); and* *WHEREAS, Mr. Robert Southerland, a private citizen and resident of Gholson Avenue located on the East side of the railroad right-of-way in the vicinity of Chavasse Avenue, addressed the City Council at its 26 July 2010 regular*	

AG4 & AG30 City of Henderson, NC, James D. O'Geary, Mayor Letter & Council Resolution	
Comment	**Response**
meeting and expressed strong support for keeping the Chavasse Avenue railroad crossing open via construction of an underpass similar to the one currently in use at Charles Street in downtown, and no other citizens came forward to speak for or against the Chavasse Avenue crossing proposal being considered by the City Council; *d. Dabney Dr. Extension—Alexander St. Extension at US1 Raleigh Rd.* *Dabney Drive Extension—Alexander Avenue Extension: The proposed relocation of Dabney Drive to connect with the Alexander Avenue Extension is almost out of the city limits; therefore, It is critical that the connection provide for the direct access onto Nicholas Street in order to provide for direct emergency services access from the Dabney Drive Fire Station and police cruisers onto Williams Street and the East Henderson area. The City Council STRONGLY OBJECTS to any design that does not provide for at-grade or on/off ramp connections from the proposed overpass improvements of Alexander Avenue onto Nicholas Street. The City Council respectfully requests that direct access from the rail crossing improvement onto Nicholas Street be designed and constructed as part of this project. (See Attachment No. 4 for current HSRP design);* *e. J. P. Taylor Rd. at US-1 Raleigh Rd.* *J. P. Taylor Road Crossing: The proposed rail crossing at this intersection does not provide for direct access onto US-1 Business/Raleigh Road. This is a critical crossing providing general traffic and public safety service delivery to Southeast Henderson. The City Council STRONGLY OBJECTS to the proposed design because it does not provide for direct access from the J. P. Taylor rail crossing improvement onto US-1 Raleigh Road. It is critical that on/off ramps be provided to connect Raleigh Road with J. P. Taylor Road in order to maintain a high level of public safety service delivery services, particularly fire and police services into the area East of the rail road tracks. The City Council respectfully requests that on/off ramps be provided so as to connect US1 Raleigh Road with the J. P. Taylor rail crossing improvements. Additionally, Belmont Dr. should be widened and improved from the intersection of J. P. Taylor Rd. Extension to Raleigh Road in order to adequately handle the increased traffic load being placed on this small, rural road. (See Attachment No. 6 for current HSRP design);* *f. The lack of a connection between Nicholas St. and J. P. Taylor Rd.* *Nicholas St. not Connecting with J. P. Taylor Road: The proposed road configuration does not provide for a physical connection between Nicholas St. and the J. P. Taylor Rd. This is unacceptable as it completely eliminates any direct public safety access to the neighborhoods and businesses to the East of the Railroad track. The City Council STRONGLY OBJECTS to the termination*	

AG4 & AG30 City of Henderson, NC, James D. O'Geary, Mayor Letter & Council Resolution	
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of Nicholas St. prior to its intersection with J. P. Taylor Road and it requests that it be extended from its planned termination point to J. P. Taylor Rd. in order to ensure that the area can and will receive adequate and appropriate public safety services. (See Attachment No. 7 for current HSRP design). 8) From RESOLUTION 10-74 – *EXPRESSES Strong concern for and objection to the fencing off of the railroad right-of-way and exceeding the current use of said right-of-way for the Southeast High Speed Rail project in a manner that would cause serious, negative impacts on the North/South corridor along Williams Street and the businesses that abut said right-of-way, especially within the downtown area.* 9) Any major improvement to a transportation network requires change on the part of those affected. The City Council and I understand this and realize that we must plan well and implement change in a manner that mitigates negative impacts and provides such change in as seamless a manner as possible. This is the spirit in which my comments are made this evening. The City Council and I request that you give full consideration to the requests made this evening regarding our concerns and work with us to improve the rail crossings and local street reconfigurations to accommodate them.	

AG7/31 Town of Youngsville, NC, Public Hearing Comments; Brenda Robbins (former Town Administrator)	
Comment	**Response**
1) We are pleased with the proposed connector route from Fleming Road to the intersection of Hwy 96/US1-A North. However we do feel that if the connector route was from North Cross Street to Hwy 96/US1-A North it would make a tremendous difference in our downtown area. In order for Hwy 96 traffic to get through Town they will have to make a right turn onto East Main Street and then a left onto North Nassau Street/Fleming Road. With Hwy 96 being Main Street we have a tremendous amount of tractor trailer traffic coming through Youngsville. Hwy 96 is a connector route for Interstate 95 to Interstate 85. Gas tankers are loaded in Selma and any that are going north come through Youngsville. We were told that because of the historical district the traffic could not be rerouted on North Cross Street, but that it would have to be detoured on Nassau Street/Fleming Road therefore requiring 2 unnecessary turns. We feel that we would have no other choice but to cul-de-sac South Nassau Street because it cannot withstand the tractor trailer traffic or just the volume of traffic. South Nassau Street is a residential neighborhood with quite a few children, the	In response to comments from individuals and from local officials, the roadwork for Youngsville, NC, that was proposed in the Tier II DEIS has been redesigned. See Chapter 2 of the Tier II FEIS. The new designs utilize Cross Street as a connection to NC 96 (rather than Nassau Street) during the construction of the Main Street bridge over the railroad. Construction of the Highway NC 96 bypass is outside the scope of this Project. However, in order to maintain the flow of traffic during construction of the bridge over the railroad at Main Street, Highway NC 96 will be realigned north of town within the alignment of the Town of Wake Forest's proposed Highway NC 96 bypass, to intersect with an extension of Cross Street. The Richmond to Raleigh Project design will allow the bypass to be completed in the future as planned.

AG7/31 Town of Youngsville, NC, Public Hearing Comments; Brenda Robbins (former Town Administrator)	
Comment	**Response**
homes are close to the street and our water and sewer lines are close to or either in the street. There is a 12" water line on South Nassau Street from East Main Street to East Persimmon Street that serves the Youngsville/Wake Forest Mobile Home Park as well as the Commerce Center South Industrial Park that houses Harborlite and K-Flex. Fleming Road cannot withstand the traffic due to the road condition as well as numerous curves. This road has several subdivisions on it and it is a residential neighborhood as well. We don't think it is fair for the residents of Fleming Road to have to worry about the volume of traffic during construction as well as the possibility of having their property split in half. We understand and appreciate the fact that our NCDOT Rail Division has designed the high speed rail with no at grade crossings, but tractor trailer/vehicle wrecks can be just as deadly. We must take in the fact that there are school buses traveling that road and picking up and letting children off. As far as the rail alignment, we feel the best solution in order to have the least impact on our residents as well as our industrial neighbors would be to go with Section S NC1, NC3 (Map# 51 Sheet 1 of 2). With the economy being in the state that it is in we need all of our industrial companies to be able to continue operating so that they will be in a position to pay their taxes. We feel that the connector route (roadway) should be from N Cross St to 96/US1A N not from Fleming Rd. With Hwy 96 having tremendous amount of traffic we know that Fleming Rd cannot handle it. That road is hilly and curvy. Best suggestion - build 96 by pass.	
2) We were told that the North Cross Street connector was not an option because of our historic district. We do not have a historic district. Several years ago our Youngsville Area Business Association Downtown Revitalization Committee worked on trying to get either a historical district or a historical designation. Neither one happened. The committee did not have the resources to spend to make the designation happen. We don't understand how something that has not been approved can be shown on a map and used as an excuse for something not to happen. During construction of the high speed rail on Main Street, traffic has got to be detoured. The ideal plan would be for our bypass to be built. It has been approved since 1991 (revised in 2003) and has been presented to the DOT Board numerous times. If that is not a possibility then the extension from Fleming Road to Hwy 96/US1-A North would work however we feel very strongly about an extension being built from North Cross Street to Hwy 96/US1-	The request to use Cross Street was accommodated in coordination with the North Carolina State Historic Preservation Office. Although Youngsville does not have a historic district listed in the National Register of Historic Places (NRHP), surveys conducted as part of the Richmond to Raleigh Project's compliance with Section 106 of the National Historic Preservation Act, identified a historic district that is eligible for the NRHP. Both Section 106 and Section 4(f) of the Department of Transportation Act of 1966 provide the same protection to resources eligible for the NRHP as those listed in it.

AG7/31 Town of Youngsville, NC, Public Hearing Comments; Brenda Robbins (former Town Administrator)	
Comment	**Response**
A. This would make traffic flow so much easier from the intersection of East Main Street and North Cross Street because large trucks would be able to keep straight at the stoplight. The plans would have to be changed but we feel that it would work a lot better for everyone.	
3) Also we have asked for and have been told that it would not be a problem to have pedestrian crossings at Persimmon Street as well as Franklin Street. The one for Franklin Street is shown on the maps on the SEHSR website the one for Persimmon Street needs to be added. Not having the Persimmon Street pedestrian crossing would cut off all the foot traffic from the south side of Town including walkers, joggers and school kids. We are losing a vehicle crossing at East Pine Street as well as West Winston Street therefore making the pedestrian crossings a necessity. We need a pedestrian crossing on the Southside of Main St. There is a lot of traffic on that side of Town needing access to Youngsville Elementary School and a convenience store.	A pedestrian crossing could not be accommodated at Persimmon Street because the properties on the north side of the street (on the east side of the railroad tracks) are part of the eligible Youngsville Historic District (see above). A pedestrian crossing at Pine Street has been added to the Project designs to provide the requested connectivity.
4) North of our corporate limits (but within our ETJ) at Bert Winston and Northbrook Dr. we would encourage you to use Section S NC1, NC3 (map 51 sheet 1 of 2) instead of NC2. NC1 and NC3 would disturb a lot less property owners, industrial and residential.	Alternative NC1 is the preferred alternative in Section S.

AG8/9/45/49 Town of Wake Forest, NC, Vivian A. Jones, Mayor; and Ann Ayers Comments and Email	
Comment	**Response**
1) As stated in a Resolution signed on the July 21, 2009, the Board of Commissioners of Wake Forest fully support and desire the development of higher speed rail service along the Federally-Designated Southeast High Speed Rail Corridor network and supports the undertaking of planning, land acquisition and construction required to bring about implementation of these service improvements.	Comment noted.
2) While we support the overall goals of the SEHSR project, we are deeply concerned about the unintended impacts this important project could have on existing at-grade crossings, public safety access, and the built environment (business and residential property).	Comment noted. The Richmond to Raleigh Project has continued dialogue with the Town of Wake Forest to discuss these concerns and methods to minimize impacts.
3) Upon review of the three alternatives under consideration for providing High-Speed Rail service through Wake Forest's jurisdiction, we offer the following recommendations:	Elm Avenue- In response to these comments on the Tier II DEIS as well as comments from the public, a new rail underpass was designed for Elm Avenue. There are numerous design constraints in this

AG8/9/45/49 Town of Wake Forest, NC, Vivian A. Jones, Mayor; and Ann Ayers Comments and Email	
Comment	**Response**
a. Provide additional grade-separated crossings at Elm Avenue, Northside Loop, and Height Lane/Unicon Drive. i. Please consider at grade crossing at Elm Street in Wake Forest. The federal rail administration, I understand, has established guidelines for at grade crossings on high speed rail lines. The crossing at Elm St is a major entrance to our downtown. We need either an at grade crossing or a bridge. DO NOT CLOSE THIS CROSSING, PLEASE! Wake Forest supports this project with several crossing closures. However, the Elm Avenue crossing is not one of those. The interconnected street grid predates most of the buildings in the historic district. Wake Forest wants an at grade crossing with a folder quad or similar gate system to prevent pedestrians, biking and other drivers from crossing when a train is present. Keep Elm Ave open.	location including the terrain, the Wake Forest Historic District, dense development, and driveway encroachment on the rail ROW. Coordination with the Town and with the North Carolina State Historic Preservation Office (NC-HPO) occurred as the new bridge design was developed. The public was provided an opportunity to view and comment on the underpass at a public update meeting (PUM) on May 15, 2012. Strong opposition to the underpass was voiced at the PUM, particularly from the businesses and residences impacted by the new design. A meeting with the Town and with a representative from the North Carolina Historic Preservation Office was held on Monday, June 18, 2012, to discuss the responses, and the Town stated that the impacts of a grade separation at this location were too severe. At the meeting it was decided that a minimal footprint pedestrian bridge (i.e. steps but not ramps) over the railroad would be a better fit at this location. The pedestrian bridge would minimize impacts to adjacent businesses, yet it would still allow students from Wake Forest Elementary School to cross the tracks. Northside Loop- The mapping for the Richmond to Raleigh Project includes a label noting the location of the planned road. Construction of a grade separation for this planned road is outside the scope of the Project; however, the Richmond to Raleigh Project does not preclude the Town from building the road in the future. Height Lane/Unicon Drive- There is no existing connection between these two roads, and providing a new connection is outside the scope of this Project.
b. Support the proposed grade-separated crossings at Cedar Avenue (pedestrian only), Dunn Avenue, Ligon Mill Road and Rogers Road;	Comment noted.
c. Please consider modifying the alignment at Ligon Mill Road to preserve historic property. Specifically, David Cooke property (9737 Ligon Mill Road), preferred alignment drawings have been provided to N C Rail Division. i. I hope that you can work with David and Pinky Cooke to provide for the needs of the road, rail and preservation of an important historic home site. If it is possible to construct a temporary road to accommodate traffic while placing the crossing into a location that does not impact the historic fabric of the home place, the property owners have indicated a willingness to work with SEHSR. Mayor Jones and I recall discussions from previous SEHSR meetings where the location of the Ligon Mill Road bridge came up. It is our recollection that the bridge shift has been proposed to allow traffic to continue to use the existing	The Project Team is aware of the concerns about impacts to the Hartsfield House at 9737 Ligon Mill Road in Wake Forest, NC, as well as questions about whether it was incorrectly assessed as not being eligible for the National Register of Historic Places (NRHP). Both the property owners and Capital Area Preservation have stated they will provide additional materials to the North Carolina State Historic Preservation Office (NC-HPO) and NCDOT in support of the property's eligibility. NC-HPO and NCDOT have reviewed the original Section 106 eligibility survey for the Hartsfield House and do not recommend altering its NRHP eligibility determination based on the information it contains. Additional materials have not been received at press; once received, NC-HPO and NCDOT will review it and reevaluate the eligibility. It should be noted that a Certificate of Appropriateness from the Wake Forest Historic Preservation Commission will be required to address impacts to the property under North Carolina statutes based on its designation as a local landmark.

AG8/9/45/49 Town of Wake Forest, NC, Vivian A. Jones, Mayor; and Ann Ayers Comments and Email	
Comment	**Response**
Ligon Mill Road while the bridge is being constructed. However, doing this shifts the new Ligon Mill Road onto property in an area that is entwined with the historic character of the Hartsfield House in Wake Forest, near old Forestville. The Hartsfield House, a two story Federal-style building, was built in ca. 1803 as dated on one of the double-shouldered chimneys. (The Historical Architecture of Wake County North Carolina by Kelly A. Lally, pg. 249 [WA1487] S.R. 2044). In the path of the new alignment, there are three old white oaks remaining from a grove (a fourth was lost in Hurricane Fran) and a garden, originally planted by the Hartsfield family, likely over 125 years ago, where daffodils and hyacinth still come up in the spring. The current owners, Pinky and David Cooke provided the attached pictures. For scale, Mrs. Cooke is standing in front of one of the trees in the last photo. I hope that you will contact David and Pinky Cooke at your earliest convenience to explore temporary solutions that result in a more satisfactory alternative.	Alternative design concepts, both provided by the Cookes and developed internally by the Project design team, have attempted to minimize impacts to the property, in particular to avoid the white oak trees. However, such designs present safety issues with the curve of Ligon Mill Road and/or sight distance in the vicinity of the proposed bridge over the railroad tracks. Tire tracks along Ligon Mill Road near the property provide evidence of the existing sharp curve along Ligon Mill Road. It should be noted that the current designs are based on preliminary designs that are intended to be very conservative (showing the greatest possible impacts). As detailed surveys are completed during the final design stage of the Project, it may be possible to further refine and reduce the estimated impacts to the Hartsfield House property.
d. Support the realignment of East Holding Avenue; and	Comment noted.
e. Support the Southeast High Speed Rail Trail Project by using the Smith Creek Corridor as the preferred route through Wake Forest, east side of the rail.	Attempts will be made to accommodate this request during development of the Greenway Corridor Plan. However, it should be noted that design constraints (e.g., required crossings of the existing rail corridor, property impacts, etc.) may effect which side of the rail corridor is recommended for the greenway.
f. Provide pedestrian accommodations at all grade-separated crossings.	All of the new bridges will have sufficient width so as not to create a hazard for pedestrian movement. In locations where existing pedestrian accommodations (e.g., sidewalks) currently exist, these accommodations will be provided on the bridges/underpasses. At other locations, pedestrian accommodations on the bridges/underpasses will be evaluated during final design based on the current NCDOT and VDOT pedestrian policies. In general, these policies consider the provision of pedestrian accommodations in more populous locations where pedestrian activity currently exists.
4) Buffer vibration.	Vibration mitigation will be provided in accordance with the guidelines set forth in the FRA's *High Speed Ground Transportation Noise and Vibration Impact Assessment* manual (USDOT, 2012).
5) Incorporate art in stations. This is a multigenerational project and should be a source of great pride and not just utilitarian. Therefore, incorporate public art into structure design and construct the high speed rail trail concurrently where possible as is the case in Wake Forest.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations or station amenities because the development of stations is a unique undertaking at an individual location. Recommendations regarding station architecture or design should be provided to the governments at the individual station locations developing the stations.

AG8/9/45/49 Town of Wake Forest, NC, Vivian A. Jones, Mayor; and Ann Ayers Comments and Email	
Comment	**Response**
6) Fund rail trail concurrently.	The concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Project DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for HSR projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project, the process of developing the environmental documentation for greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This document is currently under development, with completion anticipated at the time of the ROD for the SEHSR Corridor. The Project website will provide additional details on this separate plan and opportunities for its public review and comment.

AG2 Town of Wake Forest, NC, Planning Services, Ann M. Ayers	
Comment	**Response**
1) I hope that you can work with David and Pinky Cooke to provide for the needs of the road, rail and preservation of an important historic home site. If it is possible to construct a temporary road to accommodate traffic while placing the crossing into a location that does not impact the historic fabric of the home place, the property owners have indicated a willingness to work with SEHSR. The Hartsfield House, a two story Federal-style building, was built in ca. 1803 as dated on one of the double-shouldered chimneys. (The Historical Architecture of Wake County North Carolina by Kelly A. Lally, pg. 249 [WA1487] S.R. 2044). In the path of the new alignment, there are three old white oaks remaining from a grove (a fourth was lost in Hurricane Fran) and a garden, originally planted by the Hartsfield family, likely over 125 years ago, where daffodils and hyacinth still come up in the spring. The current owners, Pinky and David Cooke provided the attached pictures. For scale, Mrs. Cooke is standing in front of one of the trees in the last photo. I hope that you will contact David and Pinky Cooke at your earliest convenience to explore temporary solutions that result in a more satisfactory alternative.	The Project Team is aware of the concerns about impacts to the Hartsfield House at 9737 Ligon Mill Road in Wake Forest, NC, as well as questions about whether it was incorrectly assessed as not being eligible for the National Register of Historic Places (NRHP). Both the property owners and Capital Area Preservation have stated they will provide additional materials to the North Carolina State Historic Preservation Office (NC-HPO) and NCDOT in support of the property's eligibility. NC-HPO and NCDOT have reviewed the original Section 106 eligibility survey for the Hartsfield House and do not recommend altering its NRHP eligibility determination based on the information it contains. Additional materials have not been received at press; once received, NC-HPO and NCDOT will review it and reevaluate the eligibility. It should be noted that a Certificate of Appropriateness from the Wake Forest Historic Preservation Commission will be required to address impacts to the property under North Carolina statutes based on its designation as a local landmark. Alternative design concepts, both provided by the Cookes and developed internally by the Project design team, have attempted to minimize impacts to the property, in particular to avoid the white oak trees. However, such designs present safety issues with the curve of Ligon Mill Road and/or sight distance in the vicinity of the proposed bridge over the railroad tracks. Tire tracks along Ligon Mill Road near the property provide evidence of the existing sharp curve along Ligon Mill Road. It should be noted that the current designs are based on preliminary designs that are intended to be very conservative (showing the greatest possible impacts). As detailed surveys are completed during the final design stage of the Project, it may be possible to further refine and reduce the estimated impacts to the Hartsfield House property.

AG15 Town of Kittrell, NC, Jack Ball, Town Councilor,	
Comment	**Response**
1) We voted on August 2nd a new version of the Rail Design. We filled out a form on that day and was supposed to be submitted to Kerr-Tar by August 16: The Town of Kittrell would like to make sure that proposed plan Y220RJ is being used for the future planning of the High Speed Rail System. Please make sure that proposed plan Y220RK is NOT USED.	As requested by the Town of Kittrell, the road designs shown in the Tier II FEIS reflect the change from Y220RK to Y220RJ. To see the design change, refer to the Map Book Appendix for the Tier II FEIS.

AG20 Town of McKenney, VA, Charles T. Mansfield, Mayor	
Comment	**Response**
Some of the concerns to the Town of McKenney include the following: 1) Well No.1. This is the primary source of water for the town. It was drilled in 1939 on railroad property and had been considered an Artesian well. We request the proposed route of the high speed rail be kept as far as possible from that well to insure its continued productivity. Access Road to Well and Sewage Treatment Facility. We recommend the proposed access road to Well No 1 and the Sewage Treatment Facility follow Community Street then along the railroad behind Sunnyside Elementary School. That should have the least amount of impact on the historically designated property at the Zehmer farm.	The railroad alignment has been redesigned to include a slight eastward shift away from the NRHP boundary for the Zehmer Farm/Honeymoon Hill Farm historic resource (the boundary listed in the NRHP in 2009 encompasses an area much larger than the area determined to be eligible for the NRHP as part of the Richmond to Raleigh Project surveys in 2005). This shift also takes the alignment further away from the Town of McKenney's artesian well. The alignment for the public access road to the well and sewage treatment facility has also been redesigned. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
2) Effect of Vibration. We are concerned about the negative effects of vibration on the infrastructure of the water and sewer system.	Refer to Chapter 4 of the Tier II FEIS for information regarding analysis of vibration impacts along the alignment of the preferred alternative.
3) Relocation of Sewer Lines. There is a major sewer line which crosses the proposed railroad route at St. Route 40. It is likely the sewer lines will have to be relocated to be accessible after the construction of the proposed bridge. Likewise, a sewage pumping station will be required to move the sewage either over the tracks on the proposed bridge or under the railroad. The operation of another sewage pumping station would place an additional burden upon the town. Relocation of Water Lines. In a similar manner, the several water lines which presently pass below the railroad right-of-way will have to be relocated, especially in the area of the Rt. 40 bridge.	Comments noted. Assessment of impacts and relocation plans for sewer and water lines, as well as all other utilities, will be considered during the final design stage of the Project.
4) Pedestrian Traffic on Route 40 Bridge. A significant amount of foot traffic presently uses St. Route 40. We ask that sidewalks be included on the proposed bridge to accommodate pedestrians.	The Project bridge design for this location provides sidewalks to replace the existing sidewalks along Doyle Boulevard/VA Route 40.
5) Proposed station or siding. We request the plans include a siding or station in McKenney to accommodate future industrial development.	Project designs include a rail passing siding that ties into the alignment of the main rail line just north of Doyle Boulevard/VA Route 40.
6) Increased traffic on Rives Avenue. It is likely traffic will increase on Rives Avenue during construction and afterwards. That is a narrow road with poor drainage. We recommend that road be improved by widening and adding curbs and gutters.	Rives Avenue is planned to be used as part of the proposed temporary detour during construction of the Doyle Avenue/Route 40 bridge. Prior to construction an analysis will be undertaken to determine the level of improvements necessary to safely accommodate temporary detour traffic. The improvements will be made according to VDOT standards of practice.

AG20 Town of McKenney, VA, Charles T. Mansfield, Mayor	
Comment	**Response**
7) Commercial Access to Railroad Avenue. Under the present proposal, Railroad Avenue will become a dead end where it presently intersects with St. Rt. 40. The hardware store and other commercial enterprises require access to tractor trailer deliveries. We ask that that road be improved to allow continued access to these vehicles.	The Project designs accommodate rear delivery access along Railroad Street for tractor trailers with a 50-foot wheel base (WB50) through a backing movement. Other alternatives for this location were evaluated but found not practicable due to the degree of impacts to the businesses on 1st Street that the access is intended to serve.
8) We hope these concerns can be addressed to prevent additional expense to the town citizens.	Chapter 1 of the Tier II FEIS contains an expanded discussion of funding needed to develop and operate the Richmond to Raleigh Project. At this time, it is anticipated that NCDOT and DRPT will pursue Federal funding, along with state and public-private partnerships, to construct the Project. It is not possible to know if the future use of Federal funds would equate to increased Federal taxes for citizens. It is anticipated, however, that local governments will not be expected to fund project construction. Chapter 1 of the Tier II FEIS contains updated ridership and revenue information which supports prior studies that projects that the Richmond to Raleigh Project will not only be self-supporting, it will generate net revenue annually. And, given the eventual owner of the rail corridor will be responsible for all costs of operating and maintaining the facility, localities and citizens would not be forced with any increased costs. In summary, local governments will not face additional expenses for any aspect of the facility. And, although it will require an upfront Federal investment to be constructed, the Richmond to Raleigh Project will not require tax or other Federal subsidies or increased costs to citizens for annual operations.

AG22 Port of Richmond Commission - John G. Hekman, Chairman	
Comment	**Response**
1) Succinctly stated, the Port objects to the currently-proposed SEHSR design which would apparently eliminate the fixed, at-grade ("rigid"), rail crossing (sometimes referred to as a "diamond") of the CSX "S" line by Norfolk Southern at "Rockets", just south of the James River in South Richmond, between the existing flood wall and Maury Street. While we certainly understand the desirability of simplifying and eliminating lightly-used infrastructure, abandonment of this particular element, absent a more satisfactory alternative than is currently depicted on the SEHSR plans, could serve to seriously compromise, or even preclude, our plans for enhancing rail access to the Port, as well as to the rail-served industrial area along the City of Richmond's Deepwater Terminal Railroad. Alternatives which require permissive and non-competitive "switching" on or via CSX rail by NS are not viable business solutions.	The FEIS designs have been revised to show that the at-grade "Rockets" diamond will be retained under the Richmond to Raleigh Project.
2) As to our second objective, we wish to advise that enhanced rail access plans previously discussed with Kevin Page of your staff remain very much a part of the Port's planning program. But for funding issues which arose at the Port over the past two years, we would have more actively pursued preliminary design of the Port's proposed direct rail connection with Norfolk Southern, which connection currently depends upon our ability to reach and utilize the line of NS railroad mentioned in the preceding paragraph. Mr. Page can explain prior consideration of this as a potential Rail Enhancement Fund project.	The Virginia DRPT notes that enhanced rail access plans remain part of the Port's planning program. Furthermore, DRPT is committed to continued coordination with the Port of Richmond in long-range planning efforts.
3) One of the options currently being considered by the Port could involve some form of joint and collaborative operational arrangement with the Virginia Port Authority. If such were to materialize, this could make it even more feasible to revive and progress the NS connection project at an earlier date than had otherwise been thought likely. A direct NS connection would be of great strategic transportation value to the Port, and potentially to VPA. If constructed, it would provide the only clear route for movement of double-stack rail containers to and from the Port area. We believe that the Port of Richmond has the potential to function as yet another Virginia "inland port", providing multi-modal (water, highway and rail) cargo services in the central Virginia region.	Comment noted.
4) In addition, and at your convenience, we would appreciate having the opportunity to further acquaint you with the unique attributes of our Richmond intermodal complex.	As noted above, DRPT is committed to continued coordination with the Port of Richmond in long-range planning efforts.

AG25 Triangle Transit Authority, David King (Jonathan Parker Point of Contact)	
Comment	**Response**
1) As you know, Triangle Transit prepared an Environmental Impact Statement for a Regional Rail System for the Triangle and the Federal Transit Administration issued the Record of Decision in 2003. The DEIS included an alternative alignment developed by NCDOT and the FEIS incorporated NCDOT's requirements for future rail expansion (SEHSR) throughout the entire project corridor. The environmental clearance for this corridor included a segment from downtown Raleigh to Durant Road in Raleigh, coincident with the Raleigh to Richmond SEHSR corridor of interest. While Triangle Transit is currently evaluating potential options for future rail service with our regional partners through a transitional and alternatives analysis process, we request that the SEHSR project be designed in such a way that the implementation of regional rail service as originally envisioned on separate tracks within the CSX S-Line railroad corridor is not precluded. This includes designing new roadway and rail bridges to allow lateral separation for future tracks to be constructed adjacent to the proposed SEHSR/freight tracks. Triangle Transit owns a corridor parallel to the east side of the CSX S-Line railroad corridor from the Boylan Wye in Downtown Raleigh to Old Wake Forest Road in North Raleigh which was purchased as a part of the previously proposed Regional Rail project. Although plans are currently being reconsidered for this corridor, potential impacts to the use of this right-of-way should be avoided to allow for future transit use.	The Richmond to Raleigh Project and the NCDOT Rail Division have coordinated with and will continue to work collaboratively with Triangle Transit (TT) on the plans for development of a Regional Rail System for the Triangle area. In keeping with this coordination, the Richmond to Raleigh Project has taken the TT plans into consideration, and the Project designs do not preclude implementation of TT as originally envisioned on separate tracks within the CSX S-line corridor. New roadway and rail bridges allow lateral separation for future tracks adjacent to the proposed SEHSR Corridor tracks.
2) For informational purposes, please show the Triangle Transit-owned right-of-way within the CSX S-Line railroad corridor on future hearing maps and plan sheets. To that end, we also request that cross sections be made available for the portion of the SEHSR project proposed along the S-Line corridor and adjacent to the TTA-owned right of way.	For the sake of simplicity, TT ROW continues to be included in the overall rail ROW symbology on the maps, rather than shown as separate ROW within the CSX S-line corridor. Cross sections for areas along the S-line which are adjacent to TT ROW will be provided during the final design stage of the Project when survey level data is available.
3) The Capital Area Metropolitan Planning Organization has included a recommendation for possible shared-track commuter rail service from Wake Forest to Raleigh in its 2035 Long Range Transportation Plan. More recently, Triangle Transit has been asked to evaluate the suitability of this corridor for future commuter rail service, and would, at the appropriate time, like to begin a conversation with NCDOT Rail Division and CSX about the potential for implementing such a project.	As stated above, the NCDOT Rail Division will continue to coordinate with TT on the plans for development of a Regional Rail System for the Triangle area.
4) Section U - Plan Sheet 55: We request that the approach slopes for the proposed Durant Road Bridge be limited through the use of retaining walls or steeper slopes in order to facilitate access to the proposed Durant Road station which was included in the original regional rail project.	Project designs do not preclude implementation of TT designs. All road-over-rail bridge concepts in the Project (including the proposed Durant Road bridge) will allow TT to modify the end bent slope to fit TT rail underneath the end span of the Richmond to Raleigh Project bridge. Rail-over-road bridges in the Project also do not preclude construction of parallel, separate TT rail over road bridges.

AG25 Triangle Transit Authority, David King (Jonathan Parker Point of Contact)	
Comment	**Response**
5) Section V - Plan Sheet 57, comment 1: Please consider constructing a new roadway grade separation connecting Pacific Drive to Atlantic Avenue, east of the railroad corridor. The City of Raleigh has already constructed a segment of Pacific Drive between the east side of the rail corridor and Atlantic Avenue. Rather than expending unrecoverable funds on detour routes for construction of the grade separations at Millbrook and New Hope Church Roads, this would provide a permanent safer crossing for vehicles and pedestrians during the construction of both projects. In addition to facilitating construction of the grade separations the Pacific Avenue grade crossing would greatly enhance connectivity in an area that may see an increase in transit oriented development (TOD) and pedestrian activity with the introduction of future regional rail service in the corridor. Please see Figure 1.	The Richmond to Raleigh Project does not necessitate inclusion of a bridge for a proposed connection to Pacific Drive. However, as part of the collaborative planning process, this TT request has been discussed with the City of Raleigh. The Richmond to Raleigh Project plans have been amended such that they show a general location on the maps with the notation "future bridge constructed by others." The construction of a City of Raleigh-funded bridge in this location can be coordinated with the construction plans for the Richmond to Raleigh Project.
6) Section V - Plan Sheet 57, comment 2: Please consider connecting the proposed realignment of Saint Alban's Drive to connect directly to Craftsman Drive at New Hope Church Road. This would consolidate intersections along New Hope Road and move the proposed realignment of Saint Albans Drive further away from the railroad right-of-way, allowing for improved access to the proposed New Hope Church Road transit station, and potential for transit-oriented development adjacent to the station site. Please see Figure 2.	The changes brought by the Richmond to Raleigh Project do not warrant a realignment of Saint Albans to connect with Craftsman Drive. Note, however, that the Project designs for this location do contain revisions to what was shown in the Tier II DEIS, and have been developed in coordination with the City of Raleigh. The designs can be seen in the Map Book Appendix of the Tier II FEIS.
7) Section V - Plan Sheet 57, comment 3: Please consider ways in which the Highwoods Blvd. and Wolfpack Lane street connection could be retained. As you may be aware, a transit station was identified in the Final EIS for the Regional Rail Project. Should this street connection be permanently severed through a crossing closure, a station in this location would be rendered infeasible due to a lack of a street connection to Atlantic Avenue as well as the Highwoods office complex. We would like to identify ways in which this street connection could be retained, including looking at additional grade separation options in the vicinity.	In response to comments on the Tier II DEIS from the public and from the City of Raleigh, two alternative designs were developed for the Wolfpack Lane crossing, one of which included a vehicular bridge (accommodating pedestrians and bicycles) over the railroad. These alternatives were presented for comment at a public update meeting on May 15, 2012. The public voiced strong support for the addition of a bridge over the railroad at Wolfpack Lane (presented at the meeting as Alternative 57A) and those designs have been added to the Project designs for the Tier II FEIS. The designs can be seen in the Map Book Appendix of the Tier II FEIS.

AG25 Triangle Transit Authority, David King (Jonathan Parker Point of Contact)	
Comment	**Response**
8) Section V - Plan Sheet 58, comment 1: Regarding proposed street crossing closures at Harrington and West Streets (NC 1 & 2) or Jones Street (NC 3), we would like clarification of the policy that dictates 100% grade separation of the SEHSR Raleigh to Richmond corridor. The northwest area of downtown Raleigh is perhaps unlike any other on the Tier II EIS, in terms of its strategic importance for long term economic development and as a viable pedestrian-friendly area, including a potential transit station as proposed in the Regional Rail Project. If these crossing closures must be maintained, mitigation measures should include pedestrian/bicycle connections that maintain the grid street urban fabric of the area.	Between Richmond, VA, and Raleigh, NC, the Richmond to Raleigh Project has been designed to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. The recommended preferred alternative in Section V is Alternative NC5, which was developed in response to comments received from the public and local officials. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. With the NC5 alternative, the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for the crossings at Hargett Street, which would be closed, and Jones Street, which would be closed to vehicular traffic and a pedestrian bridge would be constructed.
9) Section V - Plan Sheet 58, comment 2: Please explain the proposed right-of-way impacts shown at the Dillon Supply parcels in downtown Raleigh in the area north and south of Hargett Street in downtown Raleigh.	In this location, the proposed rail ROW is expanded on both sides of the existing rail ROW to accommodate a station platform. As shown in the maps in the Map Book Appendix of the Tier II FEIS, the ROW lines encompass a portion of the existing structures on the referenced parcels. Property impacts are determined during final design when survey level data is available.
10) Section V - Plan Sheet 58, comment 3: Triangle Transit strongly supports the proposed elimination and realignment/consolidation of the Norfolk Southern (NS) tracks to Fuquay-Varina within the Boylan Wye area from the western to the eastern side of the junction area. We are now advancing corridor studies that include potential light rail transit alignment options in the Boylan Wye area. Among these alternatives is an alignment proposal coincident with the NS tracks on the western side of the Wye. In addition to being a critical component of the SEHSR project, the proposed relocation of these freight tracks has tremendous benefits to the advancement of a future transit project. Chief among these is the removal of a potential fixed guideway transit conflict at the Boylan Street Bridge and the NS tracks. We will continue to support this important relocation for both high speed rail and future fixed guideway transit purposes, and appreciate the chance to work together in this effort.	As noted above, the recommended preferred alternative in Section V is Alternative NC5. NC5 does not change the route NS trains would take from the Glenwood Yard to Fuquay-Varina (i.e., the track horizontal alignment is essentially the same between Morgan Street and Boylan Avenue).
11) Section V - Plan Sheet 58, comment 4: Due the geometric and operational advantages presented by locating the proposed SEHSR tracks along the NS railroad corridor west of Capital Boulevard and away from the right-of-way owned by Triangle Transit within the constrained CSX corridor, Triangle Transit supports the selection of the NC 3 alternative. While the NC 3 option has technical advantages over the others for a future regional rail operation in this vicinity, Triangle Transit will work collaboratively with NCDOT Rail Division, the City of Raleigh and our other regional partners to ensure that we can implement a regional rail solution north of downtown Raleigh regardless of the ultimate alignment selection for the SEHSR project.	Alternative NC5 allows lateral separation for future TT tracks adjacent to the proposed SEHSR Corridor tracks.

AG28/29 City of Raleigh, NC, Comments and Recommendations (Pertinent comments from – City Council Recommendations, Passenger Rail Task Force Resolution, Passenger Rail Task Force Letter of Elaboration and Detail, Passenger Rail Task Force Minority Recommendations & Complementary Statements, and Transportation Services Division Technical Comments.)	
Comment	**Response**
A. The Raleigh City Council held a public hearing on August 31, 2010 for the purpose of seeking public comment regarding the project. After deliberating on the project and its potential impacts at our meeting on September 7, 2010, the City Council adopted the following recommendations for your consideration: 1) Study the hybrid alternatives to NC1/NC2 and NC3 south of Wake Forest Road that have been independently developed, and identify their probable impacts and costs. If alternative designs deemed viable and feasible, NCDOT should seek additional public input from the community. The Council requests the opportunity to hold a public hearing and comment on that option. 2) Consider the recommendations developed by City staff and by the Raleigh Passenger Rail Task Force regarding the project, copies of which are attached. (Pertinent elements are included as follows): …….. a. THEREFORE, BE IT RESOLVED, that the Passenger Rail Task Force recommends that the alternate alignment called NC3 in the SEHSR Tier II Draft EIS which parallels the NS Railway between Edgeton (Wake Forest Road) and Jones Street on the west side of Capital Boulevard is the preferred track alignment because: i. NC3, unlike NC1/NC2, leaves open the at-grade highway-rail crossings at West Street and Harrington Street, which is consistent with the 2030 Comp Plan's requirements for connectivity and is essential for north-south connectivity along West and Harrington in downtown Raleigh; ii. NC3, unlike NC1/NC2, does not call for a 1300' elevated highway-like bridge high above Jones Street, the ends of which would connect only Boylan Avenue and Dawson Streets with no access to Glenwood, West Street, or Harrington; would cut Harrington; would be a considerable eyesore looming over Glenwood South; and which bridge would result in negative impacts upon the businesses on both sides of Jones Street around the railroad crossing; iii. NC3 allows a center platform at Union Depot to serve HSR trains, which will result in safer train access and more efficient connections between trains, whereas NC1/NC2 would require two less safe and far less convenient side platforms;	The recommended preferred alternative through Raleigh, NC (Section V) is Alternative NC5, which was developed in response to these comments as well as comments received from the public. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. With the NC5 alternative, the existing road network in the Five Points, Roanoke Park, Fairview Road, and the Norfolk Southern rail yard areas will remain unchanged and the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for the crossing at Hargett Street, which would be closed, and the crossing at Jones Street, which would be closed to vehicular traffic, but where pedestrian access would be maintained through construction of a pedestrian bridge over the railroad. Alternative NC5 would accommodate construction of a center platform in the vicinity of the two block area between Hillsborough Street and Hargett Street, which is consistent with the City's current plans for a new multi-modal Union Station in this vicinity. With regard to potential conflicts with freight operations, Alternative NC5 does not impede freight operations. CSX freight operations are accommodated with the track alignment, and the route NS trains would take from the Glenwood Yard south to Fuquay-Varina remains unchanged from the current configuration (i.e., the track horizontal alignment is essentially the same between Morgan Street and Boylan Avenue).

AG28/29 City of Raleigh, NC, Comments and Recommendations (Pertinent comments from – City Council Recommendations, Passenger Rail Task Force Resolution, Passenger Rail Task Force Letter of Elaboration and Detail, Passenger Rail Task Force Minority Recommendations & Complementary Statements, and Transportation Services Division Technical Comments.)	
Comment	**Response**
iv. NC3 is cited in the Draft EIS as a positive impact for constructability and operation, whereas NC1/NC2 are cited as a negative impact for constructability and operation due to freight operations conflicts at the at-grade rail crossing (called a diamond in rail parlance) at Edgeton (NC3 avoids crossing the diamond—and thus avoids the freight operations conflict—by veering southwest to parallel the NS tracks on the west side of Capital Boulevard); v. NC3 is cited in the Draft EIS as a positive impact for constructability and operation, whereas NC1/NC2 are cited as a negative impact for constructability and operation due to freight operations conflicts due to passenger trains having to move through a crossover track from the east track to the west track between Jones Street and the Boylan wye (NC3 avoids the freight operations conflict because the HSR tracks are already on the west side of parallel tracks between Jones Street and the Boylan wye where they turn due west through NCSU); b. BE IT FURTHER RESOLVED, that the Passenger Rail Task Force recommends the NC3 alignment be selected for SEHSR conditioned upon: i. Wherever a closure of an existing street is proposed, an acceptable replacement is provided; (From the PRTF Summary of Decision and Recommendation document): • In other words, we recommend 1:1 connectivity exchanges for closing Fairview and Jones, for example, perhaps bridging Washington Street as a swap for closing Fairview, and perhaps bridging Edenton Street in exchange for closing Jones Street. • We recommend that these mitigation exchanges be deemed acceptable by the City of Raleigh, not just to the SEHSR project team and FRA. • If, however, the 1:1 replacement is not feasible at Jones, then we recommend pedestrian access in the area as a minimum.	
ii. Wherever designs for new public infrastructure improvements are established, they are conducted according to the highest standard of design excellence; (From the PRTF Summary of Decision and Recommendation document): • The PRTF contends that any barriers at rail lines, such as those closing crossings at Fairview and Jones, should be designed to be visually pleasant and transparent, so as to see the trains as they pass by. We recommend against any barriers that could serve to isolate the community. Similarly, the PRTF asks that designs for a Jones Street pedestrian bridge should be pleasing, attractive, and ADA (Americans with Disabilities Act) compliant.	Fencing locations and types, as well as proposed landscaping, will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities. The Section 106 MOA for the Project (see Section 4.12 of the Tier II FEIS) will address mitigation of visual impacts on historic resources as appropriate, including the proposed pedestrian bridge at Jones Street.

AG28/29 City of Raleigh, NC, Comments and Recommendations (Pertinent comments from – City Council Recommendations, Passenger Rail Task Force Resolution, Passenger Rail Task Force Letter of Elaboration and Detail, Passenger Rail Task Force Minority Recommendations & Complementary Statements, and Transportation Services Division Technical Comments.)	
Comment	**Response**
• The PRTF believes that large bridges and long walls foster negative patterns on livability and commerce. All designs for such features should preserve and highlight the area's best qualities as public art and use as guidelines the GSA Design Excellence Program.	
iii. Wherever noise and vibration impacts are felt, there are appropriate abatements and mitigations installed;	Noise and vibration mitigation will be addressed during final design using the FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (October 2005) procedures.
iv. Wherever adopted plans and policies are found to be inconsistent, that those inaccuracies and inconsistencies are corrected; (From the PRTF Summary of Decision and Recommendation document): a. Staff informed the PRTF that none of the three alternatives (NC1, NC2, or NC3) is consistent with the current Transportation Plan and 2030 Comp Plan. Jones Street, for instance, is designated as a Green Street in the Plan. The old Comp Plan has not changed in terms of the grid system, yet the DEIS offers no mitigation for street closures (it left out consideration for local streets). b. Street closures without mitigation would be in conflict with the Plan (Jones, West, Harrington, Fairview). c. The Bike Plan is in conflict with all three options (all relatively equal in terms of conflict). However, the Bike Plan did not exist before 2009 and could not have been considered in the DEIS. d. Technically there are no conflicts with the Thoroughfare Plan or the Transit Plan. e. In some ways the SEHSR project Team set up this conflict by ignoring the city's need for connectivity. However, our test is one of consistency, not absolute compatibility, with the Plan. This implies judging the DEIS against the city's ability to flex its Comp Plan to be consistent with overall future goals and objectives.	The Project Team has coordinated extensively with the City to ensure consistency with local plans while meeting the Purpose and Need for the Project. The preferred alternative (NC5) was developed to address several of these connectivity issues, as well as to respond to the significant input from the Raleigh public. With regard to the specific items listed here: a. A pedestrian bridge has been provided at Jones Street. b. Fairview Road, Harrington Street, and West Street would not be closed with NC5. c. Several conflicts with the Raleigh Bicycle Plan have been mitigated subsequent to publication of the Tier II DEIS. The preferred alternative would provide a pedestrian/bicycle crossing at Jones Street; would not close Fairview Street; and would grade separate Wolfpack Lane. In addition, a meeting between the Richmond to Raleigh Project and City of Raleigh Transportation staff was held on February 22, 2011, to discuss bike lanes and other accommodations for pedestrians and cyclists. More details on the design changes resulting from that meeting are described in response C below. d. The closure of Hargett Street was determined in coordination with the City. A grade separation was determined to have too great impacts to justify the benefits of maintaining the connection, especially given other east-west travel options.
v. Wherever historic resources are impacted, mitigations are provided to ensure the integrity of that resource;	A Section 106 MOA will be developed to outline mitigation to address adverse effects to historic resources listed in or eligible for the National Register of Historic Places.
vi. Wherever future planning and development options are impacted, that adjustments are made to the project to ensure that those are not lost;	The Richmond to Raleigh Project has coordinated with the City of Raleigh to identify and address any such issues. The City has not made the Project Team aware of any such issues that exist with the NC5 alternative.
vii. Where private property is impacted, that best available proposals are provided to ensure that the integrity of existing property that is to remain is maintained, and where it is relocated, that the integrity of those businesses and proximity to their	The project will follow standard NCDOT procedures for ROW acquisition, which were discussed in Section 4.11.6 of the Tier II DEIS and in Section 4.11.6 of the Tier II FEIS. Further questions should be addressed to the NCDOT Right-of-Way and Relocation Agents at the following

AG28/29 City of Raleigh, NC, Comments and Recommendations (Pertinent comments from – City Council Recommendations, Passenger Rail Task Force Resolution, Passenger Rail Task Force Letter of Elaboration and Detail, Passenger Rail Task Force Minority Recommendations & Complementary Statements, and Transportation Services Division Technical Comments.)	
Comment	**Response**
clients and customers is preserved. The PRTF will submit an accompanying letter with detail and elaboration on the points in this resolution.	(http://www.ncdot.org/projects/roadbuilt/default.html).
c. PRTF MINORITY RECOMMENDATIONS & COMPLEMENTARY STATEMENTS. i. Gerry Cohen - After reviewing all three options, I selected the NC1 option. I believe strongly in the SEHSR project and its transportation benefits to Raleigh as an intermediate point on the (Boston to NYC to Washington to) Richmond to Charlotte corridor are very high.	Comment noted. As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there will be substantial long term economic benefits from development of the Project.
In my opinion the NC3 option chosen by the majority is beneficial and acceptable, but not my first choice. Here are my points in favor of NC1 over NC3 and NC2: a. The necessity for closing all crossings in the vicinity of the new Union Station intermodal facility has not been shown. The FRA will allow at-grade crossings with sufficient protection and gating, and the running speeds [approximately 45 MPH per NCDOT-Rail] as far north as West and Harrington do not necessitate all crossings being closed, to the detriment of interconnectivity in the Glenwood South area.	The recommended preferred alternative through Raleigh, NC (Section V), is Alternative NC5, which was developed in response to these comments as well as comments received from the public. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. With the NC5 alternative, the existing road network in the Five-Points, Roanoke Park, Fairview Road and the Norfolk Southern rail yard area will remain unchanged and the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area and Glenwood South is preserved except for the crossing at Hargett Street, which would be closed, and the crossing at Jones Street, which would be closed to vehicular traffic, but where pedestrian access would be maintained through construction of a pedestrian bridge over the railroad. The overarching philosophy of the design of the Richmond to Raleigh Project is to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. Chapter 1 of the Tier II FEIS provides a description of reasons for closing at-grade crossings: absolute collision avoidance; elimination of railroad/roadway traffic issues; elimination of possible system failure; elimination of horn noise; elimination of easy trespasser access; improved long term cost of maintenance; allows for future speed increases.
b. With the proposed Triangle Transit rail line already being in the NC1 and NC2 corridor north of Union Station, on balance also adding the SEHSR track(s) on this alignment is less disruptive than disturbing the NS freight operations at its freight yard and the additional relocation of businesses and residences.	Under Alternative NC5, the route NS trains would take from the Glenwood Yard south to Fuquay-Varina remains unchanged from the current configuration (i.e., the track horizontal alignment is essentially the same between Morgan Street and Boylan Avenue).
c. I would, however, under NC1, close either West or Harrington Streets to reduce the number of at-grade crossings. Jones Street should also remain open. It should be noted that FRA guidelines might be best attained by making these two crossings (Jones and Harrington or West) each one-way for motorized vehicles.	Refer to response provided above regarding Alternative NC5 impacts to streets in downtown Raleigh.

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Comment	**Response**
d. I favor NC1 over NC2 as removing the NS connector track through the Boylan Wye and routing this traffic a short distance on the CSX line. This will allow removing a rail diamond with its conflicting rail traffic through the Boylan wye, as well as opening up redevelopment options in the vicinity of the Boylan wye. I do note the same benefits in this area will be obtained with the NC3 alignment.	As stated above, Alternative NC5 does not impede freight operations. CSX freight operations are accommodated with the track alignment, and the route NS trains would take from the Glenwood Yard south to Fuquay remains unchanged from the current configuration (i.e., the track horizontal alignment is essentially the same between Morgan Street and Boylan Avenue).
ii. SAF FAHIM (Complementary Statement to Majority View) a. The options presented by NCDOT to date reflect an approach of "least overall harm" to the environment. Alternatively, there are other engineering and urban options that could consider enhancing the environment; one of them is a trench in which to bury the rails beneath ground level for option NC3. Putting the NC3 rail alignment in a trench will eliminate street closures, reduce potential of noise and vibration, and link Glenwood South to the east side of the town. This will have the added benefit of creating a beautiful gateway to the city.	The concept of trenching through downtown Raleigh was considered, but found not practicable due to an overall increase in impacts.
b. The high speed train brings an additional dimension connecting the city to the Northeast Corridor and offers potential opportunity for creating a powerful economic zone with Virginia.	Comment noted. As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there will be substantial long term economic benefits from development of the Project.
c. Such novel approaches are needed to secure a national and international future for the city. Raleigh aspires to be a city of a national and international stature. Its 2030 Comprehensive Plan establishes this aspiration by providing density and better connectivity to the city fabric in the hope to invigorate urban and economic development. Without a rail trench, the initial rail lines entering the city from the north divided the urban fabric into east and west districts separating the city into urban strips and land fragments. While the 2030 plan called for connectivity and requested the NCDOT for options that correspond with the city planning, the options proposed in the DEIS yielded little to help the city.	As stated above, the concept of trenching through downtown Raleigh was considered, but found not practicable due to overall increase in impacts. The NC5 alternative was developed in coordination with the City and best maintains and/or improves the existing connectivity through the rail corridor.
d. In fact the options proposed once evaluated, yielded negative impact which prompted the task force to consider an amended resolution to help mitigate the impact of the rail. A suggestion that seemed to meet all the criteria was to place the rail lines proposed for alternate NC3 in a trench; however, the task force decided that making such a recommendation was not within scope of the DEIS document.	Comment noted.

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Comment	**Response**
iii. Betsy Kane - I have concerns about the SEHSR project's impacts on Raleigh: a. The Draft Environmental Impact Statement (DEIS) for the SEHSR project is deficient and inaccurate in certain respects. I know a little bit about EISs from working on them at NCDOT and from reviewing many NCDOT and consultant products, as well as formal legal training including coursework specifically on NEPA, the federal law that requires environmental impact documentation. The official materials handed out at the NCDOT-provided SEHSR Public Hearing on Monday night, including an apparent excerpt from the DEIS, show the following: 1. The Purpose and Need statement for the project is vague and ambiguous (pp. 5-6 of the handout). Bullets 2 and 3 (of 4 purpose statements) are so vague as to be almost meaningless and therefore fail to operate as a sound basis for project metrics and decision-making, including, particularly, the purported decision that all at-grade crossings will be closed. The need statements do not support some of the draft conclusions in favor of the project.	The Purpose and Need for the Project was determined for the overall SEHSR Corridor project (from Washington, DC to Charlotte, NC) in the Tier I Draft and FEISs and ROD document approved in October 2002 by the FRA and the Federal Highway Administration (FHWA). A tiered process was selected for the Project because of the geographic scale of the Project and because of the numerous alternative study areas and existing rail rights-of-way. The SEHSR Corridor Tier I EIS defined the Project's Purpose and Need, examined corridor alternatives for the rail project and identified a 6-mile wide preferred corridor centered on existing rail rights-of-way. The concept of tiering is defined in the NEPA regulations issued by the Council on Environmental Quality (CEQ) (see Sections 1502.20 and 1508.38.), and is further explained in FHWA and FTA's joint regulations for implementing NEPA and Section 4(f) (see 23 C.F.R. Part 771 and 23 C.F.R. Part 774). Because the Tier I document established the Purpose and Need of the Project, additional or detailed discussion of the issue was not warranted in the Tier II DEIS. However, to better address the numerous public comments and questions on the Tier II DEIS related to this topic, Chapters 1 of the Tier II FEIS has been amended and expanded to provide additional details of the previously-decided Purpose and Need elements.
For example, bullet 5 discusses air quality and emissions reductions in particular counties along the corridor, which emissions are overwhelmingly the product of local traffic and not of long-distance motor trips. The project with crossing closures as proposed would increase air-quality related emissions by increasing local congestion and travel lengths because of impeded connectivity, while removing long-distance trips but not local ones.	In an urban area such as Raleigh, the existing road network should allow for vehicles to alter their routes so as not to travel a great distance to reach a grade separated crossing of the rail corridor. Although vehicles would have to travel a slightly longer distance to reach those locations, the grade separations would remove the need for vehicles to idle while trains pass. The removal of idling is anticipated to offset emissions associated with additional travel time, especially given the potential number of trains in the corridor in the future (e.g., freight, SEHSR, light rail). The additional distance vehicles will need to travel to the nearest bridge or underpass is typically less than one mile. The anticipated CO emissions associated with the additional distance are likely to be offset by the removal of the vehicle idling that currently occurs while trains pass at-grade crossings. As an example, a vehicle idling for one minute as a train crosses an at-grade crossing would produce approximately 70 grams of CO (based on USEPA's CAL3QHC idle emission factors). Were the same car to travel two miles out of its way to use a grade-separated crossing (one mile in each direction), it would generate approximately 16 grams of CO (based on USEPA's MOBILE factors for vehicles traveling on urban local roads). Although many factors can affect vehicle emissions of CO, the benefit of removing vehicle idling should offset any increase in CO emissions due to additional vehicle miles traveled.

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Comment	**Response**
2. The DEIS is inaccurate in at least the following respects: (1) It states that the project is consistent with adopted bike/ped and other modal plans (p. 10 of the handout). This is incorrect; Chairman Steve Waters of the Bike/Ped Advisory Commission has already pointed out some inconsistencies of proposed road closures with the Raleigh Bike/Ped plan. (2) It states that the project is consistent with the Comp Plan. This is incorrect; some of the inconsistencies are detailed in Ken Bowers' memo "HSR Alternatives and the Comprehensive Plan" dated July 9, 2010, and addressed to the Passenger Rail Task Force.	Chapters 3 and 4 of the Tier II FEIS have been amended to correct and update those sections dealing with consistency of the Project with existing land use and transportation plans in the Project Study Area.
3. The DEIS is deficient in at least the following respects: (1) It states (p. 10) that the project is compatible with highway plans, but contains no mention of city streets plans. As is not uncommon in NCDOT project environmental documents, highway planning appears to have been given paramount or exclusive consideration (p. 9) to the neglect of urban streets and complete streets.	Chapters 3 and 4 of the Tier II FEIS have been amended to correct and update those sections dealing with consistency of the Project with existing land use and transportation plans in the Project Study Areas.
4. (2) The statement of effect on emissions and air quality fails to account for where the overwhelming majority of emissions are produced (local travel and congestion), which will be worsened by closing at-grade crossings and maintaining crossings reducing connectivity to one-mile intervals.	As stated above, the removal of idling while trains pass at-grade crossings is anticipated to offset emissions associated with additional travel time, especially given the potential number of trains in the corridor in the future (e.g., freight, SEHSR, light rail).
5. It has been stated to us on numerous occasions, including in the materials handed out at the SEHSR public hearing, and in the oral presentation by Mr. Ed Lewis at the hearing, that "the project would create a fully grade-separated railroad (no at-grade crossings)." I do not accept this apparent "determination." It is a public decision, first of all. Therefore, the decision must be taken in accordance with public accountability and process of law. However, in contrast to this principle, at present: • It is not clear who, specifically, decided this. • It is not clear by what authority it was decided. • The factors that went into the purported decision have not been conveyed (to my knowledge) in writing. • It was not made due to any mandate or requirement of federal or state law.	Chapter 2 of the Tier II DEIS contains a discussion about the overarching philosophy of design for the Richmond to Raleigh Project to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. Chapter 1 of the Tier II FEIS provides an expanded description of reasons for closing at-grade crossings: absolute collision avoidance; elimination of railroad/roadway traffic issues; elimination of possible system failure; elimination of horn noise; elimination of easy trespasser access; improved long term cost of maintenance; and allowance for future speed increases.

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Comment	**Response**
b. I have read the FRA guidelines for safe crossing of HSR corridors thoroughly, and in nowhere is the closing of at-grade crossings required. Nor does "sealed corridor" mean all at-grade crossings are eliminated. "Sealed corridor" allows for many other safety measures besides closing of crossings (including 4-quadrant gates, one-way pairs, medians, barriers and other measures). By the conspicuous absence of the above elements, it may be surmised that this purported decision is at least in part, a bureaucratic and unaccountable one, to be regarded as inherently suspect because autocratic, and therefore not to be taken as an assumption by anyone concerned, including our Task Force, without a close investigation of its legitimacy. This project is a publicly-funded project and under our system of governance, the decisions that are made around it are to be in accordance with law and accountable to the public in the communities through which it passes. In accordance with law means that the decision is not to be autocratically made by agency personnel. In accordance with law mean that whereas the mandates of state and federal law will be obeyed, those decisions that are not compelled by state and federal law or regulation are flexible, and will be made in consultation with the public and in accordance with its best interests overall. The closing of city streets is a concern of utmost importance to Raleigh and other communities through which the SEHSR will pass. The well-being of businesses and the vibrancy of urban settings depends heavily, even primarily, upon access, as we know from the Fayetteville Street experience.	Please refer to Chapter 1 of the Tier II FEIS for an expanded description of reasons for closing at-grade crossings.
c. The most important factor in walkability is intersection density (street connectivity), more important than population density, job density, distance to stores, distance to a transit stop. Intersection density also has large effects on transit use and the amount of driving (Cervero and Ewing, Travel and the Built Environment, June 2010). It is impossible that we should accept as a baseline project assumption that Raleigh's greatest urban revitalization successes, such as Glenwood South, shall be severed and divided due to road closings which are not necessary, not mandated, and to which safe	As described above, the recommended preferred alternative through Raleigh (Section V) is Alternative NC5, which was developed in response to these comments as well as comments received from the public. Under NC5 the existing road network in the Five-Points, Roanoke Park, Fairview Road and the Norfolk Southern rail yard area will remain unchanged and the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for: the crossing at Hargett Street, which would be closed; and the crossing at Jones Street which would be closed to vehicular traffic, but where pedestrian access across the railroad would be maintained through construction of a pedestrian bridge over the railroad.

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alternatives exist. In Raleigh we've long congratulated ourselves on our escape from the fate of most other large cities in NC, and nationally, to have been divided and sundered by downtown freeways in the 50s-60s-70s, and sometimes the decades beyond (Durham was still fighting one off as of 2008). Whether due to good fortune or foresight, the avoidance of that fate has been a significant factor in the success and health of our downtown core and neighborhoods. It would be unfortunate (and ironic in the dramatic sense) if rail infrastructure improvements were allowed to sunder critical core-city connections decades later. The delivery of this decision that all crossings "will be closed" from "on high" from an agency and in a fashion, as far as I can tell, arbitrary and not accountable to the public, is entirely consistent with the long history of abuses by transportation bureaucracies towards local communities. The very law requiring public input, and incorporating our deliberations as the PRTF, was enacted to prevent these abuses and failures of accountability. This law is NEPA. NEPA's bedrock principle is public accountability of the impact on the built and natural environments on project decisions that involve federal funding.	
d. DOWNTOWN LIVING ALLIANCE: 1. The DLA requests that rather than simply mitigating negative impacts as proposed in the NCDOT options, that tunneling the Norfolk Southern tracks along Glenwood South be considered. This would permit Jones Street to stay open, and allow the city the opportunity to reap substantial economic benefits from the associated redevelopment opportunities that would effectively triple the commercial and residential activity of Glenwood South. The fact that the tunneling of tracks has not been studied to-date as part of the SEHSR project is indeed unfortunate, and the DLA recognizes the benefit of having this option properly considered at this stage in the project, and has therefore prepared the attached addendum.	Note that although the Downtown Alliance is not part of the City government, these comments were included with the City of Raleigh Passenger Rail Task Force comments. The concept of trenching through downtown Raleigh was considered, but found not practicable due to overall increase in impacts.
2. The decisions made on the high speed rail pathways will have long term consequences, and we remain fully supportive of the high speed rail initiative. However, we believe that the city's goals of urban development and excellence need to be fully integrated with the rail project to yield an overall positive result	Through ongoing coordination with the City and resulting project redesigns since the Tier II DEIS, the Richmond to Raleigh Project in downtown Raleigh is more fully integrated with the City's goals, as evidenced through current City support for the NC5 alternative.

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and sustainable economic development.	
3. Pedestrian access at Jones or very close-by is critical. That area is extremely popular on weekend evenings given the mid-street location in Glenwood South and the variety of restaurants and clubs nearby.	A pedestrian bridge is provided at Jones Street the preferred alternative in downtown Raleigh.
3) Replace Fire Station No. 22 on Durant Road, as it appears that the impacts to the property associated with the Durant Road bridge over the rail corridor will render it unusable as an emergency response facility. a. (From City Transportation Division Comments) - In constructing the proposed Durant Road overpass, the change in grades will directly impact the operation of the Fire Station No. 22. The proposed change in grades associated with the station driveway will render the facility unusable as a fire station. It is unclear if architectural modifications can be made to offset these impacts. Staff recommends that NCDOT explore potential relocation of this fire station to an equivalent site in the immediate vicinity of this station.	In response to these comments and those received from the public, a revised bridge and road alignment has been designed for this location and is shown in the Map Book Appendix of the Tier II FEIS. The road alignment and bridge over the railroad will be shifted to the north, away from the residential and commercial development on the south side of Durant Road. This northward shift will take the road alignment through City of Raleigh property where Raleigh Fire Station No. 22 is located, requiring the fire station to be relocated.
4) Minimize and mitigate any impacts to the Windsor Forest neighborhood on Durant Road, which is also potentially impacted by the aforementioned Durant Road bridge.	See response above.
5) Include pedestrian overpasses at Jones Street in all alternatives. As outlined in the City staff memorandum, an overpass at Jones Street and an overpass from the Powerhouse Square parking deck to Glenwood Avenue will help offset the loss of pedestrian connectivity resulting from the proposed Jones Street closure.	A pedestrian bridge is provided at Jones Street under Alternative NC5, the preferred alternative in downtown Raleigh.

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Comment	**Response**
6) Replace the Hargett Street overpass with a pedestrian bridge in all alternatives. Any pedestrian bridge construction should be coordinated with the City's planning for Union Station. a. (From the Transportation Services Division's Recommendations) - Swap the West Street Extension for the Hargett Street Bridge. The proposed Hargett Street bridge is problematic for several reasons. In addition to the physical impacts of closing Harrington Street and the visual impacts of spanning West Street, this bridge would sever the proposed Union Station plan into two separate blocks and is not recommended. In lieu of this bridge, staff recommends that NCDOT investigate including the proposed West Street Extension as part of the project. The West Street Extension was examined as part of the Union Station study and would maintain connectivity to the Boylan Heights neighborhood to offset the loss of Hargett Street. The Passenger Rail Task Force is in the process of evaluating this proposal and will offer recommendations to the City Council in the coming months. b. (From separate communications from Eric Lamb) - We have been developing a concept for extending West Street southward, and we would like to see this incorporated into the SEHSR project in exchange for doing away with the proposed Hargett Street Bridge. Furthermore, the Hargett Street pedestrian bridge referenced in the Mayor's letter will require extensive coordination with the City's proposed Union Station concept.	The Richmond to Raleigh Project has coordinated with the City in regard to the City's plans for a station in this location, and will continue to do so. Under Alternative NC5, the Hargett Street crossing is closed. The Richmond to Raleigh Project plans do not prevent the City from providing pedestrian access across the railroad in the vicinity of Hargett Street to the planned station in the future. The City's West Street Extension project is outside the scope of the Richmond to Raleigh Project.
7) Do not impact the residential properties on S. Saunders Street near Rosengarten. If a crossing of the NC Railroad corridor is to occur in this area, alternative alignments should be considered; a pedestrian crossing may be sufficient. a. (From separate communications from Eric Lamb) - There is a little bit of confusion regarding item #7 in the Mayor's transmittal letter of the City's comments. Your project does not currently entail any impacts to the S. Saunders Street properties referenced in this comment. The intent behind the comment was to avoid impacts associated with the proposed West Street Extension.	The residential properties on South Saunders Street are outside the Project Study Area.
8) Coordinate directly with Triangle Transit on your project for all alternatives, especially in the area adjacent to Seaboard Station in the NC1/NC2 alternative.	The Richmond to Raleigh Project and the NCDOT Rail Division have coordinated with and will continue to work collaboratively with Triangle Transit (TT) on the plans for development of a Regional Rail System for the Triangle area. In keeping with this coordination, the Richmond to Raleigh Project has taken the TT plans into consideration, and the Project designs do not preclude implementation of Triangle Transit as originally envisioned on separate tracks within the CSX S-line corridor.

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9) Relocate the Norfolk-Southern Rail Yard to a location outside the City as part of NC3. While it is not currently in the scope of your project, the relocation of the yard will allow for the avoidance of any impacts to the historic Roanoke Park neighborhood.	This request is outside the scope of this Project.
10) Utilize retaining walls wherever possible to minimize impacts to residential and commercial property.	Retaining walls have been incorporated into the designs for Alternative NC5 as appropriate.
11) Where retaining walls or noise walls are used, use brick materials where these surfaces will be visible from the community and from passenger trains.	As discussed in Section 1.4.1.7 of the Tier II FEIS, fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities.
12) If access to Fairview Road is closed in NC3 as proposed, consider mitigating this impact with a new pedestrian crossing over Capital Boulevard connecting the Five Points/Roanoke Park neighborhoods with the Mordecai neighborhood.	Fairview Road remains open under Alternative NC5, the preferred alternative in Raleigh (Section V).
13) Evaluate the feasibility of a separate viaduct alternative down the center of Capital Boulevard south of Wake Forest Road. Please also consider the comments on urban design regarding the project that are included in the attached letter from City Councilor Thomas Crowder (Applicable excerpt included as follows): "I request the Council propose this partnership fund, carefully study and seriously consider extending the downtown road grid network north along the Capital Boulevard Valley to the intersection of US #1 and Wake Forest Road, aligning the SEHSR Corridor from this intersection south to West Street via an elevated viaduct shared with Triangle Transit lines over a rehabilitated and potentially realigned Pigeon House Branch watercourse integrated into a heavily landscaped urban greenway and a stormwater control system below it, creating the multi-modal transportation infrastructure needed for an urban scale mixed-use, mixed-income expansion of downtown. With great vision and leadership the opportunity exist to reclaim the most polluted and impaired watercourse in the City of Raleigh, turning it into a major amenity, while also creating a true alternate SEHSR route down though the valley, which will protect not just one, or two, but ALL three northern downtown historic neighborhoods, simultaneously creating a multimodal transportation network for downtown growth coming with the creation of a	As noted earlier the recommended preferred alternative through Raleigh, NC (Section V), is Alternative NC5, which was developed in response to comments from the City of Raleigh, as well as comments received from the public. Alternative NC5 crosses Capital Boulevard, Pigeon House Branch, and West Street on a bridge (i.e., Pigeon House Branch is not impacted by the Richmond to Raleigh Project). Alternative NC5 shows a reduction in property impacts and historic resources compared to the other alternatives evaluated (NC1, NC2, and NC3). Coordination will continue with TT and the City of Raleigh throughout the remainder of the Project.

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high-speed rail and Triangle Transit hubs at the future Union Station."	
14) Conduct advance right-of-way acquisition wherever possible. Unfortunately the duration of the project planning and construction could leave many property owners in limbo, therefore early acquisition would help to reduce the burden to the community.	North Carolina and Virginia will seek ROW and construction funding as quickly as possible to minimize the amount of time properties could be in this situation. The ROW acquisition phase for this Project cannot begin until the FRA issues a ROD, at which point, the established ROW acquisition process in each state will be followed. In the state of Virginia, the Virginia Department of Transportation (VDOT) will likely oversee the ROW acquisition on behalf of the Department of Rail and Transportation (DRPT). In North Carolina, the NCDOT will oversee ROW acquisition for the Project. It should be noted that "hardship" policies for early ROW acquisition cannot apply to the Richmond to Raleigh Project until funding is established, which is contingent on the Project receiving a ROD. Chapter 1 of the Tier II FEIS contains an updated project history, summary of project steps, discussion of future project steps and a new project schedule, including anticipated date of the final NEPA step (approval of the ROD), next steps on funding, and when property acquisition and project construction are anticipated to occur.
15) Clarify any potential the property impacts in the Bickett Boulevard area in Roanoke Park. Please utilize up-to-date mapping and property owner information as the project moves forward.	This area would not be affected by the preferred alternative in Raleigh (NC5).
16) (From separate communications from Eric Lamb) - One item that escaped mention during the process is the proposed Ruritania Street Extension near I-540. This is a proposed collector street that connects under the rail corridor in the vicinity of a planned TTA rail station. We originally planned to coordinate it with TTA's project, but it may be better to evaluate construction of the grade separation as part of your scope of work.	The Richmond to Raleigh Project will continue to coordinate with the City regarding the planned extension of Ruritania Street.
17) Additional comments from City Councilor Thomas Crowder (in separate letter attached to City of Raleigh Recommendations package): a. I implore the Council to request the following mitigation measures be implemented where our existing neighborhoods and businesses abut the SEHSR sealed corridor. 1. Construct brick masonry sound walls with drought resistant landscaping enhancements located on the property owner side of the walls adjacent any residential property.	Noise and vibration mitigation will be addressed during final design using the FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (October 2005) procedures.
2. Install brick clad retaining walls and drought resistant landscaping enhancements located on the property owner's side instead of slope easements and takings of any businesses, or residential properties where remotely feasible.	As discussed in Section 1.4 of the Tier II FEIS, fencing locations and types as well as proposed landscaping, will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities.

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Comment	**Response**
3. Install the most state-of-the-art rail bed and track designs, engine mufflers and other technological advancements to reduce train noise and vibration, regardless of existing conditions.	Noise and vibration mitigation will be addressed during final design using the FRA's *High-Speed Ground Transportation Noise and Vibration Impact Assessment* (October 2005) procedures.
4. Ensure that any raised viaduct and bridge structures are architectural visual enhancements to our city and allow urban greenways in the r/o/w below the viaducts.	The Richmond to Raleigh Project is working with the Raleigh Historic Development Commission as part of the Section 106 MOA for the Project. City greenways are addressed in the Final Section 4(f) Evaluation for the Project (Chapter 5 of the Tier II FEIS).
5. That no road closures take place along Phase I, or Phase II without 1:1 replacements. The exception being Jones Street, where a pedestrian connection and urban park should be designed with public input.	This request was accommodated with the exception of Hargett Street. The closure of Hargett Street was determined in coordination with the City. A grade separation was determined to have too great impacts to justify the benefits of maintaining the connection, especially given other east-west travel options.
6. That where at all remotely possible, all grade separations be located under the existing rail lines in lieu of bridge interchanges in order to avoid stymieing economic development, or redevelopment and insuring multimodal interconnectivity along the corridor and future light rail stations.	The decision to design a bridge versus an underpass is site specific, and dependent upon many factors including existing grade, density of nearby development, natural resources, cultural resources, and the surrounding street network. In each location, the goal is to minimize impacts to the surrounding area.
7. That the Raleigh Appearance Commission work with the Passenger Rail Task Force and City Planning Staff to review and report to Council on the status of these request in the subsequent review phases of this process.	Comment noted.
18) Transportation Services Division's Endorsement of NC3 – This recommendation is consistent with the recent recommendations of the Passenger Rail Task Force and is accompanied with similar requests for mitigation. It is recognized that recommending this alternative may be more controversial due to the higher construction costs, street closures, and associated property impacts, however this alternative appears to offer significant long-term advantages to the City:	The recommended preferred alternative through Raleigh, NC (Section V) is Alternative NC5, which was developed in response to comments from the City as well as comments received from the public. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. With the NC5 alternative, the existing road network in the Five-Points, Roanoke Park, Fairview Road and the Norfolk Southern rail yard area will remain unchanged and the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for: the crossing at Hargett Street, which would be closed; and the crossing at Jones Street which would be closed to vehicular traffic, but where pedestrian access across the railroad would be maintained through construction of a pedestrian bridge over the railroad.
a. The construction of the proposed viaduct is a good long-term solution for the community with respect to replacing the existing trestles adjacent to Glenwood South. It also offers the potential removal of berms associated with the current trestles, which may provide options for use of the land beneath the viaduct. The viaduct construction also eliminates the historic vertical clearance issues at Peace Street.	Alternative NC5 does not affect the existing NS track or trestles in this location.

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Comment	**Response**
b. The NC3 alternative is better-suited to a downtown station with respect to the use of a single center platform location. The outside platforms in the NC1/NC2 alternatives are necessary due to the curvature of the track and the alignment of the tangent section required for a train platform as the corridor approaches the proposed Union Station. A single center platform is operationally superior compared to separate outside platforms.	Alternative NC5 would accommodate construction of a center platform in the vicinity of the two block area between Hillsborough Street and Hargett Street, which is consistent with the City's current plans for a new multi-modal Union Station in this vicinity.
c. While NC3 will likely include property impacts to low-density industrial uses along West Street north of Peace Street, such impacts may not be inconsistent with long-term redevelopment options for City's West Street property holdings. These impacts could allow for the possible reconstruction and realignment of West Street closer to the railroad corridor to allow for better aggregation of parcels in this area.	Between the City Sanitation Yard and Peace Street, the preferred alternative NC5 impacts the same businesses on West Street that NC3 impacts.
d. New track construction associated with NC3 would move existing rail service further away from homes in the Brooklyn-Glenwood neighborhood. By comparison, NC1/NC2 would build new tracks closer to existing homes within the Mordecai neighborhood.	Comment noted.
e. NC3 creates fewer long-term impacts for Triangle Transit's planned rail line. The addition of passenger rail lines on the east side of existing freight rails could create additional impacts for the Triangle Transit rail plan beyond those originally anticipated.	The Richmond to Raleigh Project and the NCDOT Rail Division have coordinated with and will continue to work collaboratively with TT on the plans for development of a Regional Rail System for the Triangle area. In keeping with this coordination, the Richmond to Raleigh Project has taken the TT plans into consideration, and the Project designs do not preclude implementation of Triangle Transit as originally envisioned on separate tracks within the CSX S-line corridor.
f. Although NC3 would close Jones Street, this closure has fewer impacts overall than the closures and mitigations proposed with NC1/NC2. These closures will have a greater barrier effect on this portion of downtown and could be more harmful with respect to economic impacts in this area.	As noted above, under the NC5 alternative, the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for the crossing at Hargett Street, which would be closed, and the crossing at Jones Street, which would be closed to vehicular traffic, but where pedestrian access would be maintained through construction of a pedestrian bridge over the railroad.

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Comment	**Response**
g. With respect to the impacts of closing Jones Street, the street grid can absorb the impacts associated with cars and bicycles via either Edenton Street or via West Street and North Street. Given the direct impacts to pedestrian circulation, staff recommends three specific mitigations to offset the impact of the street closure: 1. Construction of a pedestrian overpass/overlook plaza at Jones Street; 2. Construction of a second pedestrian overpass spanning from the Powerhouse Square parking deck to Glenwood Avenue south of Jones Street; and, 3. Construct additional streetscape improvements along West Street and North Street from Jones Street to Glenwood Avenue.	See above response. In addition, note that the Project will include streetscape improvements near the proposed Jones Street pedestrian bridge (along West Street and North Street) and that coordination for the proposed Jones Street pedestrian bridge will take place as part of the development of the Section 106 MOA.
h. With respect to closing Fairview Road, staff does not propose any mitigation at this time. This street is frequently closed due to the operations of the NS rail yard. Alternatives to the Fairview Road closure may be considered with the City's current Capital Boulevard Corridor Study.	Refer to response above. Fairview Road would not be closed under the NC5 alternative.
B. Transportation Services Division's Recommendations that were not included in the Raleigh City Council Recommendations: 1) Construct the Pacific Drive Extension - Due to right-of-way constraints, NCDOT will likely propose temporary closures of New Hope Church Road and Millbrook Road during construction of the street overpasses, which could have significant impacts on traffic operations in this area. As a means of offsetting the impacts associated with these closures, staff recommends the construction of the proposed Pacific Drive Extension from Old Wake Forest Road to Atlantic Avenue as a possible mitigation alternative. This street is a proposed minor thoroughfare in the City's 2030 Comprehensive Plan, and its construction would help alleviate traffic impacts during construction.	The Richmond to Raleigh Project does not necessitate inclusion of a bridge for a proposed connection to Pacific Drive. However, the Richmond to Raleigh Project plans have been amended such that they show a general location on the maps with the notation "future bridge constructed by others." The construction of a City of Raleigh- funded bridge in this location can be coordinated with the construction plans for the Richmond to Raleigh Project.
1) Construct a Wolfpack Lane Overpass - NCDOT's efforts to mitigate the Wolfpack Lane closure have been related to attempting to establish a full-movement interchange at the intersection of Atlantic Avenue and Highwoods Boulevard. Instead staff recommends bridging Wolfpack Lane over Atlantic Avenue and connecting to Beechleaf Court. This connection would maintain connectivity for the area with respect to cars, bicycles and pedestrians without substantial physical impacts to the community.	In response to comments on the Tier II DEIS from the public and from the City of Raleigh, two alternative designs were developed for the Wolfpack Lane crossing, one of which included a vehicular bridge (accommodating pedestrians and bicycles) over the railroad. These alternatives were presented for comment at a public update meeting on May 15, 2012. The public voiced strong support for the addition of a bridge over the railroad at Wolfpack Lane (presented at the meeting as Alternative 57A) and those designs have been added to the Project designs for the Tier II FEIS. The designs can be seen in the Map Book Appendix of the Tier II FEIS.

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Comment	**Response**
C. Transportation Services Division's Technical Comments and Corrections on the FEIS: 1) Cross-sections for each street proposed for grade- separation are not included in the report. Based on the City's adopted Comprehensive Plan and City standards, the following cross-sections should be included in the design of each crossing: a. Durant Road: five-lane section, with bike lanes and sidewalks on both sides b. Gresham's Lake Road: five-lane section, with bike lanes and sidewalks on both sides c. Millbrook Road: five-lane section, with bike lanes and sidewalks on both sides d. New Hope Church Road: five-lane section, with bike lanes and sidewalks on both sides e. Whitaker Mill Road: three-lane section, with bike lanes and sidewalks on both sides	A meeting between the Richmond to Raleigh Project and City of Raleigh Transportation staff was held on February 22, 2011, to discuss these specific requests. The following responses reflect the design decisions that were agreed upon at that meeting. a. Durant Road bridge: the 60 feet of pavement included in the Project designs can accommodate the City's future plans for Durant Road by reducing the lane widths and reducing the center turn lane to a narrower painted island; b. Gresham's Lake Road bridge: the Richmond to Raleigh Project bridge will be constructed asymmetrically, with sidewalk and curb and gutter on one side, which will allow the City to later build a second bridge to carry an additional two lanes of traffic without the need to replace what was constructed by the Richmond to Raleigh Project; coordination will take place during final design; c. Millbrook Road underpass: the Project designs which included five lanes and sidewalks have been modified to also include five feet of bike lanes in the vicinity of the underpass; d. New Hope Church Road: the Project designs, which included 5 lanes and sidewalks, have been modified to also include five feet of bike lanes in each direction in the vicinity of the bridge; e. Whitaker Mill Road: The width of the Project designs which include four lanes with curb and gutter can accommodate three lanes and bike lanes. The Richmond to Raleigh Project typical section will be adjusted accordingly in final design.
2) The report fails to document the impacts to residential property at the intersection of Georgetown Road and Wake Forest Road under NC3. In looking at the public hearing maps, the construction of NC3 appears to take one residence and impact a second adjacent residence.	The DEIS public hearing map had an error in that a road closure symbol should have been shown at Georgetown Road. However, the property impacts were accounted for, and were included in the impacts shown in the Tier II DEIS (Table ES 23). Note that Georgetown Road is unaffected by the preferred alternative (NC5).
3) The closures of Georgetown Road and Patton Road associated with NC3 near Wake Forest Road would create cul-de-sacs that exceed the City's standards for dead-end streets. Mitigation by extending New Road to Wake Forest Road should be considered to meet City standards.	Refer to response above.
4) The report does not account for multiple City-owned 4(f) resources, including: a. Neuse River Greenway (currently under construction) b. Simms Branch Greenway (proposed) c. Marsh Creek Greenway (proposed) d. Camp Durant Park	The first three resources have been added to the Section 4(f) Evaluation. Camp Durant Park is outside the Project Study Area.

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Comment	**Response**
5) The Marsh Creek Greenway corridor crosses the proposed rail line approximately 500' north of Millbrook Road. The City currently has greenway easement on either side of the existing rail corridor. In order to provide for the future trail connection, one of two options are available: a. reconstruct the existing culvert under the existing rail line to accommodate pedestrians (minimum 10' wide X 10' high); or, b. provide a 10' multi-purpose path adjacent to the west side of the rail line from the stream corridor to Millbrook Road and then continue with a multipurpose path along the north side of Millbrook from the west side of the rail line to the intersection of Millbrook and Atlantic Avenue. c. In the future, either of these alternatives will allow the City to extend the greenway trail north and south along Marsh Creek.	This request cannot be accommodated because the Richmond to Raleigh Project does not change the existing condition at this location. The Richmond to Raleigh Project would cross the proposed location of the Marsh Creek Greenway within the existing, active railroad corridor. The City of Raleigh has not obtained a legal crossing of the corridor at this location. Therefore, the proposed changes associated with the Richmond to Raleigh Project would not create a barrier to the development of the Marsh Creek Greenway (because that barrier already exists). The City could route the greenway south to Millbrook Road to cross the rail corridor. Millbrook Road would be grade-separated (road under rail) with the Richmond to Raleigh Project, and the underpass would accommodate bikes and pedestrians.
6) The Simms Branch Greenway corridor crosses the rail corridor between Gresham's Lake Road and Durant Road. The City has existing greenway property on either side of the rail corridor and constructed trail near each side of the corridor. The EIS does not include any accommodations to connect this greenway trail. Two options are possible: a. reconstruct the existing culvert to provide a pedestrian connection under the rail line (minimum 10' wide X 10' high); or, b. construct a 10' multi-purpose path along the west side of the rail line from Simms Branch south to Gresham Lake Road. Then continue a 10' multi-use path along the north side of the proposed Gresham Lake Road Bridge.	This request cannot be accommodated because the Richmond to Raleigh Project does not change the existing condition at this location. The Richmond to Raleigh Project would cross the proposed location of the Simms Branch Greenway within the existing, active railroad corridor. The City of Raleigh has not obtained a legal crossing of the corridor at this location. Therefore, the proposed changes associated with the Richmond to Raleigh Project would not create a barrier to the development of the Simms Branch Greenway (because that barrier already exists). The City could route the greenway south to Gresham Lake Road or north to Durant Road to cross the rail corridor. Gresham Lake Road and Durant Road would both be grade-separated (road over rail) with the Richmond to Raleigh Project, and the bridges would accommodate bikes and pedestrians.
7) The word "Capitol" is used throughout the document and should be replaced with "Capital except where referring specifically to the State Capitol building in downtown Raleigh.	Comments noted and corrected in FEIS.
8) There is no mention of closures of the private crossings associated with the Mallinckrodt pharmaceutical plant. Discussion of impacts and mitigation need to be provided within the study.	The Richmond to Raleigh Project team has initiated dialog with Mallinckrodt/Covidien and will continue to work with them throughout the NEPA and final design process to ensure their concerns are addressed to the fullest extent possible.
9) On page 3-52, the second paragraph should also reference a heavy residential development concentration in the vicinity of I-440 and Atlantic Avenue.	The residential development referenced is outside the study corridor; therefore, no change has been made in the Tier II FEIS.
10) The statement regarding transit page 3-82 is not accurate with respect to transit planning. Transit operations are provided by the City of Raleigh, NCSU, and Triangle Transit with respect to bus operations.	Comment noted and corrected in the Tier II FEIS.

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Comment	**Response**
11) On page 3-172, references to public transit in Raleigh need to include Triangle Transit and NCSU's Wolfline as other providers. Please also note that the CAT R-Line currently operates within one block of the existing Amtrak station.	Comment noted and corrected in the Tier II FEIS.
12) Section 3.11.3.2.2.4 on Page 3-85 references the Glenwood South Small Area Plan and a proposed Pedestrian Business Overlay District. This zoning overlay is in place and should be represented as existing. References to a proposed intermodal center in this section should be revised to reflect the City's Union Station study.	Section 3.11.3.3.2.8 of the Tier II FEIS has been updated to state that the Pedestrian Business Overlay District is in place. The intermodal center reference has been updated to reflect the Union Station Study.
13) Please note that the Raleigh Charter High School referenced on page 3-93 has applied to relocate to a site outside of the proposed rail corridor.	Chapter 3 of the Tier II FEIS notes that Raleigh Charter High School is now located on Glenwood Avenue, outside the Project Study Area.
14) Figure 3-14 on page 3-147 fails to show the Durant Nature Park or the Neuse River Greenway.	These resources have been added to the Project mapping.
15) On page 3-164, the description of the intersection of New Hope Church Road and St. Albans Drive needs to mention that not currently a full-movement intersection. The channelization and movement restrictions can be removed once adjacent railroad overpass is constructed.	Section 4.11.2.2.18 of the Tier II FEIS discusses how the Project will interact with existing transportation facilities in the City of Raleigh.
16) In section 4.11.2.2.18, a statement on page 4-84 incorrectly states that the Morgan Street bridge will be maintained in all three alignments. In all public hearing maps associated with the project, the bridge is replaced in all three alternatives. Explanations regarding the need to replace this bridge should be included in the report.	The narrative in Section 4.11.2.2.18 of the Tier II DEIS was in error. The costs of a bridge replacement for NC1, NC2, and NC3 were included in the impacts shown in the Tier II DEIS (Table ES 23). Note that the preferred alternative NC5 retains the existing Morgan Street bridge.
17) Section 4.11.3.3 "Police/Fire/EMS" does not include any references to Fire Station No. 22 on Durant Road as a directly impacted location. Relocation of the station may result in changes in the station's service area. 18) EIS relocation reports in Appendix C do not identify impacts to the City fire station property on Durant Road (RFD Station #22). Due to the level of adverse impacts associated with the site's existing access, this impact should be considered a complete taking and a relocation of the station should be proposed prior to the construction of the Durant Road overpass.	The designs shown in the Tier II DEIS were developed to allow continued operation of Fire Station No. 22. However, in response to comments from the City and from the public, a revised bridge and road alignment has been designed for this location and is shown in the Map Book Appendix of the Tier II FEIS. The road alignment and bridge over the railroad will be shifted to the north, away from the residential and commercial development on the south side of Durant Road. This northward shift will take the road alignment through the Fire Station No. 22 property, requiring the fire station to be relocated. This new alignment was developed in coordination with the City of Raleigh Transportation Department. The need for relocation is discussed in Section 4.11.3.of the Tier II FEIS.

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19) Table 4-32 on page 4-117 incorrectly states that the plan is compatible with the Raleigh Bike/Ped Plan. The adopted Bicycle Plan proposes improvements to Fairview Road and to Wolfpack Lane that would be affected by the proposed closures. The adopted Livable Streets Plan also does not contemplate the closure of Jones Street and emphasizes its importance as a pedestrian connection. While the DEIS is technically compatible with the adopted CAMPO Thoroughfare Plan, it is not compatible with the local street network in the adopted 2030 Comprehensive Plan with respect to closures of Jones Street, Fairview Street, and Wolfpack Lane.	The preferred alternative would provide a pedestrian/bicycle crossing at Jones Street; would not close Fairview Street; and would grade separate Wolfpack Lane. Therefore, the preferred alternative is compatible with the Raleigh Bike/Ped Plan in these locations.
20) Right-of-way impacts identified in Appendix C are not detailed enough to recognize exactly which properties are being impacted and needs to be more specific. It is also unclear as to how each property is being impacted, i.e., right-of-way only, easement acquisition, direct structural impact, etc.	The public hearing maps show the data available during the preliminary engineering stage of the Project. More detailed determinations regarding ROW impacts will be made during final designs when more survey-level data are available.
21) Appendix F regarding street impacts needs to be modified to include traffic volumes for each street closure. Impacts to Georgetown Road and Patton Road need to be included within this Appendix.	Traffic volumes for non-City roads were provided to the Richmond to Raleigh Project by NCDOT and VDOT, and were used to develop adequate road designs. Contact NCDOT Division 5 for the most up to date traffic volumes for state owned roads within the City of Raleigh.

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Comment	**Response**
1) Board of Commissioners Adopted Resolution; Effects of High Speed Rail on the Town of Franklinton, North Carolina a. WHEREAS, the Town of Franklinton is a community created by and long supported by the existence of a major rail line traveling a north-south route through the central portion of Town paralleling Main Street, the historical United States Highway l; and b. WHEREAS, this rail line stopped being used over 20 years ago for passenger rail, and today is only lightly used for commercial freight rail; and c. WHEREAS, there is currently a proposal from the Federal Rail Administration	Comment noted.

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and the Departments of Transportation in North Carolina and Virginia to construct a corridor for high speed rail along the CSX/Seaboard rail line, passing through the Town of Franklinton; and d. WHEREAS, all of the proposed routes for the Southeast High Speed Rail corridor call for the closure of at-grade rail crossings at East Mason and East College Streets and a realignment of Hawkins Street to a new crossing and realignment at Cedar Creek Road which will impact several homes, as well as a widening and realignment at East Green Street which will likely stem the loss of several commercial properties along the widened route of East Green Street; and e. WHEREAS, the closure of the crossings at East Mason Street and East College Street will create a great deal of undue burden on business owners, residents, property owners, emergency services professionals and volunteers, and taxpayers; and f. WHEREAS, the Board of Commissioners of the Town of Franklinton believes that such results will not only prove detrimental to the health of our community, but to the wellbeing of our citizens and business owners, but also will prove to become an unnecessary fiscal burden on our citizens and taxpayers from which no benefit will arise for them; g. NOW, THERBFORE BE IT RESOLVED that the Board of Commissioners of the Town of Franklinton hereby states its official opposition to these closures, and any routes for any rail project that will cause such closures and burdens on the citizens of our community.	

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h. BE IT FURTHER RESOLVED that the Board of Commissioners of the Town of Franklinton seeks the support of our state and federal elected representatives to support our community in seeking alternative solutions to resolving these challenges, and expresses its appreciation for those who have already put forth such efforts, including staff of the North Carolina Department of Transportation	The Richmond to Raleigh Project has met with Town of Franklinton officials several times since the publication of the Tier II DEIS to try to resolve these issues (September 7, 2010; January 20, 2011; December 19, 2011; and July 11, 2012). Several design concepts that would maintain a vehicular crossing of Mason Street were developed at the request of the Town and the Capital Area Metropolitan Planning Organization (CAMPO). All of these concepts were determined to have an adverse effect on the eligible Franklinton Historic District. The FRA determined it would be difficult to justify these concepts given their impacts to the district, the traffic volumes on Mason Street, and the ability to provide a pedestrian crossing at Mason Street. The Federal Advisory Council on Historic Preservation and North Carolina State Historic Preservation Office agreed that the mitigation of the closure of Mason Street provided by these designs did not justify the negative impacts they would have on the historic district. It should be noted that in addition to these meetings, two meetings were held with the Town of Franklinton during development of the Tier II DEIS (June 26, 2003, and May 9, 2008). These meetings led to the inclusion of pedestrian crossings at several locations within the Town (Mason Street, College Street, and Hawkins Street).
2) High Speed Rail Official Comments, Elic Senter (Mayor) a. The Board of Commissioners has great concern about the proposed path of the Southeast High Speed Rail. While we are greatly interested in progress in transportation modalities, we are also challenged by the fact that this proposal will essentially slice our community in half, thus effectively rendering a new pair of Towns - East Franklinton and West Franklinton. The proposed rail crossing closures will have a dramatic and immediate impact on our ability to serve our citizens, unite our community, and grow as a Town.	Comment noted. Section 4.11 of the Tier II FEIS includes an analysis of the impact of crossing closures on communities. Although four existing at-grade crossings would be closed within the Town of Franklinton, two new grade separations would be provided, just north and just south of Town limits, and the existing grade separated crossing at Green Street would be maintained. In addition, two pedestrian crossings would be provided within Town limits, and a third would be provided just south of Town limits. It is anticipated that these accommodations will mitigate for the closures of the existing at-grade crossings.
b. Franklinton was founded originally as Franklin Depot. Our roots can be traced directly to the path that railroads took throughout our state. Our community would never have come into existence were it not for a simple rail stop about 45 minutes from the center of government in our state. Over time, however, as railroads began to see less and less use, the now-Town of Franklinton began to adjust, and our citizens became quite literally a car-driven society, as did the majority of Americans. Eventually, passenger rail stopped rolling through Franklinton, and our historic depot was almost lost. Recognizing the place railroads have in our history (and our future), a great effort was made to save the depot, while at the same time acknowledging that the use of passenger rail simply was not the transportation of choice of most of the citizens of our region.	Comment noted.

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Comment	**Response**
c. Franklinton today is no longer a bustling town filled with shops and boutiques. It's also no longer a community based in textile work. A town that once had three textile mills now has none. We are, however, home to one of the largest biotechnology companies in the world, and their American headquarters are literally a mile outside of our corporate limits. Moving raw products into Novozymes' facility on NC Highway 56, and finished products out, is crucial not only to their business, but to the livelihood of their employees. Based upon the planned route, the closure of the crossing at Mason Street will shift a great deal of traffic to the intersection of Main Street and Green Street (NC Highway 56). Not only will this impact travel times, but it may also have a direct impact on the routes that some of the trucks traveling to Novozymes (as well as other areas of eastern Franklin County) can take.	The importance of maintaining an adequate road network to support the Novozymes facility has been discussed during the coordination between the Town of Franklinton and the Richmond to Raleigh Project, and is noted here. Impacts to traffic at the intersection of Main Street and Green Street (NC56) from the Richmond to Raleigh Project were discussed in Chapter 4 of the Tier II DEIS on page 4-184. All alternatives were common throughout downtown Franklinton. The anticipated level of service (LOS) in the design year 2030 under the Richmond to Raleigh Project was compared to the anticipated LOS in the year 2030 without the Project (i.e., "No Build"). The projections showed that traffic would be approaching an unstable flow in the design year under a No Build scenario, and a reduced LOS for some movements under the Richmond to Raleigh Project. Since publication of the Tier II DEIS, additional traffic counts and analysis were taken within the Town of Franklinton. The 2012 analysis took into account the move of Franklinton High School from the downtown area to a location east of downtown on Cedar Creek Road and also accounts for a planned middle school to be located at the old high school site. This analysis projects that year 2030 traffic will operate under LOS B (reasonably free flowing) under AM peak and PM peak for both the No Build and the Richmond to Raleigh Project. Refer to Section 4.14.2 of the Tier II FEIS for additional discussion regarding impacts to traffic.
d. In addition, this proposed route will directly impact businesses in our historic downtown business district in three distinct ways. First, several of them will actually lose their physical place of business, given the course that any of the three proposals will take. Buildings will be lost or cut off from traffic flow, impacting how these businesses are able to operate, and in some cases, if they are able to continue to operate. Compensating someone for a building does not necessarily mean that you are compensating the business owner for a replacement location.	NCDOT ROW procedures provide for relocation assistance as needed. It appears from the vacant storefronts within the downtown area that there are suitable locations for businesses to relocate within the community.
e. Second, by removing the traffic flow from Mason Street through downtown Franklinton, there will be a major impact on traffic flow through our downtown business district. This will not only have an adverse impact on our business owners, but on our own efforts to breathe life back into that historic district. The Town of Franklinton has been working for over four years through its Uptown Revitalization Committee to draw businesses and citizens to the downtown district. Cutting off a major secondary artery of travel will further reduce traffic flow - why stop if you don't need to? Thus, our downtown business owners will feel a further economic impact.	Existing traffic on Mason Street is approximately 25% of the amount of traffic on Green Street. Counts taken in 2005 estimated traffic on Mason Street is approximately 2,200 vehicles per day and counts taken in 2003 estimated traffic on NC 56/Green Street is approximately 8,200 vehicles per day. The majority commercial businesses along Mason Street are located on the west side of the railroad corridor near the intersection with Main Street. Access to these businesses would be accessed in the same way as currently exists from the west side of Franklinton. From the east side of the rail corridor, vehicles would only need to travel one block north from Green Street (which would remain grade separated from the railroad). Additionally, a pedestrian crossing at Mason Street would allow pedestrian activity to continue east-west across the railroad corridor on Mason Street.

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f. Third, once that major artery is cut off, we anticipate a significant drop in property values in our downtown business district. One may question how we surmise such, but the answer is simple. If there isn't a traffic flow as there has been for the past 75 or so years, what is the value of those properties to anyone interested in operating a business?	Comment noted. Based on the information presented above, it is not believed the Richmond to Raleigh Project will result in economic impacts to the Town of Franklinton. As discussed during a coordination meeting with the Town on December 19, 2012, there are potential benefits to both the property owners and the Town of Franklinton that could result from the district being listed in the National Register of Historic Places (NRHP), which could be coordinated by the Richmond to Raleigh Project as mitigation under Section 106 of the National Historic Preservation Act (NHPA). These benefits include Federal and state investment tax credit and Federal preservation grants for planning and rehabilitation, as well as being a consideration within applications for Community Development Block Grants (CDBG). Town representatives were encouraged to find out more about these opportunities from the State Historic Preservation Office.
g. Much has been made of 'historic' Franklinton by the maps created surrounding this project. As you have read, we often refer to parts of our area as historic. However, the Town of Franklinton does not have a designated historic district. A few attempts at such have been made over the last several decades; however, it has yet to be followed through. There are several historic places/structures in our community, including the Vann House, the Goswick House, the Franklinton/Sterling Cotton Mill, the A. O. Dunston House, and the Franklinton Depot. However, there is not a historic district - therefore, transportation decisions should not, in our opinion, be based upon the classification of such.	Although Franklinton does not have a historic district listed in the NRHP, surveys conducted as part of the Richmond to Raleigh Project's compliance with Section 106 of the NHPA, identified a historic district that is eligible for the NRHP. Both Section 106 and Section 4(f) of the Department of Transportation Act of 1966 provide the same protection to resources eligible for the NRHP as those listed in it.
h. Another challenge we face if each of these closures is to become reality is the complete seclusion of our historically African-American neighborhood in the Albion Academy area of Franklinton. By closing the crossing at College Street, and rerouting the closing at Hawkins Street, not only will this route increase travel times for those living in the area, thus lowering their property values and creating inconvenience, but it will also impact travel times for emergency services vehicles. The majority of those residents living on East College, Hawkins, Church, Dunston, Savage, and South Chavis Streets are African American, and have historically been disproportionally disadvantaged with regards to housing, property values, and other social equality issues.	Travel times are not expected to increase substantially under the Richmond to Raleigh Project design, which consolidates traffic from closed at-grade crossings at College Street and Hawkins Street with grade-separated crossings at nearby locations. The underpass at Green Street is located approximately 0.15 miles to the north of College Street, and approximately 0.29 miles north of Hawkins Street; the new bridge over the railroad at Cedar Creek Road is approximately 0.5 miles south of College Street, and approximately 0.22 miles south of Hawkins Street. In addition, pedestrian underpasses are proposed at both Hawkins Street and College Street.

AG37/38/50 Town of Franklinton, NC - Official Comments (Elic A. Senter, Mayor) and Board of Commissioners Resolution	
Comment	**Response**
i. Why should those residents, or any of the other residents of the eastern side of our Town (or the western side, for that matter) bear the brunt of the cost of constructing substations for our emergency services personnel when those neighborhoods affected can just as easily be unaffected by not closing the crossings? Having to construct such substations is almost a foregone conclusion for the Franklinton Fire Department, Franklinton Rescue & EMS, and the Franklinton Police Department, because their response times will be so adversely affected by the proposed closures. Such expenses to both volunteer organizations and those supported by tax dollars are burdensome on our citizens and an unnecessary distraction for those volunteers and professionals who staff these organizations.	As discussed in Section 4.11.3.3 of the Tier II DEIS, a service area analysis was completed in GIS to determine the effect that changes in access would have on emergency services in Franklinton. Figure 4-7 illustrates that there is very little difference in the five-minute emergency response area between the Build and No-Build scenario. In all Build scenarios (including the preferred alternative NC1 in Section S where Franklinton is located), the total area covered is 97 percent of the No Build coverage area.
j. We urge those making decisions regarding the route for the Southeast High Speed Rail corridor to consider these issues facing our community. We are not opposed to progress. We are opposed to "progress" that runs roughshod over our community and its citizens.	The Project Team we will continue to work with the Town of Franklinton to try to mitigate impacts to connectivity. However, the safety of the citizens of Franklinton is paramount, and grade separated crossings of the rail corridor provide the safest possible design. See Chapter 1 of the Tier II FEIS for more information regarding the philosophy of the Project to grade separate or close and consolidate all existing at-grade crossings.

AG48 Vance County Planning, NC - Jordan McMillen	
Comment	**Response**
1) Concerning the alternative, NC-3 appears to be much cleaner and will have less impact on Town of Middleburg. With the existing line running through the middle of town and along an existing roadway, traffic patterns would change significantly if NC-3 were not utilized. Although there is more impact to environmental issues with NC-3, this alternative would be favored in this area due to the other changes that NC-1 and NC-2 would have on the area.	The recommended preferred alternative in Section O (which includes Middleburg) is Alternative NC3, which is the Section 4(f) avoidance alternative in this section. This alternative also minimizes wetland, noise, and vibration impacts, and has the fewest residential relocations. It does have greater stream and riparian buffer impacts, but those impacts will be fully mitigated, and the design work will include coordination with the US Army Corps of Engineers. Alternative NC3 also had greater public support. Seven people indicated a preference for Alternative NC3, three people preferred Alternative NC1, and one person preferred Alternative NC2.
2) Additionally, a property owner contacted the county regarding your maps having the wrong ownership information for a particular parcel (Parcel located at intersection of Brookston Road and US-1-158 to right and left side of Brookston Road - Parcel # 0612 02002). I assume this was taken directly from county GIS data and tax records and as we have had some changes including to this property that I am referencing, I would encourage the state to obtain parcel data on a regular basis throughout the process. I have assured the property owner that before any property is taken, if it is to be taken, the correct property owners will be verified.	The Richmond to Raleigh Project will attempt to ensure the best available data is used for future mailings to property owners.

AG34 Camden County, VA - Randell K. Woodruff, County Manager	
Comment	**Response**
We support the Richmond to Raleigh segment of the SEHSR corridor. In addition, we support the need for the improvement of transportation infrastructure in Southeast Virginia through the development of a high speed rail system. Improvements in transportation in Southeast Virginia have a direct influence on commerce and development in North Carolina's Northeast Region. We feel a high speed rail line to and from Norfolk, VA, connecting in Petersburg, VA, would be an integral part of the SEHSR corridor. Addressing the operational impacts, along this leg of the SEHSR corridor, should be an important part of the overall plan. With a population of 1.7 million in the Virginia Beach/Norfolk/Newport News VA-NC, MSA region, along with the population of the contiguous Northeast North Carolina region and the 7+ million visitors to the Outer Banks of North Carolina annually, we believe you have potential ridership that would have a major impact to the SEHSR corridor. As plans move ahead for the SEHSR corridor, future consideration should also be given to an option for train sets that may be required in the Raleigh-Norfolk-Richmond rail line system' that will provide through service for passengers traveling between Southeast Virginia (Hampton Roads) and the Piedmont region of North Carolina and also between Hampton Roads and Central Virginia. The first train to ever run to and from Hampton Roads followed the track between Piedmont North Carolina and Portsmouth, in Hampton Roads, (through Weldon, NC) in 1834. Reasons for this route back in those days for such an initiative remain valid today in many ways and should not be overlooked.	The Hampton Roads HSR connection has been studied through a separate project, given its independent utility (as authorized by NEPA). The ROD for the Hampton Roads Tier I study was signed by FRA for review in December 2012. For more information on the "Richmond to Hampton Roads Tier I" study or plans for the next phase (Tier II EIS), as well as public involvement opportunities for that separate project, please go to http://www.rich2hrrail.info/. The two projects are being designed to ensure compatibility and connectivity in the Petersburg, VA, area. The Richmond to Raleigh Project FEIS has been updated to include additional information on the Richmond to Hampton Roads project, specifically addressing the compatibility of designs as well as an update on the status of that separate study.

AG39 Town of Windsor, VA - James L. Hoggard, Mayor	
Comment	**Response**
We support the Richmond to Raleigh segment of the SEHSR corridor. In addition, we support the need for the improvement of transportation infrastructure in Southeast Virginia through the development of a high speed rail system. Improvements in transportation in Southeast Virginia have a direct influence on commerce and development in North Carolina's Northeast Region. We feel a high speed rail line to and from Norfolk, VA, connecting in Petersburg, VA, would be an integral part of the SEHSR corridor. Addressing the operational impacts, along this leg of the SEHSR corridor, should be an important part of the overall plan. With a population of 1.7 million in the Virginia Beach/Norfolk/Newport News VA-NC, MSA region, along with the population of the contiguous Northeast North Carolina region and the 7+ million visitors to the Outer Banks of North Carolina annually, we believe you have potential ridership that would have a major impact to the SEHSR corridor. As plans move ahead for the SEHSR corridor, future consideration should also be given to an option for train sets that may be required in the Raleigh-Norfolk-Richmond rail line system that will provide through service for passengers travelling between Southeast Virginia and the Piedmont region of North Carolina and also between Hampton Roads and Central Virginia. The first train to ever run to and from Hampton Roads followed the track between Piedmont North Carolina and Portsmouth, in Hampton Roads, (through Weldon, NC) in 1834. Reasons for This route back in those days for such an initiative remain valid today in many ways and should not be overlooked. Thanks you for your dedicated work on this project that is critical to the growth and prosperity of our region.	The Hampton Roads HSR connection has been studied through a separate project, given its independent utility (as authorized by NEPA). The ROD for the Hampton Roads Tier I study was signed by FRA for review in December 2012. For more information on the "Richmond to Hampton Roads Tier I" study or plans for the next phase (Tier II EIS), as well as public involvement opportunities for that separate project, please go to http://www.rich2hrrail.info/. The two projects are being designed to ensure compatibility and connectivity in the Petersburg, VA, area. The Richmond to Raleigh Project FEIS has been updated to include additional information on the Richmond to Hampton Roads project, specifically addressing the compatibility of designs as well as an update on the status of that separate study.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
1) General Comments - • The document should incorporate all known cost figures into the entire document. • For clarity, please label the portion of any table which continues to the page after the page at which the table began as "Continued", e.g. "Table ES-21, Continued" on page ES-34.	• Costs have been updated in the Tier II FEIS and provided where feasible. • Suggestion noted.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
2) Exec Study (ES), pg. 2 (Study Corridor): "There are three alternatives in each section .... In many areas, the alternatives are concurrent II" HRTPO Staff Comment: By areas you mean sections? It appears that were three alternatives are "concurrent", there is only one alternative. If that is the case, then there are NOT "three alternatives in each section". Please revise the report and tables to show the actual number of alternatives for each section.	Within each section of the Project there are areas where all alternatives are on common alignment (and in all cases, this is true at the beginning and end of the section). In several sections, all alternatives are on common alignment for the entire section. In some cases, two of the three alternatives are on common alignment for the entire section. This is noted in each section heading in Table ES-X.
3) ES-3 (Figure ES-l): HRTPO Staff Comment: Please explain what *"Not Carried Forward"* means.	As referenced in the graphic, Section 2.2.2 of the Tier II DEIS explains the meaning of "Not Carried Forward." In addition to the alternatives evaluated in the Tier II DEIS, three other alternative alignments were considered but subsequently excluded from further consideration.
4) ES-S (Rail Alignments): *"The maximum authorized speed (MAS) is established as 110 miles per hour (mph) using fossil fueled locomotion."* HRTPO Staff Comment: Is the maximum authorized speed set in stone? Will there be future considerations for 150+ mph rail service along the alignment?	Maximum authorized speed (MAS) is based on authorization from the owner of the rail corridor and FRA safety regulations. Designs been Richmond, VA, and Raleigh, NC, have been developed such that the bridge clearances would allow for future electrification (and higher speeds). Conversion to electricity would require additional environmental evaluation at the appropriate time.
5) ES-S (Rail Alignments): "2) Centralia to Collier, VA (approximately 18 miles) – new track, 30 feet to the east of the existing main line track, MAS 90 mph with full grade separation." HRSTPO Staff Comment: Why grade separated and separate track for 90 mph rail service? Congested corridor? If investing in a separate infrastructure that will be grade separated, why is the MAS so low?	The overarching philosophy of the design of the Richmond to Raleigh Project is to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. Chapter 1 of the Tier II FEIS provides a description of reasons for closing at-grade crossings: absolute collision avoidance; elimination of railroad/roadway traffic issues; elimination of possible system failure; elimination of horn noise; elimination of easy trespasser access; improved long term cost of maintenance; allows for future speed increases. With the exception of a rail bridge over Capital Boulevard in downtown Raleigh, rail improvements throughout the entire corridor have been designed so that both passenger and freight trains can use them. MAS is based on authorization from the owner of the rail corridor and FRA safety regulations.
6) ES-S (Rail Alignments): "3) Collier to Raleigh, NC (approximately 133 miles) – new single track, with 5 mile long sidings every 10 miles (approximate), MAS 110 mph, with full grade separation (Note: Speeds above 90 mph are subject to CSX approval)". HRTPO Staff Comment: Why, if new single track, is MAS capped at 110 mph and requires CSX approval? Will they be using this new track?	MAS is based on authorization from the owner of the rail corridor and FRA safety regulations. With the exception of a rail bridge over Capital Boulevard in downtown Raleigh, NC, rail improvements throughout the entire corridor have been designed so that both passenger and freight trains can use them.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
7) ES-S (Rail Alignments): *"Within each of the 26 sections, the three project alternatives are labeled 1, 2, or 3."* HRTPO Staff Comment: Please explain here to the reader that-given the common end points of the alternatives for each section-the selection of an alternative for one section does not impact the selection of an alternative for another section. Please explain that, for example, there is no relationship or similarity between alternative "VA1" on one section and alternative " VA1" on another section, that each VA1 is simply the first alternative for that section. Please explain that selecting, for example, VA1 is not a presented option for the Virginia portion of corridor, that, instead, selecting VA1 is a presented option for section AA, for example.	Refer to page ES-2 in the Tier II DEIS for an explanation of the framework of alternatives and sections that was established to enable selection of a "best-fit" preferred alternative for the corridor.
8) ES-6 (Service): "Proposed service consists of four round trips per day between Washington, DC, and Charlotte, NC, and four additional round trips between Raleigh, NC, and Charlotte, NC." HRTPO Staff Comment: Is the document referring to initial service in this statement?	Yes, for the purposes of evaluating environmental impacts, this assumption refers to initial service. Refer to Chapter 1 of the Tier II FEIS for information on an updated study evaluating Ridership and Revenue projections. Also note that the number of available "slots" for through trains is affected by "choke points" within the entire corridor. Designs in this document provide fixes to "choke points" between Richmond, VA, and Raleigh, NC; separate environmental studies are planned and/or are underway to address design issues in other sections of the SEHSR Corridor.
9) ES-6 (Service): *"The conventional service would allow additional stops in the smaller towns along the corridor."* HRTPO Staff Comment: What is defined as conventional passenger rail service in the context of this project?	Conventional services means the equipment would be of the same type (diesel powered locomotives), operating on shared track. The difference between high speed and conventional passenger would be in the frequency of stops at smaller stations, which affects the overall trip time from beginning to end.
10) ES-6 (Summary of Impacts for Alternative Alignments) HRTPO Staff Comment: Explain in this section that no totals by alternative 1, 2, and 3 are shown on the following tables because a different alternative may be chosen for each section, i.e. VA1 may be chosen for section AA and VA2 may be chosen for section BB.	Refer to pages ES-2 in the Tier II DEIS for an explanation of the framework of alternatives and sections that was established to enable selection of a "best-fit" preferred alternative for the corridor.
11) ES-7 thru ES-10 (Tables ES-1 thru ES-7) HRTPO Staff Comment: Please remove the min/max subtotals from these tables because their existence implies to the reader that the same alternative (e.g., VA1) must be chosen for the handful of sections under which subtotals are provided. Because 1) the reader naturally will, as stated above, be inclined to think that there are only a few overall alternatives for this study, and 2) these are the first tables encountered by the reader of the executive summary, it is particularly important that these subtotals be removed. In addition, because an alternative must be chosen for each section, these max/min subtotals have little or no use for the reader.	The min/max values used to describe potential impacts were specifically provided to show the range of potential impacts for a given resource. For the Tier II FEIS, totals are only for preferred alternative.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
12) ES-12 (Highway Vehicle Operations): *"... the microscale analysis for co showed little or no change in those concentrations for the worst-case intersections."* HRTPO Staff Comment: Since the project reduces VMT, why does the DEIS examine CO concentrations from highway/highway intersections? Also, please fully label the intersections in Table ES-12 (i.e. is "New Hope Church" actually a street, e.g. "New Hope Church Road"?).	A microscale analysis was conducted to determine if changes in traffic caused by diversions associated with closing at-grade crossings had the potential to impact air quality, as discussed in Section 4.6.3 of the Tier II DEIS. The specific intersections chosen were the two intersections with the worst-case predicted levels of service. Road names in the Tier II FEIS mapping have been reviewed.
13) ES-27 (Table ES-18) HRTPO Staff Comment: Over what time period are the shown dollar impacts realized?	Based on the report, which was developed for the Tier I DEIS for North Carolina only and updated to 2005, the estimations of economic and fiscal impacts were annual effects for the design year (20 years after construction).
14) ES-36 (Historical Resources) HRTPO Staff Comment: Are there any battlefields in North Carolina?	Coordination for the Richmond to Raleigh Project under Section 106 of the National Historic Preservation Act did not identify any Civil War battlefields within the Richmond to Raleigh Project corridor in North Carolina. There are battlefields located within the state, but they are outside of the Richmond to Raleigh Project corridor.
15) ES-37 (Rail) HRTPO Staff Comment: Please identify the impact which each alternative on section CC (Petersburg area) would have on 1) the cost of the Norfolk-to-Petersburg improvements and 2) the Norfolk-to-Richmond travel time of the rail improvements recently selected by the CTB from the Tier I DEIS for the Richmond Hampton Roads Passenger Rail Project.	All alternatives are on common alignment in Section CC.
16) ES-37 (Stations) HRTPO Staff Comment: Please identify the impact which each of the three "potential station locations" in Petersburg would have on 1) the cost of the Norfolk-to-Petersburg improvements and 2) the Norfolk-to-Richmond travel time of the rail improvements.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations or design needs because the development of stations is a unique undertaking at an individual location. As noted, generalized sites were evaluated, but only to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility to the larger transportation network. All public and agency comments received regarding specific station locations have been noted and will be provided to transportation planning organizations in each station location. Those governments at the individual station locations will perform separate environmental evaluations and make the final decision on the station location and design at a later date. As noted in revised Section 4.17 in the Tier II FEIS, locating the HSR stations in developing urban and suburban areas that serve as population centers, rather than undeveloped, sparsely populated rural areas, is likely to avoid and minimize many potential direct and indirect environmental impacts from the Project.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
17) ES-38 (Parks. Recreation Areas. Wildlife Refuges) HRTPO Staff Comment: Instead of "no Section 4(f) use" did you mean "no Section 4(f) impact"?	The terminology used is correct. Section 4(f) of the Department of Transportation Act of 1966 protects publicly owned parks, recreation areas, and wildlife/waterfowl refuges, as well as historic sites listed or eligible for listing in the National Register of Historic Places. These lands can only be used for a Federally-funded transportation project if there is no other feasible and prudent alternative, and the Project incorporates all possible planning to minimize harm. A "use" is occurs when land is permanently incorporated into a transportation facility through partial or full acquisition. A "temporary use" may also occur when there is temporary occupancy of land that is adverse in terms of the preservationist purpose of Section 4(f). Last, there may be a "constructive use" when there is no permanent incorporation of land, but the proximity of a transportation facility results in impacts so severe that the protected activities, features, or attributes that qualify a resource for protection under Section 4(f) are substantially impaired. Examples of constructive use include substantial increases in noise levels at an outdoor amphitheater, impairment to aesthetics, and restrictions on access to a resource.
18) ES-39 (Table ES-23) HRTPO Staff Comment: Please provide a written introduction prior to this table and a written recap following this table. In the recap, please explain to the reader that no simple total page for Table ES-23 is shown because a different alternative may be chosen for each section. In order, however, that the reader may get an idea of the magnitude of the overall impact and cost of this project, please add a one-page "average total" table (i.e. Table ES-24) showing the sum (over 26 sections) of the average values (over the 3 alternatives for each section) by Topic. (Note that Limiting Speed and Operability /Constructability would be omitted from, or shown as "n.a." in, this table because they are not additive.).	Page ES-2 in the Tier II DEIS provides an explanation of the framework of alternatives and sections that was established to enable selection of a "best-fit" preferred alternative for the corridor. Chapter 4 of the Tier II FEIS provides information on impacts for the preferred alternatives by project section and the resulting total impacts for the corridor.
19) (Chapter 1, page 10), 1-10 (Need for the Proposed Project): "Population and economic growth rates in Virginia and North Carolina have been higher than national averages over the past several decades and are projected to remain high over the next few decades." HRTPO Staff Comment: From what cited report does this assertion come from?	Population growth rates are based on US Census Data. In terms of economic growth, a review of disposable income by state for the years 1960 to 2010 found that Virginia ranked 8th of the 50 states with an annual growth rate of 7.99%. North Carolina ranked 10th of 50 states with an annual growth rate for that period of 7.92%. (See http://www.bizjournals.com/bizjournals/on-numbers/scott-thomas/2011/05/nevada-is-income-winner-for-half-century.html?ana=e_pft)
20) 2-44 (Section 2.2.2.3.1): Conformity with Local Plans/Local Support. HRTPO Staff Comment: Is there any consideration of the alternatives for the Richmond/Hampton Roads project? And if these are the alternatives considered but dropped, why were they brought up again as local alternatives for the Richmond/Hampton Roads project in that Tier I DEIS, which is dated after the Record of Decision for the Tier I DEIS for the SEHSR?	The Richmond to Raleigh Project has been coordinated with the Hampton Roads high speed to ensure compatibility and connectivity in Petersburg. The Richmond to Hampton Roads project is not evaluating use of a downtown Petersburg station.
21) 2-44 (Section 2.2.2.3.5): Engineering Issues and Cost. HRTPO Staff Comment: Why wasn't some of this discussion not mentioned in the Richmond/Hampton Roads Tier I DEIS? If it impacts the SEHSR, it definitely would impact the Richmond/Hampton Roads project, per various citations in the Richmond/Hampton Roads Passenger Rail Project Tier I DEIS.	This question does not relate to the Richmond to Raleigh Project DEIS and should be directed to the Richmond to Hampton Roads project (http://www.rich2hrrail.info/).

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
22) 2-49 (Section 2.2.4.2): "The potential Washington Street location is on the west side of Petersburg, VA, near the intersection of the CSX A-line, S-line, and the NS N-line. There is no current railroad station at this location." HRTPO Staff Comment: Any mention of the Petersburg multimodal center planned near this location? Discussion later talks about the Raleigh multimodal center being planned. Petersburg multi-modal transit center is mentioned later in the document, but this is a consistency issue within this part of the document.	The Petersburg multi-modal transit center is not located near the railroad, and is thus not discussed in Section 2.2.4.2 of the Tier II DEIS, which provides a general discussion of potential HSR station locations. Section 3.14.4 of the Tier II FEIS provides a discussion of stations in terms of accessibility to the larger transportation network. The Petersburg multimodal center is referenced in this section of the document with regard connectivity between the transit center and potential HSR stations.
23) 2-56 (Section 2.4): "The SEHSR Greenway Concept has potential to be an important feature of the state-wide trail networks that are being developed by the states of Virginia and North Carolina in conjunction with local governments." HRTPO Staff Comment: Is there a Hampton Roads spur to the Greenway concept?	The concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Tier II DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for HSR projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project, the process of developing the environmental documentation for greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This document is currently under development, with completion anticipated at the time of the ROD for the SEHSR Corridor. The Project website will provide additional details on this separate plan and opportunities for its public review and comment. Any questions about a potential Hampton Roads Greenway does not relate to the Richmond to Raleigh Project DEIS and should be directed to the Richmond to Hampton Roads Rail project (as applicable) or to the local park planning agencies and organizations in the noted area.
24) 3-6 (Section 3.1.1.1.2) Chowan River Basin. HRTPO Staff Comment: The City of Norfolk's public water supply system withdraws water from the Blackwater and Nottoway Rivers. The intakes are outside of the study area but they are located downstream of the project. Such considerations should be reflected in the document.	The Project Study Area was defined based on the local geographic project termini, the Project Purpose and Need, and the expected limits of potential impacts. Federal and state resource agencies have agreed upon this Study Area based on the potential effects of the Project. While there are drinking water intakes located downstream of the Project in both Virginia and North Carolina, resource agencies have agreed that impacts to these resources from this Project are unlikely.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
25) 3-64 (Section 3.11.1.1): *"The local study area with the highest proportion of minority residents is Petersburg, VA, where slightly more than 82% of the population is non-white or mixed race."* HRTPO Staff Comment: Define the various study areas, if not already done, to have the spatial area defined.	The DEIS defined the Project Study Area as block groups within or adjacent to the rail study corridor. The local Study Area is the Project study within a county (or, in Virginia, a city) that was used for the purposes of presenting the data. This definition has been added to Section 4.11 of the Tier II FEIS.
26) 3-165 (Rail) HRTPO Staff Comment: Any mention of the Strategic Rail Corridor Network (STRACNET) designations along the corridor? Impacts to STRACNET in the associated impact section (4.14)?	The Project designs primarily include a 15 foot track-center where two or more tracks will be installed, and up to 30-feet along the CSX A-Line between Centralia, VA and Collier, VA. Additionally, the Project designs will include a vertical clearance of 24 feet 3 inches to accommodate future electrification. These clearances are compatible with requirements on the designated STRACNET corridor. Where applicable, undergrade bridges and track structures will be designed to accommodate the required load classification on the designated STRACNET corridor.
27) 3-174 (Safety & Security): *"From Norlina, NC, where the CSX S-line becomes an active freight railroad to the Boylan Wye in Raleigh (including the active NS-line in downtown Raleigh) common safety measures are in place at all active grade crossings."* HRTPO Staff Comment: Please explain whether or not the "safety measures remaining in place" are adequate, and, if not adequate, how the DEIS treats them (i.e. is the cost of making them adequate included in the cost of each alternative at each section?).	The overarching philosophy of design for the Richmond to Raleigh Project is to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. Table ES-23 of the Tier II DEIS includes the cost of new bridges and underpasses for each of the alternatives, by project section.
28) 4-115 (Section 4.11.4.3): Compatibility with Future Land Use and Long-Range Transportation Plans. HRTPO Staff Comment: This section is not consistent with Section 3.11.4, where there is a discussion of local plans. Section 4.11.4.3 makes mention of the various local plans in support of the SEHSR, yet 3.11.4 states that these localities rarely mention SEHSR. This is inconsistent information.	Sections 3.11.3 (Existing Land Use and Transportation) and 4.11.4.3 (Compatibility with Future Land Use and Long-Range Transportation Plans) of the Tier II FEIS have been updated to reflect recent plan amendments, as well as clarified or corrected (if the Tier II DEIS was in error) as to the compatibility between these plans and the proposed SEHSR Corridor.
29) 4-117 (Section 4.11.4.4): "In addition, city, county, PDC, MPO, and RPO transportation plans within the project study area all address the issues of highway planning, with most regional plans addressing high speed rail." HRTPO Staff Comment: This statement is contradictory to sections 3.11.3 and 3.11.4. The aforementioned sections mention how SEHSR is rarely mentioned in the various planning levels along the corridor, yet this section states most if not all localities have mentioned SEHSR and are compatible with regional plans. Denote a definition as to what constitutes a compatible planning document for the SEHSR.	As stated above, corrections and clarifications have been made to these sections.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
30) 4-124 (Section 4.11.5.2 Community-Level Impacts): *"In Alberta and La Crosse, VA, and Norlina, NC, low-income populations will equally share with wealthier populations the potentially disruptive and intrusive effects of a newly active rail within their community. This includes access restrictions to and from either side of the rail, and exposure to noise and visual intrusions."* HRTPO Staff Comment: This statement does not account for greater opportunities that persons with higher incomes may have in relation to relocation possibilities. Persons with higher income/education generally have access to more opportunities and can relocate easier than someone with less income/education.	Section 4.11 of the Tier II FEIS contains additional information on the availability of housing based on price range and addresses the potential need for housing of last resort.
31) 4-125 (Section 4.11.5.2.1 Richmond. VA): *"The VA1, VA2, and VA3 project alternatives all share a common alignment on the active rail line in Richmond, VA. Richmond currently has a large minority population and the highest concentration of low-income population in the study area. With the rail service to be provided in Richmond and the availability of bus transit in the City that will be focused on a transfer center at Main Street Station, this population has a high likelihood of being able to take advantage of the high speed rail service in the corridor."* HRTPO Staff Comment: This is a big assumption, and is dependent on employment opportunities OOBS); jobs during "office hours (9 a.m. - 5 p.m.) vs. second- and third-shift jobs; connectivity to other modes; and the cost to travel on the proposed rail line, among other factors.	It is anticipated that HSR would be used for intercity travel (e.g., personal trips) rather than daily commutes. The discussion in this section is not intended to imply that high speed passenger service would be widely used for commuters.
32) 4-125 (Section 4.11.5.2.1 Richmond. VA): *"Along Ruffin Road, one of the residential units at the Lafayette Gardens apartment community and several adjacent homes may be displaced as a result of ROW acquisition for the railroad bridge construction at this intersection. These displaces are likely low-income and minority."* HRTPO Staff Comment: Consider examining the effects on "community cohesion" attributable to the proposed displacements in this and all low-income areas along the corridor. Interdependence among neighbors is generally greater in low-income communities, where families and neighbors often rely on each other for day care, rides to work, rides to the grocery store, hospital, church and other activity centers.	Comment noted. Where possible, pedestrian accommodations have been provided along the Project corridor to maintain access for communities on both sides of the railroad tracks.
33) 4-168 (Tables 4-40 and 4-41) HRTPO Staff Comment: Consider showing delay in seconds after each LOS for all approaches. This value will provide greater detail, particularly for approaches with severe congestion (LOS F). This comment applies to ALL remaining tables in this section.	Suggestion noted.
34) 4-189 (Figure 4.10) HRTPO Staff Comment: Figure 4-10 should indicate Richmond - Hampton Roads rail lines (from Newport News and Norfolk).	This figure is intended only to convey the current ownership, operating speeds, and proposed number of tracks/sidings on the rail corridor proposed to be improved as part of this FEIS. It does not show any rail lines outside the Project Study Area.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
35) 4-199 (Safety and Security) HRTPO Staff Comment: No mention of STRACNET and its impacts along the corridor in this section of the document.	The Project designs primarily include a 15 foot track-center where two or more tracks will be installed, and up to 30-feet along the CSX A-Line between Centralia, VA and Collier, VA. Additionally, the Project designs will include a vertical clearance of 24 feet 3 inches to accommodate future electrification. These clearances are compatible with requirements on the designated STRACNET corridor. Where applicable, undergrade bridges and track structures will be designed to accommodate the required load classification on the designated STRACNET corridor.
36) 4-202 (Section 4.17.3): *"As reported in the SEHSR Tier I EIS, implementation of any SEHSR project alternative is not expected to substantially alter development patterns in the project study area except in the vicinity of the rail stations in Richmond (Main Street Station) and the yet-to-be determined locations of Petersburg, VA, La Crosse, VA, Henderson, NC, and Raleigh, NC."* HRTPO Staff Comment: This is an assumption that needs to be supported. There is the distinct possibility of the rural communities developing that do not have station options now, but would vie for one in the future, marketing for satellite living from one of the metro areas.	Additional HSR station locations are not supported by the ridership-revenue studies for the SEHSR Corridor as conducted for the Richmond to Raleigh Project. While it is possible that the Richmond to Raleigh Project asset could be used for regional rail in the future, it is not considered a reasonably foreseeable result of the immediate development of the SEHSR Corridor.
37) 4-204(Section 4.17.4.1): Richmond/Hampton Roads Passenger Rail Project. HRTPO Staff Comment: This section should reflect the reality of the February 2010 CTB approved 'preferred alternative', calling for enhanced intercity passenger rail service on the CSX route, and higher-Speed rail on the Norfolk Southern route. Furthermore, the CTB approved $93 million in funding for reintroducing conventional passenger rail service from Richmond to Norfolk via Petersburg in June 2010.	The FEIS has been updated to reflect the current status of the Richmond to Hampton Roads project.
38) 4-205(Section 4.17.4.4): *"The CSX's National Gateway Project is a multi-state project extending from North Carolina to Ohio and includes a spur that connects to the Ports of Hampton Roads."* HRTPO Staff Comment: The Ports of Hampton Roads should be noted as the Port of Virginia.	Comment noted.
39) 6-4 (Section 6.3.1) Virginia Local Agencies. HRTPO Staff Comment: Add Hampton Roads Planning District Commission and Hampton Roads Transportation Planning Organization as Section 6.3.1.17 & Section 6.3.1.18. This is due to our vested interest in the SEHSR project going forward, and its impacts to the design and planning assumptions of the Richmond/Hampton Roads Passenger Rail Project.	Comment noted. These entities will be added to the Tier II FEIS distribution list (Chapter 6).

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
40) 6-8 (Section 6.4) Document Distribution Location List. HRTPO Staff Comment: Add Hampton Roads Transportation Planning Organization to the document distribution list for it is being made available to the public. Hampton Roads Transportation Planning Organization Camelia Ravanbakht, Deputy Executive Director 723 Woodlake Drive Chesapeake, Virginia 23320 757 420 8300	Comment noted. HRTPO will be added to the list of locations where the Tier II FEIS can be viewed (Chapter 6).
41) Chapter 7, HRTPO Staff General Section Comments: • MPOs are the federally-mandated transportation policy-making, planning, and programming organizations for metropolitan areas. As such, MPOs should participate in a project like this one as formal cooperating agencies instead of only being allowed to comment during public comment periods. • In addition, given the potential impact of the SEHSR project on Hampton Roads, especially when the proposed passenger rail improvements to Hampton Roads are taken into consideration, at least one public meeting on the SEHSR DEIS should have been held in the Hampton Roads area. It is strongly recommended that future public meetings on this project include a location in Hampton Roads.	Comments noted.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
42) 7 -5 (Tier II Public Involvement). HRTPO Staff Comment: With the high proportion of minorities, as indicated by Table 3-19, the project team should clearly document any information sessions, community events, or meetings with residents of minority communities or with community leaders that represent minority persons. As well, although percentages are not as high, documentation of outreach activities with traditionally underserved communities such as, low-income, elderly and persons with disabilities, would be instrumental to demonstrate reasonable efforts to reach out to these community members.	The environmental justice section of the Tier II DEIS (Section 4.11.5) concluded that no disproportionately high and adverse effects on low-income and minority populations are anticipated within the overall Richmond to Raleigh Project corridor, and there is a reasonable expectation that minority and low-income populations would share in the benefit of the proposed rail improvements. The EJ Section was updated for the TIER II FEIS, please refer to Section 4.11.5. Outreach activities were not specifically targeted to environmental justice (EJ) communities. However, public outreach was conducted with the intent to involve all potentially affected individuals along the Project corridor. Meetings and hearings were well advertised and coordinated with local jurisdictions and news media. Individual mailings were also sent to all property owners within the Project corridor beforehand. The Project Team also held numerous meetings with local officials (including both elected officials and municipal and county staff) throughout the Project corridor (described in Chapter 7 of the Tier II DEIS). The intent of these meetings was to ensure all local concerns were addressed in the designs. Although outreach was not specifically targeted to EJ communities, all communities along the Project corridor, both EJ and non-EJ, were well-represented at the eight public hearings held in July 2010. Attendance at the meetings ranged from 183 to 373 individuals, and all areas with significant residential relocations or changes in the existing road network had representation. These hearings provided the opportunity for citizens to provide their comments on the Project. As a result of the comments, numerous design requests have been accommodated, including the provision of additional pedestrian crossings of the rail corridor.
43) 7-6 (Section 7.2.6) Small Group Informational Meetings HRTPO Staff Comment: There does not appear to be documentation of outreach activities to specifically communicate with and/or involve residents within communities with high percentages of minorities, although Table 4-33 documents several of communities having more than 50% minority. If outreach activities specifically aim to involve minority populations, please provide documentation.	As stated above, outreach activities were not specifically targeted to environmental justice communities, but rather to all potentially affected individuals throughout the Project corridor.
44) (Section 9.1) Index. HRTPO Staff Comment: Add an index to some related key words to the Richmond/Hampton Roads Passenger Rail Project and other associated spur projects of the SEHSR. The SEHSR project serves as a main document cited in various other Environmental Impact Statements, and it assists the public and researchers to denote how the SEHSR mentioned these projects within its own Environmental Impact Statement.	The Richmond to Hampton Roads project has been added to the Index (Chapter 10) of the Tier II FEIS.
45) 9-13: (Acronyms). HRTPO Staff Comment: Add "HRTPO Hampton Roads Transportation Planning Organization"	Comment noted. The organization will be noted in Chapters 6 (Distribution of the Tier II FEIS) and 8 (Response to Comments) of the Tier II FEIS; however, in these sections acronyms typically are not used.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
SECTION: APPENDIX B. HRTPO Staff General Section Comments: • Although there is extensive documentation of outreach activities to inform and engage the public through various means, there does not appear to be documentation of outreach activities to specifically communicate with and/or involve residents within communities with high percentages of minorities, although Table 4-33 documents several of communities having more than 50% minority. If this did take place, please provide documentation. • If public involvement included information sessions, community events, or meetings with residents of minority or low-income communities or with community leaders that can represent traditionally underserved communities such as minority, low-income, elderly or persons with disabilities, this should be clearly documented.	Comment noted. See responses to identical statements above.

AG16 Hampton Roads Transportation Planning Organization (HRTPO), VA, Dwight L. Farmer	
Comment	**Response**
HRTPO Staff Questions about Public Meetings: • How were the small-group meetings and additional public meetings advertised? • How far in advance of the meetings were they advertised? • What media sources did the project team use? • Were efforts made to reach traditionally underserved persons?	A June 13, 2003, bi-state press release announced the beginning of the Petersburg, VA to Raleigh, NC Tier II study, as well as dates and locations for nine public meetings along the corridor. The first meeting in North Carolina was held June 24, 2003; the first meeting in Virginia was held July 10, 2003. In early June 2003, a newsletter was mailed to everyone on the Project mailing list. The newsletter provided a status update, as well as dates and locations for nine public meetings along the corridor. The mailing list was created through a sign-up link on the Project website, and through signup at public meetings and hearings for the Tier I study. The project website www.sehsr.org also provided information about the meeting locations. Ads were placed with local newspapers including: Richmond Times-Dispatch (Richmond, VA), Progress-Index (Petersburg, VA), Dinwiddie Monitor (Dinwiddie County, VA), Brunswick Times Gazette (Brunswick County, VA), South Hill Enterprise (South Hill, VA), Franklin Times (Franklinton, NC), News and Observer (Raleigh, NC), Henderson Dispatch (Henderson, NC), The Carolinian, (Raleigh, NC), The Cary News (Cary, NC), The Independent Weekly (Triangle Area, NC), Que Pasa (Raleigh, NC) . Additional public meetings were held in Petersburg, VA, and Richmond, VA, on March 14, 2006, and March 16, 2006, when the Project was extended northward and Richmond, VA, designated as the northern terminus. These later meetings were announced through a project newsletter mailed March 1, 2006, and on the Project website, and through ads in the Richmond Times Dispatch (Richmond, VA) and the Progress Index (Petersburg, VA). As stated previously, although outreach was not specifically targeted to traditionally underserved communities, attendance at the eight public hearings held in July 2010 indicated that outreach was successful to all communities along the Project corridor.

8.2 Public Comments and Responses

This section presents the comments on the DEIS submitted by the public, interest groups, and businesses. As noted above, due to the large number of comments, the comments were summarized for presentation in the Tier II FEIS. Each individual comment received was assigned one or more summary comment codes. Responses are provided for each summary comment, and are organized by major topic (Table 8.1). Refer to Appendix O to look up the summary comment codes by commenter name (where it was provided).

Table 8-1 Major Topics for Summary Comments	
Code	**Topic**
A	Built Environment (e.g., Homes, Towns, Businesses)
B	Crossing Closures and/or Traffic
C	Natural Resources (e.g., Streams, Wetlands, Air Quality)
D	Historic Resources (e.g., Historic Districts, Historic Homes, Battlefields)
E	Construction Costs and/or Economic Benefits of the Project
F	Train Speed, Equipment, Operations, or Fares
G	Ridership
H	Safety
I	Project Schedule and/or Funding
J	Preference for an Alternative
K	Other (Including Comments Related to Potential Station Locations)
L	Project Designs
M	Comments Handled Separately

Code A – Comments Related to the Built Environment (e.g., Homes, Towns, Businesses)

Summary Comment ID	Summary Comment	Response
A_SC1	Concerns about vibration during construction and subsequent train operations.	As per Section 4.7.1.3 in the Tier II FEIS, once the final design of the Project has been established, a more detailed vibration analysis would be required to determine the soil characteristics and the efficiency at which the vibration propagates through the ground at various locations along the alignment, the most appropriate method of vibration mitigation, and the specific locations where mitigation would be required.
A_SC2	Concerns about train noise and the need for noise barriers.	As per Section 4.7.2.1 of the Tier II FEIS, once the final design of the Project has been established, a more detailed noise analysis will be performed according to the procedures outlined in FRA's High-Speed Ground Transportation Noise and Vibration Assessment (USDOT, 2012). This analysis will be completed by DRPT and NCDOT prior to the construction of the Project. It will also reassess the potential impact of new intermodal and freight train service between Petersburg, VA, and Raleigh, NC. Several types of measures will be explored to mitigate noise impacts, including wheel treatments, rail treatments, vehicle treatments, building insulation, and noise barriers.
A_SC3	Concerns about urban business and residential relocations in existing active rail corridors.	As per Section 4.11.2.1.2 of the Tier II DEIS, because the Richmond to Raleigh Project maximizes the use of existing rail corridors, neighborhood disruptions and relocations have been minimized to the greatest extent practicable. Relocation assistance policies were discussed in Section 4.11.6 of the Tier II DEIS and the Tier II FEIS.
A_SC4	Concerns over potential changes in the viewshed (i.e., visual impacts).	The DEIS addressed potential impacts to the visual environment in Section 4.9. The visual analysis examined the potential changes related to the implementation of the Richmond to Raleigh Project into the existing viewshed of the Richmond to Raleigh Project study corridor. The FRA's Procedures for Considering Environmental Impacts (FRA, 1999) states that an EIS should identify any significant changes likely to occur in the natural landscape and in the developed environment. Specific visual impacts for Virginia communities were discussed in Section 4.9.1 of the Tier II DEIS, and those for North Carolina were discussed in Section 4.9.2. Visual impacts were summarized in Table 4.23. The Section 106 MOA for the Project (see Section 4.12 of the Tier II FEIS) will address mitigation of visual impacts as they relate to resources protected by the National Historic Preservation Act.
A_SC5	Concerns about potential property impacts (disruptions and relocations).	Because the Richmond to Raleigh Project maximizes the use of existing rail corridors, neighborhood disruptions and relocations have been minimized to the greatest extent practicable. Current designs are preliminary and are intended to be very conservative (showing the greatest possible impacts). As more detailed surveys are developed for the preferred alternative, it is hoped that it will be possible to refine and reduce the estimated property impacts and relocations required to construct the proposed Richmond to Raleigh Project. Compensation for property impacts in Virginia was discussed in Section 4.11.6.1 of the Tier II DEIS and the North Carolina process for property impacts was discussed in Section 4.11.6.2 of the Tier II DEIS.
A_SC6	Concerns that the project will reduce the values of adjacent properties (those properties to remain adjacent/near the future rail line). Statements speculating that properties adjacent to proposed stations will gain in value.	The project does not anticipate a loss in adjacent property values, as explained throughout the Tier II FEIS. Virginia and NCDOT Relocation policies indicate that compensation is only provided for acquisition of real property, not for any perceived depreciation in value. As discussed in the expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there is predicted to be substantial long term economic benefits from development of the HSR project, including (but not limited to) induced demand for office, retail, hotel and higher density housing near proposed train stations. As the demand for redevelopment/infill opportunities increase surrounding station locations, surrounding property values could increase over the long term. Further questions should be addressed to the NCDOT or VDOT Right-of-Way and Relocation Agents at the following - in North Carolina (http://www.ncdot.org/projects/roadbuilt/default.html) and in Virginia (http://www.virginiadot.org/business/row-default.asp).

Summary Comment ID	Summary Comment	Response
A_SC7	Concerns about division of neighborhoods in Sections R and S (Franklinton area); opposition to Alternative NC2 in Section S due to impacts to community.	In Section R, the rail designs for the preferred alternative (Alternative NC1) have been shifted to avoid impacts to the new subdivision off Montgomery Road. The preferred alternative for Section S (Alternative NC1) was selected based on strong public support (267 for Alternative NC1 compared to 3 for Alternative NC2). Also, based on coordination with the Town of Franklinton and public comments, the proposed improvements to Tanyard Street shown in the Tier II DEIS have been removed from the Project designs (i.e., no changes proposed for existing Tanyard Street). Instead, the proposed north-south connection between East Green Street and East College Street has been moved to an alignment near the eastern boundary of the Sterling Mill historic resource. The Project Team will continue to work with the Town of Franklinton regarding closures, bridges, and pedestrian connectivity within the town. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
A_SC8	Concerns about division of neighborhoods and other impacts from Alternative NC3 in Section V (Five Points area).	Alternative NC5 was developed in response to strong public opposition to Alternative NC3, and in response to the City of Raleigh's opposition to the disruption of traffic and pedestrian patterns in the area around Jones Street and Glenwood South presented by Alternatives NC1 and NC2. An iterative series of designs were submitted by citizens during the public comment period (dubbed NC4, and "Hybrid" alternatives by members of the public). These designs were given careful consideration, but found to be infeasible due to greater impacts. However, consideration of these proposals led to the development of Alternative NC5. Alternative NC5 also provides the benefit of avoiding both the CSX Capital Yard and the NS Glenwood Yard, which minimizes/reduces any potential conflicts between freight and passenger traffic in downtown Raleigh and is the preferred alternative for this Section. The route also avoids impacts to Fairview Road, Five Points, and Roanoke Park.
A_SC9	Concerns about community connectivity and pedestrian routes; would like to see pedestrian tunnels and/or other pedestrian accommodations.	Due to the fact that the Project returns rail to communities developed along rail corridors, it will have an effect on community connectivity. Steps have been taken throughout the Project to minimize negative effects. All of the new bridges will have sufficient width so as not to create a hazard for pedestrian movement. In locations where existing pedestrian accommodations (e.g., sidewalks) currently exist, these accommodations will be provided on the bridges/underpasses.* At other locations, pedestrian accommodations on the bridges/underpasses will be evaluated during final design based on the current NCDOT and Virginia pedestrian policies. In general, these policies consider the provision of pedestrian accommodations in more populous locations where pedestrian activity currently exists. In addition, throughout the corridor 2 existing pedestrian-only underpasses have been maintained and 12 new pedestrian-only bridges or underpasses are proposed for construction. The locations of these pedestrian crossings were determined in coordination with local government representatives and in response to comments from the public on the Tier II DEIS. Additional requests for pedestrian accommodations will be considered as they are received and added to the final designs where appropriate. * Section 4.16 of the Tier II DEIS mistakenly stated that all bridge designs would include sidewalks to facilitate pedestrian access. While pedestrians will be able to cross at all bridges, the inclusion of sidewalks will depend on the current NCDOT and Virginia pedestrian policy at the time the Richmond to Raleigh Project is constructed.
A_SC10	Concerns about emergency vehicle response times (general).	The inconvenience posed by consolidation of crossings is balanced by the benefit of having nearby grade-separated crossings that allow continued, unimpeded access to and from both sides of the rail line. Emergency responders can experience several minutes of delay while stopped at at-grade crossings to allow a train to pass through. A stopped train can cause further delays as it must accelerate very slowly near crossings to avoid occupying a crossing before gates come down. Section 4.11.3.3 of the Tier II DEIS provided a discussion of the effect that closing existing at-grade railroad crossings and consolidating access would have on police, fire and emergency services along the corridor. Chapter 4 of the Tier II FEIS contains additional discussion on this topic.

Summary Comment ID	Summary Comment	Response
A_SC11	Concerns about impacts to communities on the south side of Durant Road in Raleigh, NC (Section U).	In response to comments received from the public and local officials, a revised bridge and road alignment has been designed for this location. The revised designs were shown at a Public Update Meeting on May, 15, 2012, in Raleigh, NC and are shown in the Map Book Appendix of the Tier II FEIS. The road alignment and bridge over the railroad will be shifted to the north, away from the residential and commercial development on the south side of Durant Road. This northward shift will take the road alignment through City of Raleigh property where Raleigh Fire Station No. 22 is located, requiring the fire station to be relocated. This design has been coordinated with the City of Raleigh. The design calls for maintaining traffic on the existing Durant Road during construction of the bridge over the railroad.
A_SC12	Concerns about EMS response times in Franklinton, NC (Section S).	EMS response times for the Franklinton Fire Department were modeled in the Tier II DEIS (Section 4.3.11.3.3.5). The Town of Franklinton in Franklin County, NC, straddles the active CSX S-line about 30 miles northeast of Raleigh. The Franklinton Fire Department facility is very near and to the west of the existing rail ROW. The Project designs would affect several crossings that are proposed for consolidation, and approximately three roads that would be realigned. Changes in access could affect response time and coverage to the east of the corridor. However, there is very little change in the five-minute response area between the No Build and Build (with SEHSR) scenario. With the Richmond to Raleigh Project, the total area covered is 97 percent of the No Build coverage area; thus, there is very little difference between the EMS service area for Franklinton with or without the Project.
A_SC13	Concerns about potential impacts to Durant Nature Park in Raleigh, NC (Section U).	The Richmond to Raleigh Project rail alignment stays within the existing rail ROW in the vicinity of the Durant Nature Park. The northern entrance to the park is approximately one half mile west of the railroad on Durant Road; the southern entrance is approximately on quarter mile west of the railroad off Spottswood Street. No land would be required from the park and the Project would have no effect on access to the park or the use of its facilities.
A_SC14	Comments or concerns about consistency of SESHR with existing local land use, transportation, or comprehensive plans.	The project has coordinated with local municipalities to ensure that the Richmond to Raleigh Project is compatible to the extent possible with local transportation and long-range community goals. Information on the compatibility of the Project with state and local plans was included in Sections 4.11.4.1 to 4.11.4.4 of the Tier II DEIS. A summary of coordination with Federal, state, and local agencies was provided in Appendix A of the Tier II DEIS and Appendix A of the Tier II FEIS.
A_SC15	Concerns about benefits of SEHSR for municipalities without service stops.	The overall economic benefits of the Richmond to Raleigh Project were summarized in Section 4.11.1 of the Tier II DEIS. They include economic impacts/benefits during construction (jobs for individuals to upgrade the railroad road bed, install signal and safety devices, build frontage/service roads, improve grade separated crossings, and build bridges to replace grade crossings). It is anticipated that the impact of the construction would have additional positive impacts to area manufacturing, as well as restaurants, hotels, and other service industries. While operations benefits for communities with stations are obvious, the installation of high-speed compatible track will enable communities without stops to have benefits of potential freight access, including enhanced incentives for new industry locations. Some communities could also see the addition of local or regional passenger service in the future, once the overall system and capacity are in place. The SEHSR Corridor Tier I EIS estimated that in North Carolina alone, the SEHSR Corridor program would bring $700 million in new state and local tax revenues, $10.5 billion in employee wages over 20 years, over 31,400 new one-year construction jobs, more than 800 permanent new railroad operation positions, and nearly 19,000 permanent fulltime jobs from businesses which choose to locate or expand in North Carolina because of the SEHSR Corridor service. It can be reasonably assumed that similarly positive benefits would accrue in Virginia.
A_SC16	Concerns about potential increases in noise from freight trains idling in downtown Raleigh, NC.	The preferred alternative in Section V is Alternative NC5. With the separation of freight and passenger routes north of Jones St. under Alternative NC5, and the additional capacity created through the Project, it is anticipated that there will not be a substantial change in freight idling times in downtown Raleigh resulting from the Project.

Summary Comment ID	Summary Comment	Response
A_SC17	Concerns about emergency evacuations from Raleigh in the event of a nuclear disaster, hurricane or other major disaster.	In the event of a nuclear or natural disaster, SEHSR Corridor service could be temporarily suspended if appropriate, in accordance with disaster plans that will be part of the operations plan for the service provider. Freight railroad companies and passenger train operators have established plans that dictate actions that are taken in response to disasters or other emergencies. In the past, there have been instances where rail travel after disasters has provided one of the only links into an affected area.
A_SC18	Stated preference for VA2 for Section D (north of Alberta, VA) due to impacts of other alternatives, including impacts to farm land, timber land, and a Virginia Century Farm.	Alternative VA4 is the preferred alternative for Section D. It was developed after the public comment period for the Tier II DEIS, through coordination and consultation with Federal and state natural resource and historic preservation agencies. During discussions with these agencies, it was determined that none of the existing alternatives would satisfy the conflicting concerns of the agencies (endangered species and historic resources on Alternatives VA1/VA3 and wetland impacts on Alternative VA2). Alternative VA4 reduces impacts to wetlands (compared to Alternative VA2), while avoiding a Section 4(f) use of the Wynnhurst historic resource and impacts to a population of Federally listed Michaux's Sumac (*Rhus michauxii*).
A_SC19	Concerns about impacts to Rawlings Quarry (Lake Rawlings) near Alberta, VA (Section D).	The preferred alternative in this section is Alternative VA4. The VA4 Alternative stays within the existing railroad ROW in the vicinity of Rawlings Quarry, then shifts to the west (away from the quarry) to straighten a curve in the existing ROW south of the quarry. No impacts to the private quarry are anticipated.
A_SC20	Resident states that CSX abandoned the right of way (between Collier Yard south of Petersburg, VA, and north of Norlina, NC) and it should devolve to the existing landowners along the corridor.	Although CSX has removed the tracks in the area referenced in the comment, CSX retains exclusive ownership, with exceptions, of the S-line (i.e., fee simple) and leases a portion of the corridor for operation of an underground fiber optic cable. The exceptions are located along the Burgess Connector south of Collier Yard, where portions of the ROW have been sold to individual property owners for driveway access, and in Southside Virginia, where sections of the ROW have been sold to adjacent landowners, such as the 1.3 mile long section owned by Reedy Creek Farm Associates, at the Nottoway River in Dinwiddie County. Specific questions regarding ownership of the corridor will be addressed during the ROW acquisition phase of the Project.
A_SC21	Concerns about environmental justice.	The FEIS has been updated to include additional information on potential environmental justice impacts. Section 4.11.5.1 discusses corridor-wide impacts, and Section 4.11.5.2 discusses Community-level impacts.
A_SC22	Questions about why stream, wetland, and/or historic resource surveys were conducted in Mecklenburg County, VA, after the public hearings for the DEIS.	Based on comments received for the Tier II DEIS, potential design modifications were evaluated to determine if certain project impacts could be minimized or avoided. In areas where these evaluations extended beyond the previously determined Project Study Area, resource surveys were conducted to determine if these areas contained protected resources.
A_SC23	Concerns about a potential Jones Street Bridge and impacts to Hargett Street in downtown Raleigh, NC (Section V).	The preferred alternative for Section V (NC5) would close Jones Street and provide a pedestrian-only bridge that should minimize impacts to area businesses. Hargett Street would be closed under this alternative.
A_SC24	Concerns about noise and vibration associated with idling trains (in areas without stations).	The proposed Richmond to Raleigh Project would include increased sidings to allow freight and passenger trains to pass each other while minimizing idling and stopping; sidings will allow trains to pass each other without stopping.
A_SC25	Concerns about property specific impacts to Traylor Farms in Norlina, NC (Section M).	Several modifications were made to the proposed roadwork for the area around the Ridgeway community in response to comments on the Tier II DEIS. The Preferred Alternative has no direct impacts to the Traylor Farm property (see Appendix R, maps 101 and 102).

Summary Comment ID	Summary Comment	Response
A_SC26	Request to move intersection of Glebe Road and Hamilton Arms Road in DeWitt, VA, to minimize specific impacts to a parcel (Section C).	The alignment of Glebe Rd/Hamilton Arms Rd is constrained by the Bowen House, a property eligible for the National Register of Historic Places. Impacts to the septic system on this property will be evaluated during final design and appropriate mitigation/compensation will be determined.
A_SC27	Question regarding access to US1 in Middleburg, NC (Section O).	In Middleburg, access from US-1 across the existing CSX ROW is unaffected by Alternative NC3, the preferred alternative in Section O.
A_SC28	Concerns about impacts to Franklin Farm parcel in Henderson, NC (Section O).	The recommended, preferred alternative for this section is NC3, which would minimize impacts to Franklin Farm.
A_SC29	Noted the proposed SEHSR project does not provide stops in certain areas.	Some communities could also see the addition of local or regional passenger service in the future, once the overall system and capacity are in place. The location of stops along the corridor would be determined by the operating railroad, in coordination by the governments at the potential station locations, based upon the ridership demands.
A_SC30	Questions about construction, maintenance, and ownership of access roads and driveways to private parcels whose previous access to their property would be closed/rerouted by proposed designs.	Owners of parcels with current, legal access to existing roads will have access to their parcels maintained (or will be compensated if it is not possible to maintain the access); driveway access to these parcels will be determined during final design when survey level data is available. Questions related to ownership of land within the existing rail corridor and/or easements across railroad rights of way can be directed to the freight railroads - CSX: (904) 359-3200 or Norfolk Southern: (404) 962-5742.
A_SC31	Questions about who owns existing railroad ROW; statements by private property owners claimed ownership of land the public hearing maps identified as railroad ROW.	Mapping used in this study was based on county tax parcel data, as well as railroad valuation maps. In most cases along this particular rail corridor, CSX maintains exclusive ownership of the railroad ROW (in fee simple). However, there are some instances where portions of the former railroad ROW have been sold to other entities. More detailed survey will be conducted during the ROW acquisition stage of the Project to verify ownership.
A_SC32	Questions regarding who will own purchased ROW and whether rail lines will have track rights.	It is considered most likely that ROW purchased for the Project will be owned by the states or other public entity, and will be determined when funding for the Project is secured. Throughout the entire project corridor, the railroad has been designed for mixed use (i.e., passenger and freight).
A_SC33	Concerns about train whistle/horn noise.	For general safety, trains are required to sound horns as they approach an at-grade crossing. The separation of road and rail developed for the SESHR project means that trains will not be required to whistle at crossings.
A_SC34	Assertion that regional mobility should be the primary goal of the project and that impacts are secondary in importance.	Comment noted.
A_SC35	Assertion that the impacts of the project outweigh the benefits.	Comment noted.
A_SC36	Concerns about division of neighborhoods in La Crosse, VA (Section I).	The designs presented in the Tier II DEIS are the result of an iterative design process developed through significant coordination with the Town of La Crosse, with a goal of preserving connectivity across the railroad. The Richmond to Raleigh Project plans shown in the Tier II DEIS provide for a bridge and an underpass half a mile apart within the town limits (the town limits are less than one mile across), as well as a pedestrian/bicycle underpass in the center of town for the Tobacco Heritage Trail.
A_SC37	Statements about impacts to specific properties with no questions.	Comment investigated and noted.
A_SC38	General comment on impacts with no question.	Comment noted.

Summary Comment ID	Summary Comment	Response
A_SC39	Questions asking for clarification of impacts to a specific parcel.	Information was provided by the Project team directly to the commenter.
A_SC40	Property specific question on impacts to Heartsfield House c. 1803 property and other properties along Ligon Mill Road in Wake Forest, NC (Section U).	Numerous alternative designs have been evaluated in the vicinity of the Heartsfield House in an effort to reduce property impacts; however, the designs are constrained by the curvature of Ligon Mill Road, as well as dense residential development on the east side of the railroad. The alternative designs were found not to be practicable; however, efforts will be made to minimize impacts from the roadwork during the final design stage of the Project when survey level data is available. The proposed new access road (northward extension of Steeple Run Drive) east of the railroad between Seawell Drive and Ligon Mill Road shown in the Tier II DEIS was designed to provide access east of the railroad in conjunction with the proposed closing of Seawell Drive and nearby driveways. In response to requests from property owners, the road has been redesigned. The road alignment was shifted westward, closer to the railroad to minimize property impacts and minimize impacts to a family cemetery. Adjustments to property access at the northern end will be handled during the ROW phase of the Project. The revised impacts associated with these design changes are discussed in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
A_SC41	Request for pedestrian crossing to allow access to Ettrick Community Recreational Park (Section CC).	Due to the fact that there is no location near the park where public ROW exists on both sides of the railroad (which would allow public access), it was not possible to design a public pedestrian crossing in this area.
A_SC42	Property specific question on impacts to parcel off Defense Road (Section CC).	The Richmond to Raleigh Project would require ROW along Defense Road in order to add a second railroad bridge over Defense Road (directly adjacent to the existing railroad bridge).
A_SC43	Property specific question on impacts to family cemetery off Keelers Mill Road in DeWitt, VA (Section C).	The road designs in this area were revised to avoid impacts to the cemetery. Refer to Section 2.2.9 for additional discussion, and Appendix R for a map of the revised designs.
A_SC44	Requests use of rail line for areas not served by SEHSR stations.	It is anticipated that the Richmond to Raleigh Project corridor accommodate additional regional or commuter service in the corridor. However, such development is not part of the undertaking described in this FEIS.
A_SC45	Requests for number of relocations near Kittrell, NC (Section Q).	Relocations are included in the Executive Summary and Chapter 4 of the Tier II DEIS (Page ES-30 and 4-130) and the Tier II FEIS in the corresponding sections.
A_SC46	Concerns about a specific parcel between Alberta, VA, and La Crosse, VA, in Section G that would be impacted by Alternative VA3.	The preferred alternative for Section G is VA3, which would impact the parcel in question. The selection of VA3 was based on the balancing of conflicting impacts (historic resources and streams) among the four project alternatives in this section. All alternatives would have similar impacts to private properties. VA3 was selected in coordination with state and Federal natural and historic resource agencies who noted that although it would impact the Tourist Guest House historic resource, mitigation could be used to minimize the impacts. Compared to the three other alternatives, Alternative VA3 avoids impacts to two other historic resources (Orgain House and Oak Shades) and minimizes impacts to streams.
A_SC47	Concerns about impacts associated with the proposed closure of Wolfpack Lane in Raleigh, NC (Section V).	In response to comments on the Tier II DEIS from local officials and the public, a bridge over the railroad was designed for Wolfpack Lane. The design was coordinated with City of Raleigh staff, and the public was invited to comment on the alternative at an update meeting on May 15, 2012. The design, which accommodates vehicular, pedestrian and bicycle traffic was favorably received, and has been added to the Tier II FEIS. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.

Summary Comment ID	Summary Comment	Response
A_SC48	Concerns about impacts to Porto Fino subdivision in Wake Forest, NC (Section U).	Numerous alternative designs have been evaluated in the vicinity of the Porto Fino subdivision in an effort to reduce property impacts, but the designs are constrained by the curvature of Ligon Mill Road, as well as dense residential development on the east side of the railroad. Alternative designs were found not to be practicable; however, efforts will be made to minimize impacts from the roadwork during the final design stage of the Project when survey level data is available.
A_SC49	Concerns about community impacts to if the Marina Drive crossing in Richmond, VA is closed (Section AA).	Marina Drive currently passes under the existing Falling Creek railroad bridge. There are no proposed changes to this bridge under the Richmond to Raleigh Project. Thus, Marina Drive would not be impacted by the Project.
A_SC50	Concerns about rerouting of Centralia Road and Chester Road in Chester, VA (Section BB).	Numerous alternative designs have been evaluated at this location in an effort to reduce property impacts, but the designs are constrained by nearby development and the close proximity of three historic properties (Centralia Post Office, Ragland House, and Circle Oaks) that are afforded protections under Section 106 of the National Historic Preservation Act of 1966 and Section 4(f) of the Department of Transportation Act of 1966. The designs for this location are the result of an iterative design process developed through extensive coordination with Chesterfield County.
A_SC51	Concerns about closing Elm Avenue in Wake Forest, NC (Section U).	In response to comments received from the public and local officials regarding the closure of Elm Avenue proposed in the Tier II DEIS, a road underpass was subsequently designed that would allow Elm Avenue to remain open. This design was presented at a Project Update Meeting on May 15, 2012. The response from both the public and Town of Wake Forest officials was that the impacts resulting from the design were too severe. These impacts included the relocation of businesses on Elm Avenue and impacts to several properties along White Street, including the Chamber of Commerce. Based on further coordination with the Town of Wake Forest, it was determined the most appropriate design for Elm Avenue would be to close the crossing to vehicular traffic, but provide for non-vehicular accessibility with a pedestrian bridge. The pedestrian bridge would not result in the same degree of property impacts as the vehicular underpass; however, it would similarly preclude vehicular access to Railroad Street (which is located within the existing, active CSX railroad ROW). In order to provide a means of entry to the properties along Railroad Street, the new access road shown at the Public Update Meeting is needed. This access road would result in the potential relocation of one business, as well as property impacts to the rear of the Railroad Street properties. Several alternative designs for this access road were reviewed in coordination with the North Carolina Historic Preservation Office and the design presented in the Tier II FEIS was determined to minimize impacts to the Wake Forest Historic District. It may be possible to avoid relocation of the business during final design (when more accurate survey level data is available); however, it is not known at this time.
A_SC52	Concerns or questions about receiving adequate/fair value for full or partial acquisition or condemnation or imminent domain of properties for the project. Suggestions regarding land to be used by the project (e.g., recommendations of parcel splits, sites available for acquisition, offers of land for sale).	The processes that Virginia and North Carolina have established for ROW Acquisition are described in Section 4.11 of the Tier II FEIS. Wherever possible, NCDOT and Virginia try to find an agreeable price for both the state and the property owner. When such a price cannot be reached, the legal system is used to ensure a fair market price for the property owner. Property owners are encouraged to obtain their own property appraisal for use in negotiating fair market value on their property with ROW agents. Property acquisition policies can be found under Right-of-Way at: http://www.virginiadot.org/business/resources/property_owners2006.pdf (for VA) and http://www.ncdot.gov/projects/roadbuilt/ (for NC). In all cases the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) will be applied as directed by Federal law. It is not the policy of Virginia or NCDOT to provide compensation for homes and businesses if no acquisition of property takes place.

Summary Comment ID	Summary Comment	Response
A_SC53	Question about possible legal action related to fiber optic cable being installed by telecommunication facilities without the consent of property owners.	Although CSX has removed the tracks in the area referenced in the comment, CSX retains exclusive ownership, with exceptions, of the S-line (i.e., fee simple) and leases the corridor for operation of an underground fiber optic cable. The exceptions are located along the Burgess Connector south of Collier Yard, where portions of the ROW have been sold to individual property owners for driveway access, and in Southside Virginia, where sections of the ROW have been sold to adjacent landowners, such as the 1.3 mile long section owned by Reedy Creek Farm Associates, at the Nottoway River in Dinwiddie County. Fiber optic cable was not installed as part of the Richmond to Raleigh Project.
A_SC54	Assertion that in North Carolina the railroad needs to show proof of ownership of property after being abandoned more than the 7 years or it would revert to adjacent private land owners. Request for information about House Bill 116.	NC Statute 1-44.1 currently reads, "any railroad which has removed its tracks from a ROW and has not replaced them in whole or in part within a period of seven (7) years after such removal and which has not made any railroad use of any part of such ROW after such removal of tracks for a period of seven (7) years after such removal, shall be presumed to have abandoned the railroad ROW." This presumption applies only to rights of way held as easements (i.e., not as fee simple ownership) per *McLaurin v. Winston-Salem Southbound Railway Co.* (1988). Although CSX has removed the tracks along portions of the Project corridor, they retain exclusive ownership, with a few exceptions, of the S-line (i.e., fee simple) and lease the corridor for operation of an underground fiber optic cable. The exceptions are located along the Burgess Connector south of Collier Yard, where portions of the ROW have been sold to individual property owners for driveway access, and in Southside Virginia, where sections of the ROW have been sold to adjacent landowners, such as the 1.3 mile long section owned by Reedy Creek Associates, at the Nottoway River in Dinwiddie County. NC House Bill 116 (Railroad Corridor Management) did not apply to rights of way owned in fee simple. It proposed replacing the 7 year abandonment provision with the following - "A railroad shall not be found to have abandoned a ROW or any parcel of land in which it holds an easement interest unless the railroad first records a certificate of abandonment in the office of the register of deeds for the county where the ROW is located. Upon the filing of the certificate of abandonment, the ROW or parcel of land is deemed abandoned." This Bill passed the House, but not the Senate; therefore, it was not ratified into law. It was last referred to judiciary committee in May 2009. All questions related to property ownership will be handled during the ROW acquisition phase of the Richmond to Raleigh Project. Questions related to ownership of land within the existing rail corridor and/or easements across railroad rights of way can be directed to the freight railroads - CSX: (904) 359-3200 or Norfolk Southern: (404) 962-5742.
A_SC56	Concerns about impacts of Alternative NC1/NC3 in Norlina, NC (Section M) and a stated preference for Alternative NC2.	In the Norlina area (Section M), the preferred alternative is NC1. Refer to Chapter 2 of the Tier II FEIS for an explanation of decision regarding the preferred alternative.
A_SC57	Question regarding when offers would be made on impacted properties and whether advanced acquisition is possible.	ROW negotiations on impacted properties cannot begin until after the ROD has been signed and funding for ROW purchase is available. Although both Virginia and NCDOT have advanced acquisition policies, these policies cannot be utilized without a source of funding and at this time none exists.
A_SC58	Concerns about potential impacts associated with Alternative NC2 along Fleming Drive in Youngsville, NC (Section T).	The preferred alternative in this section is Alternative NC1. Refer to Chapter 2 of the Tier II FEIS for an explanation of decision regarding the preferred alternative. Note that in response to comments from the public and from the Town of Youngsville that the designs for Flemming Road have been modified. The revised impacts associated with these design changes are discussed in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.

Summary Comment ID	Summary Comment	Response
A_SC59	Concerns that the proposed project would make it impossible for home and business owners to sell or refinance homes in the area if they are proposed to be impacted by the project.	North Carolina and Virginia will seek ROW and construction funding based on state rail priorities. The ROW acquisition phase for this Project cannot begin until the FRA issues a ROD, at which point the established ROW acquisition process in each state will be followed. No construction funding has been identified for this Project at the state or Federal level at this time. ROW acquisition is based on the fair market value of the property, which considers all improvements at their current value. North Carolina and Virginia encourage owners and real estate professionals to adhere to all laws and rules in their state regarding disclosure of information to prospective buyers. They are encouraged to check those laws and rules by contacting their appropriate state real estate licensing agency or county tax office when they list their home for sale. It should be noted that "hardship" ROW acquisition typically cannot apply to the Richmond to Raleigh Project until funding is established, which is contingent on the completion of the environmental review process.
A_SC60	Concerns about existing problem with all-terrain vehicles (ATV) and other trespassers on railroad ROW and adjacent private property where tracks have been removed.	It is anticipated that the re-introduction of train operations within the section of the corridor referenced by the commenter will help reduce problems with trespassing on private property.
A_SC61	Concerns about potential impacts to farmland currently set aside under USDA or county farmland protection programs.	During final design, efforts will be made to minimize the impacts to private property to the extent possible. If it is necessary for the Richmond to Raleigh Project to acquire land protected under Federal or state farmland protection programs, the Project will coordinate with the applicable agencies and follow all Federal and state regulations, including implementation of mitigation strategies as required.
A_SC62	Concerns about impacts to The Factory baseball fields in Wake Forest, NC (Section U).	Refer to Chapter 2 of the Tier II FEIS for an explanation of the decision regarding the preferred alternative, which is based primarily on the need to balance the degree of impacts to the ball fields and a nearby private school. The preferred alternative in Section U is NC1, which minimizes impacts to the referenced ball fields.
A_SC63	Concerns about impacts of Alternative NC2 near Norlina, NC, in Section M.	In the Norlina area (Section M), the preferred alternative is NC1.
A_SC64	General comment in support of the project.	Comment noted.
A_SC65	Concerns about the effect of Alternative NC3 to businesses using Norfolk Southern's service on their operations in downtown Raleigh, NC (Section V).	After the public hearings in 2010, a new alternative (NC5) was developed to address the various concerns expressed by the public and Norfolk Southern for downtown Raleigh. This alternative is not anticipated to affect Norfolk Southern's ability to serve its Raleigh customers.
A_SC66	Concerns about traffic and safety with proposed new access between US-1 Business and Bobbitt Road in Kittrell, NC (Section Q).	The proposed new intersection across from Wildlife Lane is approximately 1,500 feet south of the existing intersection of US-1 Business and Peter Gill Road. The new intersection is safer than the existing one because it has better spacing between intersections and turn lanes have been provided.
A_SC67	Concerns from Reedy Creek Farm Associates, LLC, regarding impacts to property immediately north of the Nottoway River near McKenney, VA (Section C). Requests clarification if it is possible to bypass the property and, if not, to have advance acquisition of the property.	Due to the need to use the existing railroad alignment over the Nottoway River (i.e., it is a design control point), it is not prudent to bypass the Reedy Creek Farm property. Any bypass of the property would cause impacts to the natural and human environment for a significant distance both north and south of the river. Although both VDOT and NCDOT have advanced acquisition policies, these policies cannot be utilized without a source of funding. Offers will be made on impacted properties after the ROD has been signed and funding for ROW purchase is available.

Summary Comment ID	Summary Comment	Response
A_SC68	The DEIS analysis of land use impacts should be expanded and the total acres of farm land taken should be provided. Encourage further efforts to reduce or mitigate land use impacts (beyond using existing ROW).	The total amount of acres projected to be impacted (additional ROW to be acquired), by alternative, is included in Chapter 4 of the Tier II FEIS. Where a preferred alternative has greater ROW impacts than another alternative, it has the positive benefit of providing faster speeds, which better meets the Purpose and Need for the Project, or it minimizes impacts to other resources (e.g., streams, wetlands, historic sites). In both the Tier II DEIS and FEIS, some land use impacts are calculated by acreages (prime and important farmland, forested uplands, wetlands), while other land use impacts (e.g., residential, business, parks) are captured by the number of relocations or sites impacted. With regard to impacts to farmland, Section 4.3 of the Tier II FEIS provides an analysis of impacts to Prime and Important Farmlands as (well as farmlands of statewide and local importance) in accordance with the requirements of the Farmland Protection Policy Act (FPPA) of 1981 (7 U.S.C. 1202(a)). All efforts will be made to minimize land use impacts, where practicable, during the final design process when more detailed survey information is available.

Code B – Comments Related to Crossing Closures and/or Traffic

Summary Comment ID	Summary Comment	Response
B_SC1	Concern about the effect that crossing closures will have on connectivity and pedestrian access across the railroad and/or that the SEHSR project should mitigate for the impact that railroad crossing closures have on pedestrian activity in the project corridor.	The Project designs include more than 80 new roadway bridges or underpasses crossing the railroad corridor throughout the length of the Project. As discussed in Section 4.11.2.2. of the Tier II DEIS, the locations of these bridges/underpasses were determined in coordination with local government representatives, who provided input on local conditions, including pedestrian activity. All of the new bridges will have sufficient width so as not to create a hazard for pedestrian movement. In locations where existing pedestrian accommodations (e.g., sidewalks) currently exist, these accommodations will be provided on the bridges/underpasses.* At other locations, pedestrian accommodations on the bridges/underpasses will be evaluated during final design based on the current NCDOT and Virginia pedestrian policies. In general, these policies consider the provision of pedestrian accommodations in more populous locations where pedestrian activity currently exists. The SESHR designs also include 12 new pedestrian-only crossings of the rail corridor within municipalities to provide increased pedestrian access. The locations of these pedestrian crossings were determined in coordination with local government representatives and in response to comments from the public on the Tier II DEIS. Additional requests for pedestrian accommodations will be considered as they are received and added to the final designs where appropriate. * Section 4.16 of the Tier II DEIS mistakenly stated that all bridge designs would include sidewalks to facilitate pedestrian access. While pedestrians will be able to cross at all bridges, the inclusion of sidewalks will depend on the current NCDOT and Virginia pedestrian policy at the time the Richmond to Raleigh Project is constructed.
B_SC2	Question regarding why the SEHSR corridor has been designed to be completely grade-separated rather than retaining some existing at-grade crossings using improved signal systems with longer crossing gates.	The overarching philosophy of the design of the Richmond to Raleigh Project, is to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. At-grade crossings inherently have risk of train-automobile collisions. A collision at a crossing on a higher speed track is a significant event often causing a death in the vehicle and in the case of larger, heavier trucks, the possible derailment of the train and associated injuries. Chapter 2 of the Tier II DEIS provides a description of reasons for closing at-grade crossings: absolute collision avoidance; elimination of railroad/roadway traffic issues; elimination of possible system failure; elimination of horn noise; elimination of easy trespasser access; improved long term cost of maintenance; allows for future speed increases. For these reasons, at-grade crossings fail to meet one of the purposes of the Richmond to Raleigh Project, which is to increase the safety and operability of the transportation system within the travel corridor.
B_SC3	Concern expressed about impacts to traffic and safety resulting from proposed closure of existing at-grade crossings at College Street and Hawkins Street in Franklinton, NC (Section S).	Section 4.14.2.8.2 of the Tier II DEIS provided information on traffic analysis for this area resulting from the proposed roadwork designs. The analysis showed that all intersection movements will operate with a stable flow under the proposed project. In response to public comments, there have been some modifications to proposed roadwork in Franklinton; however, those changes are not anticipated to have a substantial impact on traffic along Hawkins or College Streets. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. Note that in addition to the improvement of an existing underpass at Green Street (one block north of College Street), and the new bridge over the railroad at Cedar Creek Road to the south, pedestrian-only underpasses are proposed for College Street, Hawkins Street, and Mason Street.

Summary Comment ID	Summary Comment	Response
B_SC4	Concerned about the effect that the SEHSR designs will have on emergency response times in Franklinton, NC (Section S).	EMS response times for the Franklinton Fire Department were modeled in the Tier II DEIS (Section 4.3.11.3.3.5). The Town of Franklinton in Franklin County, NC, straddles the active CSX S-line about 30 miles northeast of Raleigh. The Franklinton Fire Department facility is very near and to the west of the existing rail ROW. The Project designs would affect several crossings that are proposed for consolidation, and approximately three roads that would be realigned. Changes in access could affect response time and coverage to the east of the corridor. However, there is very little change in the five-minute response area between the No Build and Build (with SEHSR) scenario. With the Richmond to Raleigh Project, the total area covered is 97 percent of the No Build coverage area; thus, there is very little difference between the EMS service area for Franklinton with or without the Project.
B_SC5	Concern expressed that adding rerouted traffic to Green Street in Franklinton, NC, will present a danger to residents (Section S).	The designs for Green Street meet the American Association of State Highway and Transportation Officials (AASHTO) Federally adopted design standards. The existing underpass at Green Street is proposed to be re-built with greater horizontal clearance, creating safer access across the railroad for motorists, pedestrians and bicyclists. The proposed designs for Green Street in the downtown area call for the construction of curb and gutter, providing improved safety for pedestrians and bicyclists.
B_SC6	Expression of opposition to the closure of the Wolfpack Lane at-grade crossing in Raleigh, NC, and/or a request for a pedestrian/bicycle overpass or another transportation connection in this vicinity (Section V).	In response to comments on the Tier II DEIS from local officials and the public, a bridge over the railroad was designed for Wolfpack Lane. The design was coordinated with City of Raleigh staff, and the public was invited to comment on the alternative at an update meeting on May 15, 2012. The design which accommodates vehicular, pedestrian and bicycle traffic was favorably received, and has been added to the Tier II FEIS. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC7	General concern about impacts to police/fire/emergency service providers; concern that proposed closure of at-grade crossings will result in slower response times for emergency services. General concern about inconvenience of having to travel additional distance because of inability to cross the tracks at grade.	The inconvenience posed by consolidation of crossings is balanced by the benefit of having nearby grade-separated crossings that allow continued, unimpeded access to and from both sides of the rail line. Emergency responders can experience several minutes of delay while stopped at at-grade crossings to allow a train to pass through. A stopped train can cause further delays as it must accelerate very slowly near crossings to avoid occupying a crossing before gates come down. Section 4.11.3.3 of the Tier II DEIS provided a discussion of the effect that closing existing at-grade railroad crossings and consolidating access would have on police, fire and emergency services along the corridor. Chapter 4 of the Tier II FEIS provides information about changes in impacts resulting from modifications to roadwork that were made for the Tier II FEIS.
B_SC9	Expression of opposition to the proposed closure of the Old Lane at-grade crossing in Chester, VA, and/or concerned about ease of entry onto Chester Road from Hopkins Road (Section BB).	The Richmond, VA, to Raleigh, NC, Richmond to Raleigh Project has been designed to consolidate and grade separate (through bridges or underpasses) all railroad-roadway crossings. A grade separation in the vicinity of Old Lane could not be provided due to several design constraints, most notably the location of the rail interlocking that trains use to switch between the CSX A-line and S-line; therefore, the Project proposes to close the existing at-grade crossing. Additional traffic analysis for this area was conducted following the Tier II DEIS, which indicated a need for additional traffic accommodations such as turn lanes for the Hopkins Road and Centralia Road intersection. The road work designs have been revised to include these accommodations. These design revision were shown at a Public Update Meeting on February, 26, 2013, 2012 in Chesterfield, VA. Refer to Chapter 4 of the Tier II FEIS for information about impacts, including a discussion about the traffic analysis. Maps can be found in the Map Book Appendix of the Tier II FEIS.

Summary Comment ID	Summary Comment	Response
B_SC10	Expression of concern about impacts to local traffic in the downtown Raleigh, NC, area near Five Points, Roanoke Park, Fairview Road, and the Norfolk Southern rail yard under Alternative NC3 (Section V).	The preferred alternative in this section (Section V) is Alternative NC5, which was developed in response to comments received from the public and from local officials. Under NC5, the existing road network in the Five Points, Roanoke Park, Fairview Road and the NS Yard area will remain unchanged. The new alternative is discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC11	Concern expressed about an increase in traffic on Fleming Road/Nassau Street in Youngsville, NC, resulting from the DEIS designs utilizing Nassau Street as a detour for Highway NC-96 Hwy during construction of Main Street bridge over the railroad (Section T).	In response to comments from individuals and from local officials, the roadwork for Youngsville, NC, that was proposed in the Tier II DEIS has been redesigned. The new designs utilize Cross Street as a connection to Highway NC-96 rather than Nassau Street, during the construction of the Main Street bridge over the railroad. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. Based on these new designs, and the fact that Cross Street will be signed as a detour route for NC-96, no substantial increase in traffic on Nassau Street or Fleming Road northward is anticipated to occur as a result of the Richmond to Raleigh Project.
B_SC12	Concern about traffic delays during construction, including questions regarding how traffic will be maintained on-site throughout construction.	In some locations, traffic will be maintained on-site during a staged construction process. In some locations an off-site detour will be used. Refer to Chapter 4 of the Tier II FEIS for information regarding planned detours and maintenance of traffic for specific locations during construction of the Project.
B_SC13	General concern about impacts to traffic in Chesterfield County, VA, including questions about whether or not traffic analysis was conducted for this area (Sections AA, BB, CC).	Chapter 3 of the Tier II DEIS contains information about existing traffic in the Chesterfield area and Chapter 4 of the Tier II DEIS provides an overview of the traffic analysis that was conducted for the area. In response to comments from individuals and from local officials, changes were made to some of the roadwork that was shown in the Tier II DEIS for Chesterfield County, and additional traffic studies were conducted. The revised designs were developed in coordination with the County. The results of the additional traffic analysis are contained in Chapter 4 of the Tier II FEIS.
B_SC14	Statement of opinion regarding crossing closures and grade-separated crossings (bridges and underpasses), and/or support for closing crossings.	Comment noted.
B_SC15	Concern about the effect that the SEHSR designs will have on emergency response times in Youngsville, NC (Section T).	Section 4.11.3.3 of the Tier II DEIS provided a discussion of the effect that closing existing at-grade railroad crossings and consolidating access would have on police, fire and emergency services. A service area analysis was conducted for seven facilities along the corridor that are representative of worst-case changes; Youngsville was one of the seven analyzed. The analysis showed that there is no negative impact to the EMS service response area for the Youngsville EMS Rescue Station in Franklin County under the Project designs and there are actual improvements in response coverage area.
B_SC16	Concern about the effect that the SEHSR designs will have on emergency response times in Henderson, NC (Section P).	Section 4.11.3.3 of the Tier II DEIS provides a discussion of the effect that closing existing at-grade railroad crossings and consolidating access would have on police, fire and emergency services. A service area analysis was conducted for seven facilities along the corridor that are representative of worst-case changes; Vance County Ambulance and Fire Service in Henderson was one of the seven analyzed. The analysis showed that with the Project designs, the total area covered in a 5 minute response time is 93 percent of the No Build Coverage area, thus there is very little change in the five-minute response area between a No Build and the designs for the Richmond to Raleigh Project Build scenario shown in the Tier II DEIS. In response to comments following publication of the Tier II DEIS, modifications were made to some of the proposed roadwork designs in Henderson. Another service area analysis was conducted to account for the revisions to the roadwork. The analysis revealed no substantial difference in a 5 minute response time coverage area under the proposed designs. Chapter 4 of the Tier II FEIS contains additional discussion on this topic.

Summary Comment ID	Summary Comment	Response
B_SC17	Concern about slowed emergency response times to property located between Henderson, NC, and Kittrell, NC, resulting from the closure of the private rail crossing near rail milepost S-119.5 (Section Q).	The nearest proposed grade separated crossing is located approximately 1/2 mile south of the existing private crossing that is proposed to be closed. No substantial increase in emergency response time is anticipated.
B_SC18	Concern about emergency access to a property that is separated from US-1 by the existing railroad corridor in Middleburg, NC (Section O).	The preferred alternative in this area (Section O) is Alternative NC3. In Middleburg, NC, Alternative NC3 is on new alignment east of town. Access from US-1 across the existing CSX ROW is unaffected by the recommended Alternative NC3 designs. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC19	Request to maintain access across the railroad at Elm Avenue in downtown Wake Forest, NC, for the sake of local businesses and/or emergency responders who are located on the east side of the railroad (Section U).	In response to comments received from the public and local officials regarding the closure of Elm Avenue proposed in the Tier II DEIS, a road underpass was subsequently designed that would allow Elm Avenue to remain open. This design was presented at a Project Update Meeting on May 15, 2012. The response from both the public and Town of Wake Forest officials was that the impacts resulting from the design were too severe. These impacts included the relocation of businesses on Elm Avenue and impacts to several properties along White Street, including the Chamber of Commerce. Based on further coordination with the Town of Wake Forest and correspondence dated June 26, 2012, it was determined the most appropriate design for Elm Avenue would be to close the crossing to vehicular traffic, but provide for non-vehicular accessibility with a staircase-only pedestrian bridge to minimize impacts. The pedestrian bridge would not result in the same degree of property impacts as the vehicular underpass; however, it would similarly preclude vehicular access to Railroad Street (which is located within the existing, active CSX railroad ROW). In order to provide a means of entry to the properties along Railroad Street, the new access road shown at the Project Update Meeting is needed. This access road would result in the potential relocation of one business, as well as property impacts to the rear of the Railroad Street properties. Several alternative designs for this access road were reviewed in coordination with the North Carolina State Historic Preservation Office and the design presented in the Tier II FEIS was determined to minimize impacts to the Wake Forest Historic District.
B_SC20	General question regarding where fencing will be used, and how it will be used in conjunction with bridges and overpasses, and/or concern that fencing will inhibit pedestrian movement across the railroad.	It is important to note that it is unsafe for pedestrians to cross the railroad (either existing or proposed with this Project) in locations that are not legal crossings; note that it is also considered trespassing. However, the ability of pedestrians to move safely across the HSR corridor is an important design criterion of the Richmond to Raleigh Project. In developed areas along the corridor, fencing may be used to direct pedestrians to bridges/underpasses that have been designed to accommodate pedestrian access. Specific locations for fencing will be determined later during final design in coordination with the owner of the railroad, the operator of the railroad, and local governments. Refer to Chapter 4 of the Tier II FEIS for additional information.
B_SC21	Question regarding whether or not the SEHSR designs provide a pedestrian bridge near the Ettrick Community Recreational Park in Ettrick, VA, to accommodate the residents of the College Park subdivision who currently use a shortcut across the tracks (near the existing train station). Request that if a pedestrian bridge is included at this location, that it also span Laurel Road (Section CC).	A pedestrian crossing was studied for the area between Dupuy Road north of the park, and Chesterfield Avenue/River Road to the south, where no legal crossing currently exists. Due to the fact that there is no location near the park where public ROW exists on both sides of the railroad (which would allow public access), it was not possible to design a public pedestrian crossing in this area. This project calls for the existing Chesterfield Avenue/River Road bridge (with existing sidewalks) located approximately 0.18 miles to the south to be retained, and for a bridge to be built approximately 0.5 miles to the north at Dupuy Road with sufficient width so as not to create a hazard for pedestrian movement. Specific pedestrian accommodations on bridges/underpasses will be evaluated during final design based on the current VDOT pedestrian policies.

Summary Comment ID	Summary Comment	Response
B_SC22	Request that a crossing at Chavasse Avenue in Henderson, NC, be maintained (Section P).	The project has been designed to be completely grade-separated. Multiple designs for were considered for this location; however, due to constructability issues related to existing grades, it was not possible to provide a bridge or underpass at Chavasse Avenue while maintaining the existing side street intersections. Cutting off these side streets would alter the road network in the town to such a degree as to render the option imprudent. However, to facilitate continuation of east/west connectivity in this area, a new bridge over the railroad is proposed approximately 0.35 miles south for an extension of Alexander Avenue. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC23	Concern expressed about impacts to Williams Street in Henderson, NC, and/or a request to maintain this street as a north/south corridor through town on the east side of the railroad tracks (Section P).	In response to comments from the public and from officials with the City of Henderson, NC, several revisions have been made to the proposed roadwork designs that were shown in the Tier II DEIS. The new designs retain the Williams Street/ Nicholas Street corridor from Lowery Street on the northern end, through an intersection with a re-aligned JP Taylor Road at the southern end of the city. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC25	Expression of opposition to the potential loss of east/west pedestrian and vehicular connectivity at Mason Street in downtown Franklinton, NC, that would result from the proposed crossing closure (Section S).	The DEIS proposed a pedestrian bridge at Mason Street to maintain pedestrian connectivity at Mason Street. Many design concepts were developed for a vehicular bridge or underpass at Mason Street both before the publication of the Tier II DEIS and afterwards. Designs in this location are constrained by the Franklinton Historic District (eligible for the National Register of Historic Places), existing development, and the surrounding topography. Refer to 4.12 of the Tier II DEIS for more information about the protections provided to eligible resources by Section 106 of the National Historic Preservation Act of 1966. In consideration of current and projected traffic volumes, and the location of grade separated crossings approximately 0.7-mile north of Mason Street (proposed) and 0.15-mile south of Mason Street (existing at NC 56/Green Street), it was determined that the impacts associated with a vehicular bridge or underpass at Mason Street were unacceptable from a Section 106 perspective, provided that intersection improvements at Main Street and Green Street could accommodate the increased traffic and that a newly developed pedestrian underpass design be included in the Project designs. A subsequent analysis verified that intersection improvements can accommodate the traffic. Designs for a pedestrian underpass at Mason Street incorporating both ramps and steps have been included in the Tier II FEIS. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC26	Concern about the impact to school bus routes in Franklinton, NC (Section S).	Although school bus routes were not specifically analyzed, Section 4.14.2.8.2 of the Tier II DEIS provided information on the traffic in this area resulting from the proposed roadwork designs. The analysis shows that in Franklinton, all intersection movements will operate with a stable flow under the proposed project. In response to public comments, there have been some modifications to proposed roadwork in Franklinton. The changes were included in new traffic analysis conducted for the Tier II FEIS. The results show that the changes were not found to have a substantial impact on traffic flow through the town. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC27	Request for an additional pedestrian crossing within the Town of Youngsville, NC (Section T).	In coordination with local officials, an additional pedestrian crossing has been added to the designs in Youngsville, NC. A Pine Street pedestrian bridge over the railroad has been included in the Tier II FEIS. The new design is discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. A map can be found in the Map Book Appendix of the Tier II FEIS.

Summary Comment ID	Summary Comment	Response
B_SC30	Question regarding the placement of the proposed underpass in La Crosse, VA, along with concern that it will be difficult for the fire department on the east side of the railroad to respond to calls on the west side (Section I).	Emergency response times are not expected to be substantially altered in La Crosse, VA. Refer to the Tier II DEIS Section 4.11.3.3 for additional discussion regarding analysis of emergency response times. This information was updated in Section 4.11.5.2.5 of the Tier II FEIS.
B_SC31	Question regarding the placement of the proposed underpass in La Crosse, VA, along with concern that it will difficult for citizens to move from one side of town to the other (Section I).	In the Town of La Crosse, there are several design constraints that limit the locations where a bridge or underpass can be located within the town limits while preserving the downtown core. These constraints include the grade of the surrounding area in relation to the grade of the railroad; historic resource boundaries; compact development; allowance for a future station platform; and the orientation of Main Street, which crosses the railroad at a severe (skewed) angle. The designs presented in the Tier II DEIS were the result of an iterative design process developed through significant coordination with the Town of La Crosse, with a goal of preserving connectivity across the railroad. The Richmond to Raleigh Project plans shown in the Tier II DEIS provided for a bridge and an underpass half a mile apart within the town limits (the town limits are less than one mile across), as well as a pedestrian/bicycle underpass in the center of town for the Tobacco Heritage Trail. Based on ongoing discussions with the Town, the Project Team attempted to provide an additional pedestrian bridge in the center of Town; however, the impacts to adjacent properties were deemed too great.
B_SC32	Concern about impacts in downtown Raleigh, NC, associated with alternatives NC1, NC2 and NC3, including potential effect that crossing closures will have on vehicular and pedestrian access across the railroad; the impact on emergency services; and/or visual impacts of a vehicular bridge on Jones Street (Section V).	The preferred alternative in Section V is Alternative NC5, which was developed in response to comments received from the public and from local officials. Alternative NC5 preserves the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area except for the Jones Street crossing, where a pedestrian bridge would be constructed, and the Hargett Street crossing, which would be closed. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC33	Concern that fencing will prevent pedestrian access across the railroad in Norlina, NC (Section M).	In downtown Norlina, the existing US-158 underpass includes a partial shoulder section. It is proposed that this Project would rebuild the facility with curb and gutter and widened sufficiently to avoid creating a hazard for pedestrian movement. Specific pedestrian accommodations for the underpass will be evaluated during final design based on the current NCDOT pedestrian policies.
B_SC34	Request for the NCDOT to immediately close the Beachtree Trail at-grade crossing of the railroad corridor just south of Kittrell, NC, as presented in the DEIS (Section Q).	Although the Richmond to Raleigh Project would not close this crossing until sometime in the future, the NCDOT Rail Division has a process regarding requests for crossing closures. A request can be made to the NCDOT Rail Division either internally (from within NCDOT), from the railroad, municipality or private citizens. Once a request is received and assigned, an NCDOT Rail Division engineer will run a preliminary review to make sure the crossing meets criteria for closure. After that a field investigation with the Division office and railroad is held. If the outcome of that investigation is a recommendation for closure, a public workshop is held. After the public comment period a Transportation Review Committee (TRC) meeting is held and the subsequent recommendation is taken to the NCDOT Board of Transportation (BOT). After BOT approval, the NCDOT Rail Division would enter into an agreement with the railroad to close the crossing, and identify funding if available. Once funding is secured the NCDOT Rail Division would prepare the appropriate level of environmental documentation, develop the design, and then set up construction funds to move forward with the closure and any identified mitigation projects. Contact the NCDOT Rail Division Engineering and Safety Branch, 1553 Mail Service Center, Raleigh, NC 27699-1553 to submit a formal request for closure of the Beachtree Trail crossing.

Summary Comment ID	Summary Comment	Response
B_SC35	Expression of concern that the closing of at-grade crossings will result in an increase in fuel use and an increase in the production of pollutants and greenhouse gasses.	The consolidation of rail crossings throughout the Richmond to Raleigh Project corridor will necessitate that some automobiles travel an additional distance to reach a grade-separated crossing. However, some automobiles actually could travel less, depending upon the origin and destination of the trip. Any additional distance vehicles will need to travel to the nearest bridge or underpass is typically less than one mile. The anticipated CO emissions associated with an additional distance are likely to be offset by the removal of the vehicle idling that currently occurs while trains pass at-grade crossings. As an example, a vehicle idling for one minute as a train crosses an at-grade crossing would produce approximately 70 grams of CO (based on USEPA's CAL3QHC idle emission factors). Were the same car to travel two miles out of its way to use a grade-separated crossing (one mile in each direction – a conservative example), it would generate approximately 16 grams of CO (based on USEPA's MOBILE factors for vehicles traveling on urban local roads). Although many factors can affect vehicle emissions of CO, the benefit of removing vehicle idling should offset any increase in CO emissions due to additional vehicle miles traveled.
B_SC36	Concern about the effect that the SEHSR designs will have on emergency response times in the area north of Highway 288 in Chesterfield County, VA (Section AA).	The Chesterfield County Fire Station 17, located at the intersection of Chester Road and Park Road, will be provided improved (direct) access across the railroad through construction of the proposed Park Road Extension and bridge, which should improve emergency response. A map of the design is shown in the Map Book Appendix of the Tier II FEIS.
B_SC37	Request to retain the existing at-grade crossing at Centralia Road in Chester, VA (Section BB).	No at-grade crossings will be retained under this Project. The overarching philosophy of the design of the Richmond to Raleigh Project is to consolidate and grade separate all railroad-roadway crossings for the primary purpose of ensuring both rail and roadway safety. Chapter 2 of the Tier II DEIS provides a description of reasons for closing at-grade crossings: absolute collision avoidance; elimination of railroad/roadway traffic issues; elimination of possible system failure; elimination of horn noise; elimination of easy trespasser access; improved long term cost of maintenance; allows for future speed increases.
B_SC38	Request that Brookston Road in Henderson, NC, be left open for traffic to accommodate existing use as a cut through road for residents of the county (Section O).	Brookston Road is proposed to remain open, and has been designed to cross over the railroad on a bridge.
B_SC39	Concern about the effect that the SEHSR designs will have on emergency response times in Ridgeway, NC (Section N).	The DEIS designs included a grade separation at Ridgeway Warrenton Road, approximately three quarters of a mile to the north of the Ridgeway Volunteer Fire Department (VFD), in keeping with the County thoroughfare plan. Following the Tier II DEIS, coordination with Warren County Fire and EMS representatives led to development of a new design for a bridge over the railroad located closer to the Ridgway VFD, to replace the design at Ridgway Warrenton Road. The Warren County thoroughfare plan was modified, with planned routing that include a grade separation in the new location. Chapter 4 of the Tier II FEIS contains a discussion of the GIS analysis of the 5-minute response time coverage under the new design. The results indicate some difference between the overall EMS service area for the Ridgeway Volunteer Fire Department under the Preferred Alternative compared to a No Build scenario. However, the difference is less substantial than the difference for the designs in the Tier II DEIS.

Summary Comment ID	Summary Comment	Response
B_SC40	Concern expressed that NCDOT and/or DRPT have plans to close all or a number of at-grade crossings in advance of project approval or funding.	NCDOT and DRPT do not plan to close crossings proposed by this Project in advance of project approval or funding. However, both NCDOT and DRPT have existing policies that provide a process (outside of and unrelated to the Richmond to Raleigh Project) for evaluation of crossings when requests are made for closure based on safety and traffic conditions. Requests for individual rail crossing closures within the Richmond to Raleigh Project study corridor may be evaluated prior to project construction under the existing policies. Separate from this Project, in 2010 NCDOT completed a Traffic Separation Study for Henderson, NC where there is existing freight railroad service. The study evaluated existing at-grade crossings and was conducted in coordination with the City. The recommendations included safety improvements as well as several crossing closures that are also proposed to be closed under the Richmond to Raleigh Project. As of fall 2012 the Project is on hold pending funding availability. Implementation of the recommendations contained in the Henderson TSS will include additional coordination with the City, and will follow NCDOT policy for public involvement and notification.
B_SC42	Request to retain a crossing at Woods Edge Road in Chesterfield County, VA (Section BB).	In response to numerous comments received from the public and local officials indicating a strong desire to maintain connectivity across the railroad, and additional analysis of traffic data, a bridge over the railroad will be provided at Woods Edge Road. The proposed bridge at Pine Forest Drive to the south will also be retained; however, the proposed extension of Walthall Industrial Parkway has been removed from the designs. The revised impacts associated with these design changes are discussed in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
B_SC43	Concern that providing only one road crossing of the rail corridor in Norlina (US-401/158) is not enough to support the traffic and/or that another crossing is needed at Division Street. Recommendation to connect Warren Plains or Yancey Road to Hyco Street.	As stated in Section 4.14.4.2 of the Tier II DEIS, traffic currently using the Division Street crossing has multiple facilities in the grid network to access US-401/158 and reach its intended destination. The traffic analysis assumed that the closure of the east leg of the intersection of Liberty Street and US-401/158 would route traffic to Elm Street or Division Street and back to Main Street. The closure of the east and west legs of the intersection of Hyco Street and US-401/158 is anticipated to route traffic back to US-1 to reach its desired destination. With the closure of the crossing at Division Street and the additional changes to the above intersections, the intersection of Main Street and US-401/158 was analyzed to estimate the effects of the proposed traffic rerouting and design in the 2030 design year. With the Richmond to Raleigh Project, there is anticipated to be a marked improvement in the level of service (LOS) for the northbound and southbound approaches, which carry the greatest volume through the intersection. Eastbound and westbound approaches would experience an increase in delay (i.e., the time it takes a driver to complete his/her movement through the intersection), which results in a reduced LOS. However, it is important to note that the number of cars waiting in line at these approaches is predicted to be small (i.e., one or two cars).

Code C – Comments Related to Natural Resources (e.g., Streams, Wetlands, Air Quality)

Summary Comment ID	Summary Comment	Response
C_SC1	Concerns about wildlife encroachment on the rail corridor.	The area immediately adjacent to the rail line will be cleared and maintained. This should serve to reduce the occurrence of wildlife foraging within the rail corridor.

Summary Comment ID	Summary Comment	Response
C_SC2	Concerns about airborne asbestos caused by vibration in Raleigh, NC (Section V).	As stated in Section 3.7.1 of the Tier II DEIS, the maximum vibration from HSR would be approximately 85 vibration decibels (VdB) at a distance of 50 feet. According to FRA (1988), the vibration amount required to cause minor cosmetic damage to fragile buildings is 100 VdB. The preferred alternative in Raleigh (NC5), is generally located away from older residential areas, minimizing the potential for the SEHSR Corridor passenger trains to cause cosmetic damage. In most cases, existing freight trains will be closer to residential areas than the proposed SEHSR Corridor tracks. According to USEPA Guidance for Controlling Asbestos-Containing Materials in Buildings (USEPA, 1985), for a site to have the potential to release asbestos, the asbestos must be exposed, accessible, and near movement corridors or subject to vibration. It is unlikely that the preferred alternative would increase asbestos releases in downtown Raleigh.
C_SC3	Concerns about diesel emissions.	Emissions from the proposed diesel trains have been included in the air quality analysis for the Project (see DEIS Section 4.6.1). The predicted annual emissions are well below the *de minimis* levels established in 40 CFR 51.853 and no further action or mitigation is required
C_SC4	Concerns about wildlife habitat impacts	Impacts to natural terrestrial communities have been minimized to the extent possible through the selection of alternatives that include the lowest acreages of mixed forested habitats for each section of the Project (see Section 4.10 of the Tier II FEIS).
C_SC5	Concerned about potential wetland impacts.	Measures will be taken to avoid and minimize wetland impacts to the extent practicable as outlined in Section 4.1 of the Tier II FEIS. Impacts to jurisdictional wetlands and perennial streambed or important intermittent streambed that result from activities authorized under an individual permit from the USACE require compensatory mitigation. Mitigation requirements for Virginia and North Carolina are discussed in the Tier II FEIS in Section 4.1.6.
C_SC6	Concerns about wildlife impacts of Alternative NC2 in Section S (Franklinton/Youngsville areas).	For Section S, Alternative NC1 was selected to minimize impacts to natural resources and farmland.
C_SC7	Concerns about potential impacts to the artesian drinking water well in the Town of McKenney, VA (Section C).	As a result of requests from the property owner and other Town residents, the Project designs have been modified to move further away from well.
C_SC8	Assertion that the proposed SESHR service would have positive effects on the environment by removing vehicles from the road.	Comment noted.
C_SC9	Concerns about stormwater impacts to water quality.	The addition of new paved surfaces and railroad tracks has the potential to affect water quality. The proposed designs would implement, to the extent practicable, procedures to limit stormwater impacts to water quality, including avoidance of direct surface water impacts; avoidance of stormwater discharges into public water supplies; and other stormwater best management practices (Tier II DEIS Section 4.1.1.3 and Tier II FEIS Section 4.1.1.3).
C_SC10	Concerned about impacts to Neuse River Basin water quality.	Streamside riparian zones within the Neuse River Basin in North Carolina are protected under provisions of the Neuse River Basin Riparian Buffer Rules administered by the North Carolina Division of Water Quality (NCDWQ). The rules protect two riparian zones: Zone 1 extends 30 feet from stream bank and Zone 2 extends from 30 to 50 feet from the stream bank (Tier II DEIS Section 4.1.1.2 and Tier II FEIS Section 4.1.1.2). Where these rules apply, mitigation will be required for impacts to riparian buffers at each stream crossing. Mitigation requirements will be coordinated directly with NCDWQ.
C_SC11	Concerned about overall impacts to natural resources.	The Richmond to Raleigh Project will make all efforts to avoid and minimize impacts to natural resources to the extent possible through the final design process and coordination with Federal and state natural resource agencies.

Summary Comment ID	Summary Comment	Response
C_SC12	Statement that the corridor should provide access to natural resources (i.e., wildlife can cross).	Comment noted.
C_SC13	Concerns that the NC2 alternative in Section S would have greater negative air quality impacts to area (Franklinton/Youngsville) residents.	For Section S, Alternative NC1 is the preferred alternative. It should be noted that emissions from the proposed diesel trains have been included in the air quality modeling for the Project (DEIS section 4.6.1). The predicted annual emissions for the entire project (all alternatives) are well below the *de minimis* levels established in 40 CFR 51.853.
C_SC14	Concerns about stream impacts.	Measures will be taken to avoid and minimize stream impacts to the extent practicable as outlined in Section 4.1 of the Tier II FEIS. Impacts to jurisdictional wetlands and perennial streambed or important intermittent streambed that result from activities authorized under an individual permit from the USACE require compensatory mitigation. Mitigation requirements for Virginia and North Carolina are discussed in the Tier II FEIS in Section 4.1.6.
C_SC15	Concerns about wetland impacts in the area of Chester, VA, in Section BB.	In the Tier II DEIS, it was estimated that there would be 4.88 acres of wetlands impacted in Section BB. Measures will be taken to avoid and minimize wetland impacts to the extent practicable as outlined in Section 4.1 of the Tier II FEIS. Impacts to jurisdictional wetlands and perennial streambed or important intermittent streambed that result from activities authorized under an individual permit from the USACE require compensatory mitigation. Mitigation requirements for Virginia and North Carolina are discussed in the Tier II FEIS in Section 4.1.6.
C_SC16	Concerns about stream and natural spring impacts and flooding between Green Street and Bullock Street in Franklinton, NC, if Tanyard Street is extended (Section S).	In response to comments received from the public, the proposed improvements to Tanyard Street shown in the Tier II DEIS have been removed from the Project designs (i.e., no changes proposed for existing Tanyard Street). Instead, the proposed north-south connection between East Green Street and East College Street has been moved to an alignment near the eastern boundary of the Sterling Mill historic resource. This design includes removal of pavement at the west end of Bullock Street. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
C_SC17	Assertion that estimated stream impacts for Alternatives NC1/NC3 and Alternative NC2 in the area near Bert Winston Rd in Youngsville, NC, are incorrect; proposed corrected impacts provided (Section S).	The stream impact numbers presented in the Tier II DEIS were correct based on coordination with the US Army Corps of Engineers (USACE), who reviewed and approved the stream and wetland delineations for the Tier II DEIS (USACE Action ID 200421016). The jurisdictional determination from the USACE is included in Appendix A of the Tier II DEIS. Updated stream impacts are shown in Section 4.11.1.1 of the Tier II FEIS.
C_SC18	Concerned about potential impacts to four trees in excess of 240 years old on the Cooke Property, which would be impacted by the proposed Ligon Mill Road railroad bridge in Wake Forest, NC (Section U).	Numerous alternative designs have been evaluated at this location in an effort to reduce property impacts on both sides of the railroad and road. However, the designs are constrained by the curvature of the road and development on both sides of the railroad. During final design, attempts will be made to avoid and minimize impacts to the extent practicable.
C_SC19	Assertion that SEHSR could have a positive impact on local air quality.	As stated in Section 4.6.1 of the Tier II DEIS, "From an air quality perspective, the additional intermodal and freight trains would likely result in a regional efficiency improvement as a result of freight providers switching from long haul trucking to intermodal and freight rail. Quantification of the reductions and re-routing of truck hauling was determined to be outside the scope of this Project. The intermodal and freight trains are not considered to be induced by the Project, but rather represent an improved and more efficient transfer from other fuel-consumption sources."
C_SC20	Statement about the importance of maintaining natural habitat and open spaces.	Comment noted.

Summary Comment ID	Summary Comment	Response
C_SC21	Concerns about environmental impacts associated with Alternative NC3 in Raleigh, NC (Section V).	The preferred alternative for Section V is NC5, which would have fewer linear feet of stream impacts (compared with NC3) and would place the proposed railway further from several residential areas compared to the other alternatives through downtown Raleigh.
C_SC22	Concerns that SEHSR trains would increase idling of freight trains in downtown Raleigh, NC (Section V).	None of the alternatives through downtown Raleigh would cause substantial increases in idling for freight operations.
C_SC23	Concerns about heat pollution in downtown Raleigh, NC (Section V).	Heat pollution is not anticipated to be an impact associated with the Richmond to Raleigh Project.
C_SC24	Concerns about the proposed designs resulting in an increase in flooding.	Potential impacts to floodplains and floodways were evaluated in Section 4.1.3 of the Tier II DEIS. Floodplain crossings will be re-examined once the final designs have been completed, when detailed survey-level data is available. Mitigation includes designing proposed floodplain crossings to minimize or eliminate an increase in the base flood elevation. Mitigation measures include right angle crossings and typical section reductions. The Richmond to Raleigh Project will coordinate with FEMA and local authorities in the final design to ensure compliance with applicable floodplain management ordinances. Also, the agency review and permitting process will require that the designs meet Federal and state floodplain development guidelines.
C_SC25	Concern that the project's reliance on fossil (diesel) fuels is not energy efficient or sustainable.	The ROD for the SEHSR Corridor Tier I EIS established that the SEHSR Corridor would be developed to use fossil fuel powered trains. Refer to Chapter 2 of the SEHSR Corridor Tier I DEIS for background on the basis for the decision. Note that the designs for the R covered by this Tier II document will accommodate future electrification; however, electrification is not covered under this environmental document process.
C_SC26	Request that more analysis should be completed regarding the potential benefits of this project to air quality, greenhouse gas emissions, and energy use.	The relevant Federal guidelines for assessing air quality impacts, greenhouse gas emissions, and energy consumption were used in preparing the Tier II FEIS. Benefits to air quality and energy consumption are a small piece of the overall decision process regarding the implementation of HSR service, and efforts to quantity the benefits would be questionable due to the number of assumptions (e.g., modal split, origin and destination of travelers, load factor of the trains, and other modal options if train were not taken). An expanded discussion of greenhouse gas emissions can be found in Section 4.6 of the Tier II FEIS.
C_SC27	Statement that if the SEHSR project crosses Lake Gaston at the location of the existing railroad easement, Dominion Power would not need to file with the Federal Energy Regulatory Commission (FERC). If it does not, a formal FERC filing must be initiated.	The Project designs cross Lake Gaston on the existing railroad corridor.
C_SC28	Request for additional data and analysis of air quality impacts, including steps to reduce adverse air quality impacts (cleaner engines, electrification, requirements on contractors, etc.).	All relevant Federal guidelines for assessing air quality impacts have been followed. Mitigation of "adverse air quality impacts" is not required because the air quality analysis did not identify violation of air quality thresholds. Electrification of the system is beyond the scope of this Project.

Summary Comment ID	Summary Comment	Response
C_SC29	Preference for restoration, enhancement, and creation as opposed to "less desirable" in-lieu fees and mitigation banks; once alignments are selected, FEIS should indicate specific mitigation to be used and seek to locate it within same watershed.	Specific mitigation cannot be described in the Tier II FEIS as it will be determined in coordination with the US Army Corps of Engineers and state water quality agencies during the permitting stage of the Project. However, the Tier II FEIS documents the availability of existing mitigation assets and the potential for permittee-responsible mitigation in Section 4.1.
C_SC30	Request that the FEIS should specifically set out the methods to be used to ensure enforcement of erosion and sediment control measures. In Virginia, the FEIS should state how the SEHSR will avoid falling into the "repair" and "rebuilding" categories which provide for exceptions to the rules.	The requirements for sediment and erosion control, National Pollutant Discharge Elimination System (NPDES) and state stormwater permits should provide adequate protection from erosion and sedimentation. Each of those permits requires oversight by a state agency whose responsibility is to ensure the enforcement of the required measures. In the absence of construction funding, it is not possible to identify what agency or organization will be constructing the Project. Therefore, it is not appropriate to specify specific measures that be undertaken to ensure enforcement of sediment and erosion control measures during project construction. While the regulatory exception cited may apply to the Richmond to Raleigh Project's repair or rebuilding of railroad infrastructure, the bulk of the Richmond to Raleigh Project's land-disturbing activities would be associated with roadway changes due to the relocation and/or consolidation of rail crossings. In Virginia, roadway changes and improvements associated with the Project would fall under the jurisdiction of VDOT and would not be exempt from the aforementioned land-disturbing activity requirements set forth in the E&S Control laws and regulations. VDOT would still be required to construct all roadway improvements in accordance with the strict provisions of the VDEQ's Virginia E&S Control Handbook and VDOT's Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications, as approved by VDCR.

Code D – Comments Related to Historic Resources (e.g., Historic Districts, Historic Homes, Battlefields)

Summary Comment ID	Summary Comment	Response
D_SC1	Question of whether the project properly complied with Section 106 of the National Historic Preservation Act, which requires federal agencies to take into account the effects of their undertakings on historic resources that are included in the National Register of Historic Places (NRHP) or that meet the criteria for the NRHP.	Yes. The Richmond to Raleigh Project EIS identifies all historic resources within its area of potential effects that are included in or eligible for the NRHP, and assesses the effects of the Project on these resources. Coordination with the Virginia Department of Historic Resources, North Carolina State Historic Preservation Office (NC-HPO), and Federal Advisory Council on Historic Preservation has been ongoing throughout the Project. A Section 106 MOA is being developed with these agencies and other consulting parties to minimize and mitigate for unavoidable impacts to historic resources.

Summary Comment ID	Summary Comment	Response
D_SC2	Assertion that the following properties should be recognized as historic, but were not identified as such in the DEIS: (1) Bishop property (old Burgess A train station) in Dinwiddie County, VA; (2) Harry Blacknall house/Old Dutch Inn (southeast corner of US-1 & Kittrell College Rd) in Kittrell, VA; (3) Heartsfield House on Ligon Mill Rd in Wake Forest, NC; (4) City Road United Methodist Church (903 N Garnett Street) in Henderson, NC; (5) family cemetery at 15920 Keelers Mill Road in Dewitt, VA; (6) Weldon family home site on Weldon Road north of Norlina, NC; (7) Homes located south of Ruffin Road directly east of the Davee Gardens Historic District. Request to verify whether they are eligible for the NRHP and afforded Section 106 protections.	These seven properties have been verified as not meeting the criteria for the National Register of Historic Places (NRHP). Those wanting specific documentation regarding the evaluation of their property can contact the Project Team via the Project's toll-free hotline: (877) 749-7245. It should be noted that cemeteries are not ordinarily considered eligible for inclusion in the NRHP unless they are contributing elements of eligible properties or meet special conditions which are referred to as "Criteria Considerations," such as a birthplace or grave of a historical figure of outstanding importance if there is no other appropriate site or building directly associated with his productive life.
D_SC3	Expressions of concern about impacts to the c. 1803 Hartsfield House at 9737 Ligon Mill Road in Wake Forest, NC, and questions about whether it was incorrectly assessed as not being eligible for the NRHP. Statement that Capital Area Preservation will submit additional materials to NC-HPO and NCDOT in support of the property's eligibility.	NC-HPO and NCDOT reviewed the original Section 106 eligibility (Phase II) survey for the Hartsfield House and do not recommend altering its NRHP eligibility determination based on the information it contains. Additional materials described in Capital Area Preservation's letter have not been received. NC-HPO and NCDOT await the additional information and will review it upon submittal. A Certificate of Appropriateness will be required to address impacts to the property under North Carolina statutes based on its designation as a local landmark.

Summary Comment ID	Summary Comment	Response
D_SC4	Request to avoid or minimize impacts to historic resources, in particular noise and vibration and visual intrusions (e.g., fences).	All efforts will be made to avoid and minimize impacts to historic resources along the Project. The Section 106 MOA will outline agreed-upon measures that will be taken to avoid, minimize, or mitigate the adverse effects of the Project on historic resources. The MOA will likely include specifications for fencing, bridges, and other visual intrusions. Noise and vibration mitigation will be assessed for all impacted areas along the Project per the FRA's noise and vibration guidelines.
D_SC5	Assertion that the NC3 alternative in downtown Raleigh, NC, would impact the Glenwood-Brooklyn and/or Roanoke Park historic districts (part of the Five Points neighborhood), including vibration damage to its historic terra cotta sewer pipes and historic plaster walls, noise impacts, traffic impacts, and relocation of local businesses.	The preferred alternative in Section V is Alternative NC5, which was developed in response to comments received from the public and local officials. The NC5 alternative addresses these concerns expressed by the citizens of the Five Points neighborhood. Alternative NC5 was presented at a Public Update Meeting on September 27, 2011 in Raleigh, NC. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
D_SC6	Assertion that the alternative through downtown Petersburg, VA, which was considered but not carried forward, would have enhanced the Petersburg historic district.	An alternative that would serve old Union Station in downtown Petersburg, VA, was explored in early planning efforts by FRA. It was excluded from further consideration because of lack of conformity with local plans, impacts to historic resources, residential and business relocations, travel time, and engineering issues/cost. See Section 2.2.2.3 of the Tier II DEIS for more information.
D_SC7	Question of whether the project properly complied with Section 4(f) of the Department of Transportation Act of 1966, which protects publicly owned parks, recreation areas, and wildlife/waterfowl refuges, as well as historic sites listed or eligible for listing in the NRHP.	Yes. The Richmond to Raleigh Project Section has fully complied with Section 4(f). For more information, see the final Section 4(f) evaluation (Chapter 5 of the Tier II FEIS).
D_SC8	Request to not impact the historic Butterworth family home (located at the terminus of Glebe Road on Route 1) in DeWitt, VA.	This property is referred to as the Bowen House in the Tier II DEIS and is eligible for the NRHP. The Richmond to Raleigh Project alternatives would add a set of tracks within the existing rail corridor on the west side of US-1. The rail corridor is approximately 75 feet west of the western boundary of this resource and over 150 feet from the main house. However, the road system in this area would also be modified by rerouting the corridor to the south of the Bowen House and bridging Glebe Road over the rail lines. This new bridge would be just southwest of the Bowen House boundaries. It is possible that the new structure would be visible from the main house. However, any modifications to the viewshed would be tempered by a vegetative screen, distance, and the US-1 corridor. Therefore, it was recommended that the Richmond to Raleigh Project alternatives would have no adverse effect on this resource under Section 106 of the National Historic Preservation Act of 1966 (NHPA). The Virginia Department of Historic Resources (VDHR) concurred with this recommendation in a letter dated November 23, 2009.
D_SC9	Question of who will maintain the bridges in historic areas (such as along Centralia Road in Chesterfield County, VA) when they have graffiti, litter, etc.	Maintenance of the bridges built as part of the Project would be by the owner of the road network. In Virginia, that is either VDOT (as in the case of Centralia Road) or the municipal government. In North Carolina, that is typically NCDOT, although there are also local roads maintained by city governments (such as in downtown Raleigh).

Summary Comment ID	Summary Comment	Response
D_SC10	Question of whether the project has studied how other countries have handled impacts to historic sites and other human and natural resources.	The Richmond to Raleigh Project has followed all applicable regulations set forth by the United States government, the Commonwealth of Virginia, and the State of North Carolina. Regulations and mitigation required in other countries were not considered as part of the Project.
D_SC11	Request to identify that the Massenburg property at 9985 Seawell Drive in Wake Forest, NC, is listed on the National Register of Historic Places. Also note that the grade crossing of the CSX railroad at the property is a private road predating the railroad at the property is a private road predating the railroad line (prior to the 1840s).	The Richmond to Raleigh Project mapping now includes the Massenburg property, which is known as Oakforest in the NRHP. It should be noted, however, that the private road to the house was not included within the boundary listed in the NRHP. Only the listed property is afforded protections under Section 106 of the NHPA.
D_SC12	Request to not impact the three historic properties on Thurston Road in Chesterfield County, VA.	The historic resource surveys for the Richmond to Raleigh Project identified only one property along Thurston Road within the Project Study Area as eligible for the NRHP (House at 3619 Thurston Road). The Richmond to Raleigh Project plans call for rerouting an extension of Park Road to the southwest of the house. Although the Project would take a small amount of ROW from the southwest corner of the parcel, the roadwork would not be visible from the main house or any contributing outbuildings. In a letter dated November 23, 2009, VDHR concurred with the recommendation that the Richmond to Raleigh Project would have "no adverse effect" on this resource.
D_SC13	Question of how the project will impact the property between Defense Road and Kutchen Road in Petersburg, VA, that was a Civil War battlefield.	A portion of this property was determine eligible for the NRHP and is referred to as the Dimmock Line Earthworks. The Richmond to Raleigh Project would require ROW along Defense Road from the Dimmock Line Earthworks in order to add a second railroad bridge over Defense Road (directly adjacent to the existing railroad bridge). Construction of the bridge and associated improvements to Defense Road would necessitate large disturbances to a portion of the earthworks. The Project Team is coordinating with the Virginia Department of Historic Resources and the National Park Service Petersburg National Battlefield to determine ways to minimize the impacts of the Project on the resources in the vicinity of Defense Road and establish mitigation for unavoidable impacts.
D_SC14	Statement that the DEIS identified a property as historic, but it is not listed on the National Register.	Section 106 of the National Historic Preservation Act of 1966 (NHPA) protects all resources that are included in or eligible for the National Register of Historic Places (NRHP). Properties not listed in the NRHP, but assessed to be eligible for it, are afforded the same protections as those listed in it.
D_SC15	Request to minimize impacts to the National Register-listed Honeymoon Hill Farm (referred to in the DEIS as Zehmer Farm).	Based on coordination with the property owner and VDHR, the Richmond to Raleigh Project rail and road designs adjacent to this property have been revised to minimize impacts.
D_SC16	Assertion that the following historic structures in Franklinton, NC (Section S), would be negatively impacted by the SEHSR project: the historic First Baptist Church, Sterling Mill (listed on the National Register), and the Franklinton Depot (listed on the National Register).	In coordination with NC-HPO, the Richmond to Raleigh Project was determined to have "no effect" or "no adverse effect" on the First Baptist Church, Sterling Mill, and Franklinton Depot under Section 106 of the NHPA. The project would not impact the structure of any of these historic resources. A small amount of ROW would be needed from the Sterling Mill and Franklinton Depot properties; none would be required from the First Baptist Church.

Summary Comment ID	Summary Comment	Response
D_SC17	Concern regarding the closure of the at-grade crossings at Elm Avenue and East Holding Avenue on the Wake Forest Historic District (Section U). Question whether the concrete CSX railroad overpass at Roosevelt Avenue (mistakenly identified in comment as West Avenue) would have to be replaced and, if so, whether its demolition would be an adverse effect on the district.	Coordination with NC-HPO determined that the at-grade crossing closures within the Wake Forest Historic District would have "no adverse effect" under Section 106 of the NHPA. However, in response to numerous requests from the public and local officials to maintain access across the railroad at Elm Avenue, a road underpass was evaluated for Elm Avenue, and was presented to the public at an update meeting on May 15, 2012, in Raleigh, NC. Based on comments at the public meeting regarding the impacts of the underpass, as well as input from the Town, it was not carried forward into the Tier II FEIS. Rather, a pedestrian-only bridge has been added in this location to improve pedestrian connectivity. Regarding the existing railroad overpass at Roosevelt Avenue, the Project designs intend to retain it provided that it is verified to be structurally sound.

Code E – Comments Related to Construction Costs and/or Economic Benefits of the Project

Summary Comment ID	Summary Comment	Response
E_SC1	Comments and questions on how the SEHSR will compete for profitability compared with other modes of transportation. Comments on the motivation to use HSR when other transportation options, especially cars, are perceived as cheaper, faster, more reliable, etc.	As discussed in detail in the amended Chapter 1 of the Tier II FEIS, the proposed HSR will be cheaper than flying and faster and more reliable than driving. This amended section also shows results of a recent ridership/revenue study, including how many riders are attracted from other transportation modes, as well as additional modal comparison data that supports the need for the SEHSR for the entire Washington, DC, to Charlotte, NC, corridor. The American transportation system is a mixture of both private and public investment in infrastructure (roadways, railways, airports, waterways) and operations (vehicles, aircraft, vessels, etc.) that provide modal alternatives and options for the future. All modes of transportation are subsidized (i.e., use tax funds) to some degree, and none are expected to be entirely profitable.
E_SC2	Comments that there are not enough benefits of the project compared to costs and impacts; that the project is not economically justified.	As discussed in an amended/expanded Chapter 1 of the Tier II FEIS, there have been several detailed cost/benefit analyses prepared for the SEHSR Corridor, including one for the entire national HSR system (which the SEHSR Corridor is only one segment) prepared in 1997, as well as a detailed feasibility study specifically for the Washington, DC, to Charlotte, NC, SEHSR corridor completed in 1999 (http://www.sehsr.org/reports/feasibility/default.htm). Other studies demonstrate the benefits of the Project (http://www.sehsr.org/reports.html). These studies have repeatedly concluded that the tangible and intangible benefits of the Project (to rail users as well as the public at large) exceed its costs, including projected revenues greater than annual operating costs and substantial positive economic, environmental, and fiscal impacts.
E_SC3	Questions and comments on the perceived greater value of pursuing less costly and incremental railroad improvement projects instead of this project.	The purpose of this Project is to create a new high speed passenger rail facility as part of a national HSR network, as defined in the SEHSR Corridor Tier I EIS (http://www.sehsr.org/reports.html), as well as Section 1.3 of the Tier II DEIS (http://www.sehsr.org/deis/sehsr_deis_download_files.html). The amended/expanded Chapter 1 of the Tier II FEIS expands on the Project's purpose, including a summary of Federal policies and programs that have been creating an intermodal transportation network since 1965. The Project's purpose does not include addressing other railroad improvement needs that are outside of those needed for the Project. As summarized in Sections 1.3.1 and 1.3.2 of the Tier II DEIS, both Virginia and North Carolina have been implementing ongoing railroad improvements for decades that address various railroad operation and safety needs, including reducing congestion for existing passenger and freight operations. To review or comment on ongoing railroad programs and projects, please visit the applicable web sites - NCDOT Rail Division (http://www.bytrain.org/) and Virginia DRPT (http://www.drpt.virginia.gov/default.aspx). In addition, it should be noted that the improvements presented in this Tier II FEIS could be built incrementally based on the availability of project funding.
E_SC4	Questions and comments on the high speed rail jobs created by the project or others along the rail line. Questions and comments on who is going to have preference for those jobs. Comments recommending preference be given to those affected by the project	As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), the detailed cost/benefit analyses prepared in 1997 for the entire national HSR system (which the SEHSR Corridor is only one segment) identified the substantial long term economic benefits from development of the Project, including: creation of jobs in railroad construction and operation; induced development of office, retail, hotel and higher density housing near planned rail stations; and, increased manufacturing jobs in the rail passenger transportation industry, including car, equipment and part manufacturers. Many of these jobs will likely be in the vicinity of the rail alignment. Most of these jobs will be created by the private sector. There is no plan for the government to require private companies or any public agency to set specific contracting or hiring requirements or preferences for these spin-off jobs. Where public funds may be used for construction of the Project, however, all applicable hiring laws and policies will apply. Existing Federal hiring regulations stipulate that hiring of illegal workers and conflicts of interests by contractors are illegal.

Summary Comment ID	Summary Comment	Response
E_SC5	Comments or questions related to the cost of the project being too expensive and how much money the United States has or should spend on this project. Comments included suggesting funding the project is wasteful, putting too great a burden on taxpayers,	As discussed in an amended/expanded FEIS Chapter 1, there have been several detailed cost/benefit analyses prepared for the Richmond to Raleigh Project. These studies have repeatedly concluded that the tangible and intangible benefits of the Project (to rail users as well as the public at large) exceed its costs, including projected revenues greater than annual operating costs and substantial positive economic and fiscal impacts. An expanded Chapter 1 of the Tier II FEIS also indicates that Congressional interest and funding for developing HSR in the US dates back to at least 1965. The Washington, DC to Charlotte, NC corridor is one of five key corridors in the overall national system, and is one of the fastest growing corridors in the nation, with ridership doubling in the last year.
E_SC6	Comments or questions about the harm the project would inflict on the economy, including statements that it would not create jobs, not bring in revenue, would increase costs to localities, etc.	As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there have been several detailed cost/benefit analyses prepared for the SEHSR Corridor, including one for the entire national HSR system (of which the SEHSR Corridor is only one segment) prepared in 1997, as well as a detailed feasibility study specifically for the Washington, DC to Charlotte, NC SEHSR Corridor completed in 1999, as well as other studies that demonstrate the benefits of the Richmond to Raleigh Project. These studies have repeatedly concluded that there will be substantial long term economic benefits from development of the Project, including: creation of jobs in railroad construction and operation; induced development of office, retail, hotel and higher density housing near planned rail stations; increased manufacturing jobs in the rail passenger transportation industry, including car, equipment and part manufacturers; increased tourism; reduction in use of carbon fuel; reduced need to widen highways; and, many other benefits, as noted in Chapter 1 of the Tier II FEIS. Maintenance or other responsibilities for localities would be established through agreements between the operation of the system and local governments that specify payments or other terms.
E_SC7	Comments in support of the project, claiming it will benefit the economy, create new jobs, have less environmental impact, create positive net benefits (compared to costs and impacts) and overall benefit the communities, including helping the economies along the rail line, throughout NC and VA, as well as nationally.	As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there have been several detailed cost/benefit analyses prepared for the SEHSR Corridor, including one prepared in 1997 for the entire national HSR system (of which the SEHSR Corridor is only one segment), a detailed feasibility study specifically for the Charlotte, NC to Washington, DC SEHSR corridor completed in 1999, as well as other studies that demonstrate the benefits of the Richmond to Raleigh Project. These studies have repeatedly concluded that there will be substantial long term economic benefits from development of the Project, including: creation of jobs in railroad construction and operation; induced development of office, retail, hotel and higher density housing near planned rail stations; increased manufacturing jobs in the rail passenger transportation industry, including car, equipment and part manufacturers; increased tourism; reduction in use of carbon fuel; reduced need to widen highways; and, many other benefits, as noted in Chapter 1 of the Tier II FEIS.
E_SC8	Comments from companies or individuals interested in getting work from the project during its construction or operations, and/or requesting to be contacted when work begins.	Comment noted. Please keep up with the Project's progress at http://www.sehsr.org.

Summary Comment ID	Summary Comment	Response
E_SC9	Assertions that other transportation projects should be funded first, before the SEHSR, given they are perceived to be more important and of a higher priority.	As discussed in an amended/expanded Purpose and Need section of the Tier II FEIS (Chapter 1), there have been several detailed cost/benefit analyses prepared for the SEHSR Corridor, including one for the entire national HSR system (which the SEHSR Corridor is only one segment) prepared in 1997, as well as a detailed feasibility study specifically for the Charlotte, NC to Washington, DC SEHSR corridor completed in 1999, as well as other studies that demonstrate the benefits of the Richmond to Raleigh Project. These studies have repeatedly concluded that there will be substantial long term economic benefits from development of the Project, including: creation of jobs in railroad construction and operation; induced development of office, retail, hotel and higher density housing near planned rail stations; and, increased manufacturing jobs in the rail passenger transportation industry, including car, equipment and part manufacturers; increased tourism; reduction in use of carbon fuel; reduced need to widen highways; and many other benefits, as noted in Chapter 1 of the Tier II FEIS. Given these substantial public benefits, Congress has repeatedly funded the national HSR program, including the SEHSR Corridor. The purpose of this EIS is to evaluate and mitigate the impacts of this Federally-listed priority project; it is not to evaluate the various components and priorities of the entire Federal transportation budget. To provide input on those decisions, please contact your US Senator and Representatives.

Code F – Comments Related to Train Speed, Equipment, Operations, or Fares

Summary Comment ID	Summary Comment	Response
F_SC1	Statement of opinion regarding the importance of train speed/ trip time/schedule (e.g., faster is better; convenient schedules will enhance ridership).	Comment noted.
F_SC2	Request to have high-level platforms at stations to facilitate quick and easy passenger boarding and transport of bicycles; also a request for policies and procedures that allow for easy transport of bicycles (i.e., not the current policies on some Amtrak trains which require bicycles to be dismantled, boxed, and checked as baggage).	The level of platforms is determined, in part, from compliance guidelines established to implement the Americans with Disabilities Act (ADA) of 1990 and regulated under ADA Accessibility Guidelines published n the Federal Register on July 23, 2004 (amended August 5, 2005). To comply with ADA requirements, FRA requires level boarding at 48" above top-of-rail (ATR) for east coast services. Where passenger service is operated on shared freight corridor, an exception to this requirement with 8" ATR platform height is commonly applied. The Project will consider level boarding where feasible and compatible with the proposed service at that location.
F_SC3	Request for specific train amenities/upgraded equipment/specific operations to enhance ridership.	Equipment and operational specifications will be developed at a later date, once funding for construction of the Project has been secured.
F_SC4	Request for state of the art construction of the railroad.	The Project designs call for new ballast (the rock surface underneath the railroad ties), concrete ties, and welded steel rails.

Summary Comment ID	Summary Comment	Response
F_SC5	Comment related to selection of train technology (diesel/hydrogen cell traction /electric as well as monorail), and/or comments/questions related to the compatibility of the train technology proposed for this project segment and the segments proposed for Richmond/Raleigh, Petersburg/Hampton Roads, Richmond/DC, as well as existing HSR trains in the Northeast Corridor and local/commuter trains that may be used on the system.	The ROD for the SEHSR Corridor Tier I EIS established that the SEHSR Corridor would be developed to use fossil fuel powered trains. Refer to Chapter 2 of the SEHSR Corridor Tier I DEIS for background on the basis for the decision. Note that the designs for the Richmond, VA, to Raleigh, NC covered by this Tier II document will accommodate future electrification. The purpose of the Project is to eventually connect this Project with high speed linkages north of Richmond, VA, to Washington, DC, and beyond to the Northeast Corridor, as well as Hampton Roads (via Petersburg). The train technology proposed with this Project and all proposed connected corridors are being designed with these underlying assumptions for system compatibility in mind.
F_SC6	Comment related to the importance of improved reliability (e.g., frustrations posed by delays associated with freight dispatching and congestion at choke points), and/or statement of preference for dedicated tracks to achieve better performance.	The ROD for the SEHSR Corridor Tier I EIS established that the SEHSR Corridor would be developed using an incremental approach to HSR using existing (freight) railroad rights of way to the greatest extent possible. This approach provides the least overall environmental impacts and highest commercial feasibility. The designs add capacity in the areas between Petersburg, VA, and Richmond, VA where there is existing rail, to minimize conflicts between freight operations and passenger service. Between Petersburg, VA, and Raleigh, NC the designs call for construction of new or rebuilt single track with passing sidings five miles long, every ten miles, which will allow freight and passenger to pass without stopping.
F_SC8	Question regarding why the system has not been designed to achieve higher speeds similar to the systems that are used in Europe and Asia.	The ROD for the SEHSR Corridor Tier I EIS established that the SEHSR Corridor would be developed using an incremental approach and would utilize fossil fuel powered trains. Refer to Chapter 2 of the SEHSR Corridor Tier I DEIS for background information on the basis for the decision. A finding discussed in the SEHSR Corridor Tier I EIS noted that with fossil fuel engines, speed increases above the 110 mph did not generate significant improvements in ridership and revenues, but they did significantly increase costs because of more stringent regulations. It should be noted, however, the bridges and underpasses have been designed to allow for electrification in the future.
F_SC9	Question regarding the funding source for the project (i.e., public vs. private).	Refer to Chapter 1 of the Tier II FEIS for an expanded discussion of the necessary involvement of Federal funds in development of the SEHSR Corridor. It is anticipated that North Carolina and Virginia will pursue Federal funding through the Passenger Rail Investment and Improvement Act (PRIIA), reauthorization of Federal transportation programs and other Federal funding sources (which was anticipated by the Federal government as needed as part of the overall Federal HSR investment). Public-private partnership funding opportunities may also be sought along with Federal and state funding. Decisions regarding future funding of the SEHSR Corridor will be made at the completion of the environmental review process. The Project is not anticipated to be funded by local governments. Maintenance or other responsibilities for localities would be established through agreements between the operation of the system and local governments that specify payments or other terms.

Summary Comment ID	Summary Comment	Response
F_SC10	Question regarding whether there is a limit on the number of high speed passenger trains, freight trains, and conventional passenger trains that can use the corridor.	The Richmond to Raleigh Project contemplates eight additional intermodal freight trains along with two to four additional conventional freight or passenger trains. Construction of the Richmond to Raleigh Project could also allow for conventional passenger service (i.e., local service with more stops in smaller towns) in the future, as demand for service grows. The daily number of trains that could operate within the proposed SEHSR Corridor is constrained by the number of available "slots" in the dispatch schedule. The number of slots is affected by "choke points" within the active freight corridors north of Petersburg and south of Raleigh. This project provides additional rail capacity between Richmond, VA and Raleigh, NC; however, such points in other locations throughout the corridor will impact the number of available slots for trains operating on the new corridor. Separate environmental studies are planned and/or are underway to address design issues in other sections of the corridor. For the purposes of this environmental document, proposed service within the Richmond, VA, to Raleigh, NC, portion of the SEHSR Corridor consists of four new high speed passenger round trips per day (eight trains).
F_SC11	Statement of opinion that higher speeds are not necessary, and/or do not justify the potential impacts and amount of work or cost needed to achieve higher speeds.	Comment noted.
F_SC12	Question regarding fares and/or statement of opinion that fares need to be structured to be competitive with other modes of transportation.	Refer to Chapter 1 of the Tier II FEIS for discussion regarding the ridership and revenue forecasts updated in 2012. The updated forecast includes information regarding projected fares.
F_SC14	Question regarding proposed speeds throughout the corridor.	The Maximum authorized speed (the maximum allowable speed a train may operate based on authorization from the owner of the rail corridor and FRA safety regulations) is anticipated to be: 79 mph from Richmond, VA, to Centralia, VA; 90 mph from Centralia, VA, to Collier, VA (south of Petersburg); and 110 mph from Collier, VA, to Raleigh, NC. Refer to Chapter 1 of the Tier II FEIS for additional discussion related to anticipated speeds.
F_SC15	Concern about stopped and idling trains within passing sidings in Section S.	Between Petersburg, VA, and Raleigh, NC, the Project designs call for construction of new or rebuilt single track with passing sidings five miles long, approximately every ten miles, which will allow freight and passenger to pass without stopping.
F_SC16	Question regarding whether intermodal freight trains are anticipated to be stopping in Raleigh, NC, or just passing through; concern expressed about impacts associated with potential intermodal loading/offloading operations in Raleigh (Section V).	The Richmond to Raleigh Project EIS document assumes eight additional intermodal trains along with two additional conventional freight trains to account for impacts related to a potential increase in freight traffic. Currently, there is no intermodal freight service through Raleigh, and no known plans for introduction of the service. However, operation of intermodal trains is controlled by the freight railroad companies and is driven by market demand.

Summary Comment ID	Summary Comment	Response
F_SC17	Statement of preference to use or modify tracks currently used by Amtrak, or to develop the project on new alignment rather than following the alignment studied in DEIS.	The SEHSR Corridor Tier I EIS concluded that of the nine existing railway options considered, Alternative A (NCRR & S-line), modified with passenger connectivity to Winston-Salem (Alternative B), was the combination of alternatives that best met the Project's Purpose and Need while minimizing environmental impacts. It is, therefore, not the purpose of this Tier II project to revisit the use of other existing rail lines. Also, based on the findings of feasibility studies prior to the Tier I document, NCDOT, DRPT, FRA, and FHWA, focused on an "incremental" development approach to HSR to formulate and analyze the SEHSR Corridor from the beginning. The decision to utilize existing rail infrastructure, an established transportation corridor and railroad ROW (with only small areas requiring new infrastructure to reach desired project speeds and crossing grade closures), allowed a significant reduction in the initial capital investment required by the system. This "incremental" approach also reduces the potential environmental impacts by avoiding the creation of a new, approximately 500-mile long facility on new alignment, thereby avoiding significant impacts to existing urban and natural areas over a much larger project area. These factors would also allow the Project to be built much faster and would also ensure it met the fundamental project goal of connecting the downtowns of major cities along its route. It was therefore an assumption in the SEHSR Corridor Tier I EIS and this Tier II study that rail transportation service for this Project would be provided on the NCRR and S-lines, with standard gauge railroad tracks that are capable of also supporting North American standard heavy-haul freight trains as well as high speed passenger trains. Sharing trackage with conventional rail will also provide substantial benefits to freight service. Also, the design will allow for higher speeds in the future with changes in technology, equipment, and design assumptions (e.g. electrification, tilt technology).
F_SC18	Statement of opinion that it is important that fares be affordable.	Refer to Chapter 1 of the Tier II FEIS for discussion regarding the ridership and revenue forecasts updated in 2012. The updated forecast includes information regarding projected fares.
F_SC19	Statement of opinion (general).	Comment noted.

Code G – Comments Related to Ridership

Summary Comment ID	Summary Comment	Response
G_SC1	Comments supporting the project, including indicating they or others would ride/use it.	Comment noted. The following were reasons expressed in support of the Project, which are consistent with the Purpose and Need defined for the Project: 1) Connecting east coast cities with HSR will expand the public's travel opportunities, providing an opportunity that equals Eisenhower's building of the interstate highway system. This is the step needed to take us into the next 30 years. 2) The average plane is delayed over 56 and a half minutes for every airport along the SEHSR Corridor, and over the next 20 years our population is expected to grow 26 percent. 3) We are going to be unable to pave our way out of congestion. 4) Personal willingness to use train.
G_SC2	Comment that ridership information could not be found in the DEIS and/or the issue did not appear to have been fully assessed.	Ridership has been assessed in the SEHSR Corridor Tier I EIS (Chapter 1) and Tier II DEIS (Chapter 2). These documents are available on the Project website - http://www.sehsr.org/reports.html. Ridership has also been reassessed recently for the Project (see Chapter 1 of this FEIS).

Summary Comment ID	Summary Comment	Response
G_SC3	Questions/comments on the need and/or demand for high speed rail.	Chapter 1 of the Tier II FEIS has been expanded to further define the Project's Purpose and Need, established in numerous previous studies.
G_SC4	Questions/comments on adequate amounts of ridership to support the facility.	Ridership has been assessed in the SEHSR Corridor Tier I EIS (Chapter 1) and Tier II DEIS (Chapter 2) documents available on the Project website - http://www.sehsr.org/reports.html. Chapter 1 of the Tier II FEIS also contains updated ridership estimates and assumptions, specifically about the proposed users of the facility and how reliable projections have been developed.
G_SC5	Questions/comments on users of the existing Amtrak rail system.	Ridership was assessed in the SEHSR Corridor Tier I EIS (Chapter 1) and Tier II DEIS (Chapter 2) documents available on the Project website - http://www.sehsr.org/reports.html. Existing Amtrak ridership as well as ridership estimates and assumptions for future riders on the SEHSR Corridor facility have been updated and expanded in Chapter 1 of the Tier II FEIS.
G_SC6	Questions/comments on riders of SEHSR trains regarding where they live, where they travel, the purpose of their travel, and when they travel. Questions regarding whether they will really use it, given our low population densities, people's natural inclination to drive their own vehicles, and the limitations in other public transportation needed to support the system.	Ridership was assessed in the SEHSR Corridor Tier I EIS (Chapter 1) and Tier II DEIS (Chapter 2) documents available on the Project website - http://www.sehsr.org/reports.html. Chapter 1 of the Tier II FEIS contains updated ridership estimates and assumptions, specifically about the proposed users of the facility. It also details how the projections were developed and verified, and discusses any improvements needed to the public transportation systems to support the planned HSR system. Chapter 3 of the Tier II FEIS has been amended to provide additional discussion of existing public transportation systems and all proposed improvements to the overall public transportation system that will allow system wide connectivity with the SEHSR Corridor system.
G_SC7	Questions/comments on how the facility will compete for ridership and profitability compared with other modes of transportation, especially in the long term. Questions regarding whether the number of riders justify the cost. Assertion that people will not use HSR as long as other transportation options are faster, more reliable, cheaper, etc.	Chapter 1 of the Tier II FEIS expands on the Tier II DEIS and demonstrates how the proposed HSR will be time competitive and cheaper than flying for trips within a 550 mile distance, and faster and more reliable than driving. This section also contains additional modal comparison data (cost, speed, travel time, reliability) that supports the need for and projects the use of the SEHSR for the entire Washington, DC, to Charlotte, NC, corridor.
G_SC8	Questions/comments on specific detailed ridership projections at all the proposed stations. Clarify existing Amtrak versus future ridership projections at each station.	Section 2 of the Tier II DEIS, including Table 2-1, contains ridership estimates that include ridership figures for existing Amtrak and future HSR passenger trains. Chapter 1 of the Tier II FEIS contains updated ridership estimates and additional on-off ridership projections at each proposed station for the selected alternative.
G_SC9	Comments or questions about portions of the project corridor having very low population densities, which would not provide enough ridership to support the facility (i.e., people do not live close enough or in dense enough locations to the proposed station to justify their use of the facility).	Updated ridership and revenue projections for the Richmond to Raleigh Project were developed based on the Preferred Alternative. The results of this analysis are discussed in Chapter 1, Section 1.5 of the Tier II FEIS. The report is included in Appendix C. The updated modelling results agreed with earlier assessments that the proposed Project revenue would exceed anticipated operation and maintenance expenses.

Summary Comment ID	Summary Comment	Response
G_SC10	Questions/comments on how the SEHSR will reduce traffic and congestion on local roads and major routes through the area.	The purpose of the Project is not to reduce traffic or relieve congestion on local roads or on all regional highways, nor is it to supply local public transit options to relieve local commuter congestion or to directly serve employment centers or airports, though there may be ancillary benefits. Those goals are met through the coordinated activities of various other separate regional transportation planning programs and agencies along the corridor, including regional transit authorities and metropolitan planning associations, who will coordinate with the SEHSR Corridor. However, the SEHSR Corridor is intended to be the main north/south spine to which many local commuter options are connected. As further discussed in the amended Chapter 1 of the Tier II FEIS, the purpose of the Project is to provide multimodal options to better serve regional, long-distance and interstate leisure and business travelers between major metropolitan areas traveling north and south along the I-85 & I-95 travel corridor on the east coast (in North Carolina and Virginia and beyond). The Richmond to Raleigh Project would offer a competitive intercity transportation mode which would divert over a million travelers annually from air and auto travel within the Washington, DC, to Charlotte, NC, travel corridor.
G_SC11	Questions/comments on the proposed technology, rate of speed, rate of return on investment, resulting number of riders and/or future expansion capabilities of the system.	Prior to the SEHSR Corridor Tier I EIS, the USDOT, along with North Carolina and other states who would benefit from the SEHSR Corridor, determined that an "incremental approach" would be used for the Project. This included the improvement of existing railroad ROW for the Project (rather than developing a new railroad facility on new alignment), in order to minimize impacts to the human and natural environment, as well as substantially reduce project cost. These factors would allow the Project to be built much faster and would also ensure it met the fundamental project goal of connecting the downtowns of major cities along its route. It was therefore an assumption in the SEHSR Corridor Tier I EIS and this Tier II study that rail transportation service for this Project would be provided on standard gauge railroad tracks capable of also supporting North American standard heavy-haul freight trains as well as high speed passenger trains. Sharing trackage with conventional rail will provide substantial benefits to freight service, but will place certain technological requirements and operational limitations on the high-speed train sets and other technology choices. One of these limitations will be operational, with a maximum speed of 110 mph in the corridor, with an average speed of 85 to 90 mph. The proposed project designs do allow for higher speeds in the future with changes in technology, equipment, and design assumptions (e.g., electrification, tilt technology). However, in more urban areas and near stations high speeds will not be possible. Therefore, with this incremental approach as the underlying basis for the Project, the speed of the facility was not a variable that could be modified to maximize ridership. However, the number and frequency of station stops along the route were evaluated and modified to maximize ridership and therefore profitability under the initial proposed technology, equipment and design assumptions.

Summary Comment ID	Summary Comment	Response
G_SC12	Questions/comments on the need/demand for a route between Charlotte and Richmond, and Raleigh to Richmond. Question of who is going to use those routes.	Richmond is not the northern terminus of the SEHSR Corridor. The Richmond to Raleigh Project is only one segment of the overall SEHSR Corridor, which will extend HSR service south from the Northeast Corridor (NEC) and provide service between Boston, MA, New York, NY, and Washington, DC, southward from Washington, DC, to Charlotte, NC, and (in the future) to Atlanta, GA. Because of the length of the overall SEHSR Corridor (over 450 miles), a tiered approach was adopted for the required environmental studies. Refer to Chapter 1 of the Tier II DEIS for a description of this approach. The Tier II EIS includes detailed environmental analysis for the portion of the preferred corridor between the logical termini of Richmond, VA, and Raleigh, NC. These termini were selected because of the type of improvements proposed (i.e., introducing passenger rail service to a significant section of this corridor where it does not currently exist.) Other environmental documentation will be prepared separately for implementation of the remainder of the corridor as appropriate to those improvements. Project segments are needed together to serve regional, long-distance and interstate leisure and business travelers between major metropolitan areas traveling north and south along the I-85 & I-95 travel corridor on the east coast (in North Carolina and Virginia and beyond). As noted in the SEHSR Corridor Tier I EIS, the entire SEHSR Corridor will help balance the overall transportation system by offering a competitive intercity transportation mode which would divert over a million travelers annually from air and auto travel from Washington, DC, to Charlotte, NC. The amended Chapter 1 of this FEIS provides additional ridership information on the Raleigh to Richmond segment of the SEHSR Corridor, given the planned SEHSR Corridor linkages from Raleigh to Charlotte and Richmond to Washington, DC, and beyond to points northeast.
G_SC13	Questions/comments on how the train schedules (frequency of trains) were set to maximize ridership.	The expanded FEIS Chapter 1 discusses how ridership was estimated as well as the anticipated train frequency.
G_SC14	Questions/comments on using existing rail lines versus building a new system on a totally new alignment (bypassing towns).	The SEHSR Corridor Tier I EIS concluded that of the nine existing railway options considered, Alternative A (NCRR & S-line), modified with passenger connectivity to Winston-Salem (Alternative B), was the combination of alternatives that best met the Project's Purpose and Need while minimizing environmental impacts. It is not the purpose of this Tier II project to revisit the use of other existing rail lines, and a new system on totally new alignment is not proposed. Based on the findings of feasibility studies prior to the Tier I document, NCDOT, DRPT, FRA, and FHWA, focused on an "incremental" development approach to HSR to formulate and analyze the SEHSR Corridor from the beginning. That decision to utilize existing rail infrastructure, an established transportation corridor and existing railroad ROW (with only small areas requiring new infrastructure to reach desired project speeds and crossing grade closures), allowed a significant reduction in the initial capital investment required by the system. This "incremental" approach also reduces the potential environmental impacts by avoiding the creation of a new 450 mile long facility on new alignment, thereby avoiding significant impacts to existing urban and natural areas over a much larger project area. These factors would also allow the Project to be built much faster and would also ensure it met the fundamental project goal of connecting the downtowns of major cities along its route. It was, therefore, an assumption in the SEHSR Corridor Tier I EIS and this Tier II study that rail transportation service for this Project would be provided on the NCRR and S-lines, with standard gauge railroad tracks that are capable of also supporting North American standard heavy-haul freight trains as well as high speed passenger trains. Sharing trackage with conventional rail will also provide substantial benefits to freight service. Also, the design will allow for higher speeds in the future with changes in technology, equipment, and design assumptions (e.g., electrification, tilt technology).
G_SC15	Questions/comments regarding the inclusion of the Petersburg to Hampton Roads HSR segment, and its effect on ridership.	The updated ridership and revenue estimates provided in Chapter 1 of the Tier II FEIS include the Hampton Roads project segment linkage.

Code H – Comments Related to Safety

Summary Comment ID	Summary Comment	Response
H_SC1	Questions and comments on the location of fencing and landscaping in the project corridor. Questions about whether the high speed rail corridor will be completely sealed/impenetrable from any unauthorized access.	The Richmond to Raleigh Project corridor will not be completely sealed from any unauthorized access. It is important to note that it is unsafe to cross the railroad (either existing or proposed with this Project) in locations that are not legal crossings; this is also considered trespassing. In developed areas along the corridor, fencing may be used to direct pedestrians to bridges/underpasses that have been designed to accommodate pedestrian access. Fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities. Along the rail alignment, landscaping will be consistent with what currently exists. Along road work, landscaping will be addressed during final design using VDOT or NCDOT standards/procedures. Details for landscaping in historic districts may be specified under the Section 106 MOA (with input from property owners and other consulting parties).
H_SC2	Comments stating that to ensure safety from the high speed rail, fencing or walls should be placed along the rail line where the following uses are present - residential homes or neighborhoods, pedestrians, bicyclists, parks, schools, libraries, other uses that attract children, or where pets or wildlife may be inclined to cross.	The Richmond to Raleigh Project corridor will not be completely sealed from any unauthorized access. It is important to note that it is unsafe to cross the railroad (either existing or proposed with this Project) in locations that are not legal crossings; this is also considered trespassing. However, the ability of pedestrians to move safely across the HSR corridor is an important design criterion of the Richmond to Raleigh Project. In developed areas along the corridor, fencing may be used to direct pedestrians to bridges/underpasses that have been designed to accommodate pedestrian access. Fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities.
H_SC3	Questions regarding the type of fencing materials to be used and the height of the fencing. Comments included concerns that the fencing will be very tall (e.g., 20-foot) or made of chain link or concertina wire.	As discussed in Section 4.16 of the Tier II FEIS, fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities.
H_SC4	Questions about the speed of each train as it passes through each town, including those without a stop.	The description of the Preferred Alternative in Chapter 2 includes information on the maximum authorized speed of the train by project section. In areas without a stop, it can be assumed that the train will travel at speeds up to the maximum authorized speed for the section in which the area is located. In areas with a stop, it can be assumed that the train will begin slowing down at least one to two miles in advance of the station.
H_SC5	Questions about the protections that will be put into place to avoid accidents, including derailments.	As discussed in Section 4.16 of the Tier II FEIS, numerous safety measures are required in the design and operation of the proposed HSR according to FRA regulations and design standards. The most effective method of avoiding crashes and derailments is full grade separation of the facility, which this Project proposes. Other safety measures address issues such as degree of curvature, minimum ROW widths, and maximum grades.
H_SC6	Comments regarding the overall assurance of safety of high speed trains, including factors such as speed, weight, and turns.	As discussed in Section 4.16 of the Tier II FEIS, numerous safety measures are required in the design and operation of the proposed HSR according to Federal regulations as well as FRA design standards.

Summary Comment ID	Summary Comment	Response
H_SC7	Comments regarding the history of numerous grade crossing collisions along the project route and/or support for the project achieving 100% grade separation.	As discussed in Section 4.16 of the Tier II FEIS, the safest design for HSR is full grade separation, which this Project proposes.
H_SC8	Comments on the relative safety of high speed rail trains versus other forms of transportation or statements that HSR is more dangerous or have more accidents than aircraft.	Section 1.6 of the Tier II FEIS has been updated to include statistics on the relative safety of HSR versus other modes of transportation, including flying. As noted, fatality statistics show rail and flying have nearly identical safety records, which are substantially better than any other mode of transportation.
H_SC9	Questions on the appropriate size of "safety buffer zones" for conventional versus high speed trains to keep residents and the environment safe.	As discussed in Section 4.16 of the Tier II FEIS, numerous safety measures are required in the design and operation of the proposed HSR according to FRA regulations and design standards. The most effective method of avoiding crashes and derailments is full grade separation of the facility, which this Project proposes. Other safety measures address issues such as degree of curvature, minimum ROW widths, and maximum grades.
H_SC10	Questions and comments on how terrorist attacks on the system will be prevented, including the kinds of security measures/monitoring systems/safety techniques proposed to be used.	As discussed in Sections 3.19 and 4.16 of the Tier II DEIS, the entire corridor will be accessible from many miles of arterial and secondary roadways where security measures will not be practicable. However, the FRA has prescribed track safety standards and regulations with which each railroad must comply. The regulations include track inspections at specified minimum frequencies based on several criteria that include Class of track and whether passenger trains are carried. All Federal safety and security regulations current at the time of completion of construction and implementation of passenger service will be followed. Section 4.16 of the Tier II FEIS also describes how fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities. This may include urban locations where fencing is determined to be appropriate for pedestrian safety and preventing unauthorized access.
H_SC11	Questions and comments on how it will be ensured that no illegal immigrants work on this railway (in order to ensure national security).	Current US Federal employment law mandates that employers only hire legal citizens and documented workers.
H_SC12	Comments on the current "poor maintenance" of the existing rail lines, which pose a current safety hazard. Questions on how this new system would improve long-term maintenance.	Any existing lines will be improved as needed and in many locations new lines will be created, as described in Chapters 1 and 2 of the Tier II DEIS and FEIS. All of the rail improvements must meet current Federal HSR design, operations, and maintenance requirements and standards as discussed in Section 4.16 of the Tier II FEIS, which will improve the lines for shared freight systems as well. Another benefit of the lines being improved for high speed travel is that they are straighter (less curved), which results in less long-term maintenance requirements (because of less wear and tear).
H_SC13	Comments that the existing conventional train corridor is a current safety issue and should be removed entirely.	FRA has prescribed track safety standards and regulations with which each railroad must comply. The regulations include track inspections at specified minimum frequencies based on several criteria that include Class of track and whether passenger trains are carried. As owner of the existing railroad in the corridor between Richmond, VA and Raleigh, NC, CSX is required to meet all current Federal safety regulations. Likewise, all of the proposed rail improvements must meet current federal HSR design, operations, and maintenance requirements and standards as discussed in Section 4.16 of the Tier II FEIS, which will improve the rail for shared freight systems as well. Revised Chapter 1 of the Tier II FEIS discusses the reasons for the current corridor location being located between cities.

Summary Comment ID	Summary Comment	Response
H_SC14	Comments and questions requesting that the project consider methods of improving safety other than closing crossings, especially in areas that are pedestrian-oriented.	Revised Section 4.16 of the Tier II FEIS discusses the proposed full grade separation design as well as the proposed pedestrian over/under-passes. Fencing locations and types will be determined during final design based on coordination between the owner of the rail corridor, the operator of the railroad, and adjacent communities. Together, these project elements will protect surrounding communities to the greatest extent practicable while also minimizing the rail line's intrusion into the community.
H_SC15	Comments that the high speed rail will turn existing thriving neighborhoods and downtowns into unsafe areas to live.	It is the experience of NCDOT and DRPT that an inactive rail line near a neighborhood is more detrimental than an active, well maintained one. Revised Section 4.16 of the Tier II FEIS discusses the proposed full grade separation design as well as the proposed pedestrian over/under-passes.
H_SC16	Comments on the safety of specific proposed road or rail design elements.	All specific location design comments and concerns are addressed in individual responses to specific design requests/clarifications.
H_SC17	Suggestions that a new system on a completely new alignment, bypassing towns, should be considered to avoid the potential for accidents affecting downtowns and urbanized areas.	Based on the findings of earlier feasibility studies, NCDOT, DRPT, FRA, and FHWA focused on an "incremental" development approach to HSR to formulate and analyze the SEHSR Corridor in the Tier I EIS. This approach maximizes the use of existing infrastructure so that the initial capital investment required by the system is reduced, the Project may be built faster, and the Project would meet the fundamental goal of connecting the downtowns of major cities along its route. Bypassing cities would have required the creation of an entirely new 450 mile long facility with all new infrastructure on new alignment, thereby creating much greater impacts to existing urban and undeveloped/natural areas over a much larger impact area. A bypass option would also have been substantially more expensive, the time to construction would have been even greater, and the goal of connecting downtowns, the heart and soul of any city or town, would not have been fulfilled. For these reasons, it was determined that the Richmond to Raleigh Project would utilize the existing rail infrastructure, and be located within an established transportation corridor and railroad ROW.

Code I – Comments Related to Project Schedule and/or Funding

Summary Comment ID	Summary Comment	Response
I_SC1	Comments and questions on the source of funds to be used for the construction of the project including the use of public versus private funds.	At this time, it is anticipated that North Carolina and Virginia will pursue Federal funding through the Passenger Rail Investment and Improvement Act (PRIIA), reauthorization of Federal transportation programs and other Federal funding sources (which was anticipated by the Federal government as needed as part of the overall Federal HSR investment). Public-private partnership funding opportunities may also be sought along with Federal and state funding. Chapter 1 of the Tier II FEIS contains an expanded discussion of the necessary involvement of Federal funds in development of the SEHSR Corridor. As was done in the 1950s when the Federal government created the Interstate Highway System, the nationwide HSR system will use a variety of Federal funding options over many years to invest the billions of dollars needed for such a large new national transportation network. In authorizing this network, the Federal government recognized the substantial economic and environmental benefits such an investment will provide to all elements of the country for decades to come. As was the case for interstate highways, the initial cost to construct such a massive new public transportation system could not be fully funded by private sources or alone by individual end users (see Chapter 1 of the Tier II FEIS for more information). Thus, the estimated $2.1 billion in construction costs for the Raleigh to Richmond portion of the Project were never intended to be fully financed by the system's ridership; however, most long-term operational costs are estimated to be covered through ridership fees (see I_SC2). Decisions regarding future funding of the Richmond to Raleigh Project will be made at the completion of the environmental review process. The Project is not anticipated to be funded by local governments.
I_SC2	Comments and questions on the need for public subsidies for the project for operations and maintenance. Comments and questions on whether the project will "pay for itself."	As noted in Section 2.2.5.1 of the Tier II DEIS, earlier studies showed the Washington, DC, to Charlotte, NC, portion of the SEHSR Corridor is projected to net $21.6 million more per year in 2025 than it will cost to operate the facility. Chapter 1 of the Tier II FEIS provides an update of projected ridership/costs/revenue for the Richmond to Raleigh portion of the SEHSR Corridor. As discussed in Chapter 1, Section 1.5 of the Tier II FEIS and included as Appendix C. The facility has been studied repeatedly since 1997 with the conclusion that proposed revenues will exceed operations and maintenance expenses.

Summary Comment ID	Summary Comment	Response
I_SC3	Comments and questions on whether high speed rail is economically viable, including comments that if the system was viable, there would be no need for massive subsidies for its construction and operation, or if it is was potentially profitable, someone in the private industry would have built it already.	The transportation system is a mixture of both private and public investment in infrastructure (roadways, railways, airports, waterways) and operations (vehicles, aircraft, vessels, etc.) that provide modal alternatives and options for the future. As was done in the 1950s when the Federal government created and paid for the Interstate Highway System, the national high speed passenger rail system (of which the SEHSR Corridor is currently one of five high priority projects moving forward) was initially conceived in the 1960s and has received billions of dollars in Federal funds nationally for implementation since the early 1990s. In authorizing this network, the Federal government has consistently recognized the substantial economic and environmental benefits such a large new national transportation network will provide to the country for decades to come. (See Chapter of the Tier II FEIS for expanded discussion of project cost/benefits.) As is the case for modern toll roadways, such a massive new public transportation system could not be initially funded by private sources or by individual end users (see I_SC11). Thus, the estimated $2.1 billion in construction costs for the Raleigh to Richmond portion of SEHSR Corridor (as provided in the Tier II DEIS, with updated costs provided in the Tier II FEIS) were never intended to be financed by the system's ridership, but by the Federal government as part of the overall national high speed system investment. Because the Project involves improving rail lines that will continue to be shared with freight rail companies, that public investment will also benefit freight companies as well as the passengers who ride on the SEHSR Corridor. As noted in Section 2.2.3 of the Tier II DEIS, stations are proposed at reasonable stops along the route to maximize service to surrounding populations. The forecasts for the HSR between Charlotte and New York estimate total ridership (including both long distance and southeast trains) of approximately 1.3 million passengers annually by 2025, resulting in annual ticket revenues of $103.5 million. As noted in Section 2.2.5.1 of the Tier II DEIS, the Washington, DC, to Charlotte, NC portion of the HSR alone is projected to bring in $21.6 million more per year in 2025 than it will cost to operate the facility. These independent studies consistently indicate that the facility would not only be self-supporting, it would generate net revenue annually. Therefore, although it would require an upfront Federal investment to be constructed, it is not expected to require tax or other Federal subsidies for annual operations and would provide substantial economic and environmental benefits. (See Chapter 1, Section 1.5 and Appendix C of the Tier II FEIS for an expanded discussion of the Project Purpose and Need as well as several previous cost/benefit studies that have repeatedly confirmed the economic viability of the system. Updated ridership and revenue information is also presented here.)
I_SC4	Comments and questions about funneling all trains through Richmond's Main Street Station, including the opinion that to do so will create a bottleneck for train passage, will be excessively expensive, and will harm the viability of the entire SEHSR network.	The SEHSR Tier I EIS evaluated a corridor swath through Richmond without specifically designating stations. Subsequent studies focused on HSR from the Richmond area north will address issues associated with routing trains by Main Street Station.
I_SC5	Comments regarding the availability of enough federal funding to pay for the project. Also, statement that it is highly unlikely that substantial federal funding will be available in the future in light of foreseeable fiscal realities.	As discussed in detail in Chapter 1 of the Tier II FEIS, this Project is an integral portion of the overall SEHSR Corridor system, which in turn is part of a larger nationwide HSR network established through the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991. The Federal government established the SEHSR Corridor as a priority through several previous studies, including the Tier I DEIS for the SEHSR Corridor (see http://www.sehsr.org/reports/DEISes.pdf). The FRA, as well as the states of Virginia and North Carolina, continue to identify this Project as a priority, and as such are moving forward to complete the required NEPA and environmental permitting approvals, and have committed to continue pursuing funding for its construction. Completion of the environmental planning process is essential to obtaining Federal funding.

Summary Comment ID	Summary Comment	Response
I_SC6	Comments about on how the project is very much needed and is supported, with a desire to fund it and build it as soon as possible. Assertion that waiting any longer will only cost the project more. Reasons stated in support include: to boost economic de	Support for the Project, including its funding, has been noted. See an expanded Chapter 1 of the Tier II FEIS for additional project Purpose and Need (including cost/benefit) information.
I_SC7	Questions and comments on Norfolk Southern's decision in Raleigh, NC, to not move their train yard and whether it would affect funding or federal approval of Alternative NC3 and/or put the entire SEHSR project at risk (Section V).	In Section V (Raleigh), the preferred alternative (NC5) avoids both the Norfolk Southern rail yard and the CSX rail yard (Seaboard). Norfolk Southern's decision to keep their rail yard in Raleigh does not put the Richmond to Raleigh Project at risk.
I_SC8	Questions and comments on when it will be known which specific houses/businesses will be acquired for the project and when acquisitions will happen. Questions on the specific steps for the project to move forward and the project schedule, including when and how final decisions will be made.	Chapter 1 of the Tier II FEIS contains an updated project history, summary of project steps, discussion of future project steps and a new project schedule, including anticipated date of the final NEPA step (approval of the ROD), and next steps on funding, which is a precursor to property acquisition and project construction.
I_SC9	Comments and questions on the uncertainty of the project and the extended timeframe before many final decisions will be made. Comments that this situation could potentially put properties "under a cloud," or "on hold," or "essentially unmarketable, unsellable or severely reduced in value" for years. Related questions about what property owners should do if they are to be impacted and plan to sell, or want to make improvements, and what are the public disclosure requirements in each state.	North Carolina and Virginia will seek ROW and construction funding based on state rail priorities. The ROW acquisition phase for this Project cannot begin until the FRA issues a ROD, at which point, the established ROW acquisition process in each state will be followed. No construction funding has been identified for this Project at the state or Federal level at this time. ROW acquisition is based on the fair market value of the property, which considers all improvements at their current value. North Carolina and Virginia do not have a position on the issue of disclosure other than to encourage owners and real estate professionals to adhere to all laws and rules in their state regarding disclosure of information to prospective buyers. They are encouraged to check those laws and rules by contacting their appropriate state real estate licensing agency or county tax office when they list their home for sale. It should be noted that "hardship" ROW acquisition typically cannot apply to the Richmond to Raleigh Project until funding is established, which is contingent on the completion of the environmental review process.
I_SC10	Comments and questions on how the project will efficiently spend the public's money.	FRA, NCDOT, and DRPT require efficient project management and have strict project auditing and oversight requirements.

Summary Comment ID	Summary Comment	Response
I_SC11	Statements that the project should only be built by the private sector, given the assumption that the private sector would make it a success, unlike federal projects.	High speed passenger rail outside the NEC is inherently a public-private partnership because of the shared infrastructure with freight rail. Although public-private partnerships can play a critical role in final delivery of HSR service, no HSR system in the world has succeeded without significant up-front public investment and involvement. This is because private investment is not possible in the early stages of most large-scale infrastructure and public works projects (as is also the case for highways constructed as toll roads) due to the sheer size of initial investment required to design and construct the system. Other obstacles to privatization that would need to be overcome include substantial risks involved in such highly complex and multi-jurisdictional projects, the amount of time for projects to become operational, and potential uncertainty on when the projects, once they are up and running, will produce a strong enough return on investment. As discussed in a revised Chapter 1 of the Tier II FEIS, it is anticipated that North Carolina and Virginia will pursue construction funding through various Federal sources, including the Passenger Rail Investment and Improvement Act (PRIIA), reauthorization of Federal transportation programs and other Federal funding sources (which was anticipated by the Federal government as needed as part of the overall Federal HSR investment). State and public-private partnership (P3) funding opportunities may also be sought along with Federal funding. Such a P3 initiative to create private investment opportunities is being pursued in California (see http://www.cahighspeedrail.ca.gov/). See Chapter 1 of the Tier II FEIS for more information on the Project's costs and benefits that support the public need for the Project.
I_SC12	Comment that the project is going to be another federal financial failure, worsen national debt, and burden taxpayers, similar to other federal initiatives such as the US Postal Service, Social Security, and Amtrak.	Chapter 1 of the Tier II FEIS contains an expanded discussion of the necessary involvement of Federal funds in development of the SEHSR Corridor. As was done in the 1950s when the Federal government created the Interstate Highway System, the nationwide HSR system will use a variety of Federal funding options over many years to invest the billions of dollars needed for such a large new national transportation network. In authorizing this network, the Federal government recognized the substantial economic and environmental benefits such an investment will provide to all elements of the country for decades to come. As was the case for interstate highways, the initial cost to construct such a massive new public transportation system could not be fully funded by private sources or alone by individual end users (see Chapter 1 of the Tier II FEIS for more information). Thus, the estimated $2.1 billion in construction costs for the Raleigh to Richmond portion of SEHSR Corridor were never intended to be fully financed by the system's ridership. However, as noted in Section 2.2.5.1 of the Tier II DEIS, the Washington, DC, to Charlotte, NC, portion of the SEHSR Corridor is projected to bring in $21.6 million more per year in 2025 than it will cost to operate the facility (see Section 1.5 of the Tier II FEIS for updated ridership/costs/revenue). As discussed in Chapter 1 of the Tier II FEIS, the facility has been studied repeatedly since 1997 with the conclusion that it would not only be self-supporting, but it would generate substantial net revenue annually. The project would require an upfront Federal investment to be constructed, and public-private funding opportunities may also be sought. However, it is not expected to require tax or other Federal subsidies for annual operations. In addition, Between the substantial socio-economic benefits of the system and the net annual operating surpluses for the system operators (which reduces any need for future public funding), the Raleigh to Richmond portion of the SEHSR Corridor is predicted to be a financial success for Virginia and North Carolina.

Summary Comment ID	Summary Comment	Response
I_SC13	Comments and questions on the multiuse greenway/trail associated with the SEHSR, including statements that the trail should be guaranteed with the project and acquisition of the trail corridor should be part of the SEHSR and paid in full with federal money.	The concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Project DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for HSR projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project, the process of developing the environmental documentation for greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This document is currently under development, with completion anticipated at the time of the ROD for the Richmond to Raleigh Project. The Project website will provide additional details on this separate plan and opportunities for its public review and comment.
I_SC14	Comments and questions on why the project has been evaluated in a "piecemeal" fashion, has had so many "endless studies," "red tape," and "analysis paralysis," and/or has wasted a lot of time and money.	As indicated in the SEHSR Corridor Tier I EIS and Tier II DEIS documents, the Project is Federally funded and, therefore, subject to the environmental studies and public involvement requirements of the National Environmental Policy Act (NEPA). Due to the size and complexity of the Project's potential impacts, a full evaluation of the Project has taken over 20 years to go from corridor concept to Tier I and Tier II studies with preliminary design (i.e., 1992 to 2012). Given that the average timeframe for smaller Federal Highway Administration (FHWA) road projects to complete only the Tier II-level NEPA process is 5.5 years, with 13% of projects taking more than 10 years to complete (based on an FHWA study), the Richmond to Raleigh Project has not taken an unusually long time. For an expanded project history that describes the various steps taken in the life of the Project and the value/purpose/requirement for each, see Chapter 1 of the Tier II FEIS.
I_SC15	Comments and questions on why the project is being "rushed through," with not enough "conservative, diligent research," and/or the need for "better evaluation of impacts." Comment that this will result in careless and reckless impacts to the environment and communities.	As discussed in the expanded Chapter 1 of the Tier II FEIS, the Congressional interest in national high speed ground transportation dates back to 1965, with numerous detailed studies for the Washington, DC, to Charlotte, NC, corridor dating back to as early as 1981, with a major Federal economic study of the entire national HSR system in 1997, a feasibility study specifically for the SEHSR (Washington, DC, to Charlotte, NC, corridor) in 1999, the SEHSR Corridor Tier I EIS prepared in 2003, and the Tier II DEIS for the current project in 2010. These studies have been, and continue to be, methodical and deliberate, with a continued focus on avoiding, minimizing and mitigating human and environmental impacts; ensuring the greatest possible economic benefits; and ensuring the tangible and intangible benefits of the Project exceed its costs. This is demonstrated in this FEIS document, which contains refined environmental analysis and engineering designs for the Preferred Alternative, which avoids human and natural resources as much as practical while still allowing high operability.
I_SC16	Comments and questions on how the project should be funded, including using a gas tax increase.	Appropriate project funding sources will be evaluated once the NEPA process is complete.

Summary Comment ID	Summary Comment	Response
I_SC17	Comments and questions on whether or not a particular locality's taxes will go up if the train does not stop (at a station) in a particular locality.	The states of Virginia and North Carolina have committed to continue pursuing funding for the Project's construction. At this time, it is anticipated that Federal funding will continue to be pursued through the Passenger Rail Investment and Improvement Act (PRIIA), reauthorization of Federal transportation programs and other Federal funding sources (which was anticipated by the Federal government as needed as part of the overall Federal HSR investment). State and public-private partnership funding opportunities may also be sought along with Federal funding. Specific decisions regarding future funding of the SEHSR Corridor will be made at the completion of the environmental review process. At this point it is not possible to speculate what revenue sources the Federal and state governments will use to fund construction of the Project; however, it is not anticipated that funding will come from localities.

Code J – Comments Related to Preference for an Alternative

Summary Comment ID	Summary Comment	Response
J_SC1	Expression of preference for a particular alternative.	Preference noted. Refer to Chapter 2 of the Tier II FEIS for an explanation of the decision regarding the preferred alternative for each section of the Project.

Code K – Other Comments (Including Comments Related to Potential Station Locations)

Summary Comment ID	Summary Comment	Response
K_SC1	Questions on how the station locations were selected, and/or why specific locations were not considered for station stops, and/or comments on the number of stations/stops in specific locations.	Section 2.2.3 of the Tier II DEIS details the needs for placing stops/stations between Richmond, VA, and Raleigh, NC. Other linkages planned for the SEHSR Corridor will eventually connect to Washington, DC, to the north and Charlotte, NC, to the south, as well as Hampton Road, VA. This study only evaluates station locations for the Richmond to Raleigh segment of the overall SEHSR Corridor. Each of the stations must be placed at reasonable intervals while still serving the population centers along the route. The DEIS recommended that stations be located in three cities that currently have stations - Richmond, VA, Petersburg, VA, and Raleigh, NC. Two new stations were recommended for La Crosse/South Hill (VA) and Henderson (NC). These locations were recommended based on operational model ridership and revenue forecasting, station platform engineering design needs, feedback from the public, and the size of accessible populations along the route (see pages 2-45 to 2-48 of the Tier II DEIS for more detailed information). Improvements made to the rail infrastructure through the Richmond to Raleigh Project could create opportunities for the development of conventional rail service to exist along with high speed service throughout the Project corridor, or to connect to other rail lines extending outside the corridor. Conventional trains could operate at the same (or lower) speeds as the SEHSR Corridor, but stop more often at additional locations. Additionally, Virginia and North Carolina have both evaluated the feasibility of adding conventional passenger train service to eastern and western portions of the states. The proposed SEHSR Corridor service would serve as the spine to these added routes, allowing conventional rail service passengers to connect to the proposed SEHSR Corridor service and other points in the Northeast, Southeast, and beyond. Note that although this environmental document has assessed operational data and ridership projections to identify suitable station stops, the planning, improvements, construction and maintenance/operations needed for each station is a local responsibility.
K_SC2	Comments in support of the use of Main Street Station (MSS) in Richmond, VA, as part of the SEHSR project (Section AA).	The SEHSR Corridor Tier I EIS evaluated the corridor through Richmond without specifically designating stations. Subsequent studies focused on HSR from the Richmond area north will address issues associated with routing trains by Main Street Station.
K_SC3	Suggestion for a specific station location or other comments about the proposed station in the Petersburg, VA area (Section CC).	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations because the development of stations is a unique undertaking at an individual location. However, generalized sites within the Petersburg area were evaluated, but only to the level to ensure that a station placed along the Project corridor in this general location would provide sufficient accessibility to the larger transportation network. All specific ideas for station locations will be noted and provided to transportation planning organizations in the Petersburg area, who will perform separate environmental evaluation and make the final decision on the station location and design at a later date. It should be noted that Chapter 1 of the Tier II FEIS contains an expanded discussion of likely station design guidelines and the types of information and detailed studies that the station NEPA studies would likely need to contain.
K_SC4	Suggestion for a specific station location or other comments about the proposed station in in Raleigh, NC (Section V).	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations because the development of stations is a unique undertaking at an individual location. NCDOT and the City of Raleigh have completed a separate environmental evaluation and are currently constructing a new Raleigh Union Station. This project includes improvements to the CSX-S-Line and the NCRR H-Line at Boylan Junction (see Chapter 1, Section 1.1.3.2).
K_SC5	Suggestion for a specific station location or other comments about the proposed station in La Crosse, VA (Section I).	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of specific station locations. All specific ideas for station locations will be noted and provided to the Town of La Crosse, who will perform a separate environmental evaluation and make the final decision on its location and design at a later date. It should be noted that Chapter 1 of the Tier II FEIS contains an expanded discussion of station design guidelines and the types of information and detailed studies that the station NEPA studies would likely need to contain.

Summary Comment ID	Summary Comment	Response
K_SC6	Suggestion for a specific station location or other comments about the proposed station in Henderson, NC (Section P).	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations because the development of stations is a unique undertaking at an individual location. All specific ideas for station locations will be noted and provided to the Town of Henderson, who will perform a separate environmental evaluation and make the final decision on its location and design at a later date. It should be noted that Chapter 1 of the Tier II FEIS contains an expanded discussion of station design guidelines and the types of information and detailed studies that the station NEPA studies would likely need to contain.
K_SC7	Comments stating that Richmond's Main Street Station (MSS) is "impractical," "outdated," a "bottle-neck," "too congested," and a "bad idea." Assertion that funneling trains through MSS would be prohibitively expensive, degrade speeds, and affect trip times and reliability. Also suggestions that the Broad Street Station (also known as Union Station) is a better choice (Section AA).	The Tier 1 study evaluated the corridor through Richmond without specifically designating stations. Subsequent studies focused on HSR from the Richmond area north will address issues associated with routing trains by Main Street Station.
K_SC8	Comments and questions on amenities needed for each of the rail stations to ensure high ridership, including suggestions for appropriate access, parking, security, and passenger amenities.	As detailed in Section 2.2.4 of the Tier II DEIS, the rail alignments have been designed to accommodate a platform at all the locations identified to have a station/stop. Detailed designs for the Project's proposed stations will be developed by other entities (e.g., the municipalities or the entity who eventually operates the service) and evaluated through separate NEPA processes. All applicable design requirements (other than the Americans with Disabilities Act), including parking, security, station design and passenger amenities, would be controlled by the local government where the station is located, in conjunction with the applicable state rail agency and the rail operator, who may have their own design guidelines. It should be noted that Chapter 1 of the Tier II FEIS contains an expanded discussion of likely station design guidelines and the types of information and detailed studies that the station NEPA studies would likely need to contain.
K_SC9	Suggestion that only bare minimums are required for rail stations, specifically reduced size structures, unmanned services, basic designs and limited amenities are needed to save costs and conserve space.	As detailed in Section 2.2.4 of the Tier II DEIS, the rail alignments have been designed to accommodate a platform at all the locations identified to have a station/stop. Detailed designs for the Project's proposed stations will be developed by other entities (e.g., the municipalities or the entity who eventually operates the service) and evaluated through separate NEPA processes. All applicable design requirements (other than the Americans with Disabilities Act), including parking, security, station design and passenger amenities, would be controlled by the local government where the station is located, in conjunction with the applicable state rail agency and the rail operator, who may have their own design guidelines. It should be noted that Chapter 1 of the Tier II FEIS contains an expanded discussion of likely station design guidelines and the types of information and detailed studies that the station NEPA studies would likely need to contain.
K_SC10	Comments and questions about specific land use/growth/redevelopment and transportation needs in a community (outside of the project study area).	It is advisable that all respondents with non-project related comments and suggestions regarding land use or transportation in their communities take their concerns to their local government planning department staff. Section 3.11.3 of the Tier II DEIS specifies which agencies are responsible for land use planning, regulating development and transportation planning in the two-state project areas.

Summary Comment ID	Summary Comment	Response
K_SC11	Comments and questions about existing freight traffic sharing trackage with the proposed SEHSR. Comments expressing desire to re-route freight away from the proposed SEHSR route.	As discussed in Section 1.3 of the Tier II DEIS, the FRA has been implementing proposed HSR routes nationally since 1991. Figure 1-2 of the Tier II DEIS provides a map of the Designated High Speed Rail Corridors as well as other existing or proposed passenger rail routes across the nation. Early in the planning process NCDOT, DRPT, and FRA determined, through a series of feasibility studies and modeling, that the SEHSR Corridor should be analyzed and implemented using an incremental approach. This approach minimizes impacts to both the human and natural environments by using existing rail infrastructure and rail ROW as much as possible. Use of existing infrastructure also reduces the initial capital investment required by the system. FRA will continue to make operational decisions on the best possible routes for passenger trains on both HSR and conventional railways based on a variety of factors, including existing freight traffic.
K_SC12	Comments or questions about suggested areas the SEHSR should extend to and connect with, including airports, entertainment areas, employment centers, even if those are located outside of the project corridor.	It has long been recognized that, for complete transit system functionality, there are a variety of important local origins and destinations located outside of the Richmond to Raleigh Project corridor in each metropolitan region that need to be served by other transportation projects (e.g., regional rail, local light rail) with linkages to the SEHSR Corridor (e.g., RDU airport). For example, the proposed Triangle Regional Transit Program project will address many of the local connectivity needs in the Research Triangle Park area of North Carolina. Virginia and North Carolina have both evaluated the feasibility of adding conventional passenger train service to eastern and western portions of the states. The proposed SEHSR Corridor service would serve as the spine to these added routes, allowing conventional rail service passengers to connect to the proposed SEHSR Corridor service and other points in the Northeast, Southeast, and beyond. Towns that are not designated to receive a HSR stop initially could benefit by access to passenger rail service at defined stations along the SEHSR Corridor, with the future potential for conventional passenger rail service based upon demand. However, those conventional needs extend beyond the scope of the Richmond to Raleigh Project and, therefore, will need to be addressed by separate public transit projects developed through the coordinated activities of various other regional and local transportation planning agencies located along the corridor (see G_SC10). As discussed in Chapter 1 of the Tier II DEIS for this Project, the Richmond, VA, to Raleigh, NC, portion of the SEHSR Corridor will enhance the connectivity between major cities through greatly enhanced speed, reliability, and reductions in travel time. The project's purpose is to better serve regional (not local), long-distance and interstate leisure and business travelers between major metropolitan areas traveling north and south along the I-85 and I-95 travel corridor on the East Coast (in Virginia and North Carolina, as well as north to Washington, DC, and the Northeast, and south to South Carolina, the Gulf Coast, and Florida). The project will use existing north-south freight and passenger rail lines and corridors to regionally connect the city centers in these metropolitan areas, providing an alternative that will divert long-distance intercity trips from air and highway users.

Summary Comment ID	Summary Comment	Response
K_SC13	Comments in support of the project, including comments supporting current travel by train either in this corridor or along lines that connect to this corridor. Statements affirming that the new SEHSR service would be used in the future including the following: 1) Support for the project, given that it will improve regional and intercity connectivity and overall mobility; 2) It is critical that high speed rail links major cities in the east. Consistent and reliable high speed rail service will expand the worlds of older people and others less willing to drive/fly to DC, NYC, and Boston. 2) The Richmond-Raleigh high speed rail corridor is the missing link in the SEHSR, and needs to be free of at-grade crossings for safety, operational and competitive federal funding reasons, as well as include bridges where feasible to enhance connections within communities. 3) Connections between city centers is crucial to the economies of the localities along the facility. 4) The facility will create an even larger economic region. 5) Connections to other regional transportation and transit systems and modes are essential as well as SEHSR (see K_SC12 and K_SC15 for additional information).	Comment noted.

Summary Comment ID	Summary Comment	Response
K_SC14	Comments and questions on how the area around train stations should be developed, including suggestions as to their function and use, including items such as destinations for shopping, entertainment, and culture.	The DEIS (Section 2.2.4) does not evaluate the environmental impacts of stations or recommend specific station locations because the development of stations is a unique undertaking at an individual location and will be addressed in separate NEPA studies. Chapter 1 of the Tier II FEIS does contain an expanded discussion of likely station design guidelines and the types of information and detailed studies that the future station NEPA studies would likely need to contain. As described in the revised Section 4.17.3 of the Tier II FEIS, a likely local effect of the SEHSR Corridor is to encourage development of higher density land uses around the planned stations, which may limit the growth of urban sprawl. Such improvements are assumed in the various economic benefit studies summarized in the updated Chapter 1 of the Tier II FEIS. Section 3.11.3 of the Tier II DEIS specifies which agencies are responsible for land use planning, regulating development and transportation planning in the potential station locations. It is advisable that all respondents with non-project related comments and suggestions regarding land use or transportation in their communities take their concerns to their local government planning department staff.
K_SC15	Comments and questions on needs for multimodal transit connectivity to the SEHSR, including transfer points, public transportation, and other local and regional transit systems and how they will connect/work with the proposed system.	As described in Chapters 1, 3 and 4 of the Tier II FEIS, the intent of the SEHSR Corridor is to be connected to other forms of transit, which would enhance regional connectivity. For example, the SEHSR Corridor is being planned for connectivity with other rail transit in the major metropolitan areas along the Project corridor (e.g., Triangle Regional Transit Program). In addition, Virginia and North Carolina have both evaluated the feasibility of adding conventional passenger train service to eastern and western portions of the states. The proposed SEHSR Corridor service would serve as the spine to these added routes, allowing conventional rail service passengers to connect to the proposed SEHSR Corridor service and other points in the Northeast, Southeast, and beyond. The Richmond, VA, to Raleigh, NC, portion of the SEHSR Corridor enhances the connectivity through greatly enhanced speed, reliability, and reductions in travel time. Section 3.11.3 of the Tier II DEIS discussed the associated local and regional transit services planned to connect to the SEHSR Corridor, as well as which agencies are responsible for planning the transportation needs in the two-state project area. As discussed in the revised Section 3.11.3.1 of the Tier II FEIS, at all proposed SEHSR Corridor stations/stops there is currently at least one public bus transit service agency that either currently provides, or is anticipated to be expanded to provide, bus or van services for SEHSR Corridor riders at the planned station locations. This includes the following bus transit agencies/systems (listed by proposed SEHSR Corridor station location) - Richmond, VA (Greater Richmond Transit Company (GRTC)); Petersburg, VA (Petersburg Area Transit); La Crosse, VA (Lake Area Bus/Halifax Area Rural Transit (LAB/HART)); Henderson, NC (Kerr Area Rural Transportation System (KARTS)); and Raleigh, NC (Capital Area Transit (CAT) & Triangle Transit (TT)) Additionally, rail transit plans for the Richmond region include several commuter rail and light rail lines providing service to Main Street Station, as well as a proposed commuter rail line that could potentially share the same ROW as the SEHSR Corridor between Main Street Station and Petersburg, VA. Rail transit plans for the Raleigh region involve a light rail line that could potentially share the same general corridor as the SEHSR Corridor from north Raleigh to downtown Raleigh. It is advisable that all persons with comments or suggestions regarding public transit needs in their communities (which are outside the scope of this Project) take their concerns directly to their local transit or transportation planning agencies.
K_SC16	Comments requesting that the SEHSR should extend to the Hampton Roads area of Virginia and be a part of this EIS, or requesting this study better reference/incorporate that project linkage.	The Hampton Roads HSR connection has been studied through a separate project, given its independent utility (as authorized by NEPA). The FEIS for the Hampton Roads study was submitted to FRA in July 2012. For more information on the "Richmond to Hampton Roads Tier I" study or plans for the next phase (Tier II EIS), as well as public involvement opportunities for that separate project, please go to http://www.rich2hrrail.info/. The two projects are being designed to ensure compatibility and connectivity in the Petersburg, VA/Tri-Cities area. The Richmond to Raleigh Project FEIS has been updated to include additional information on the Richmond to Hampton Roads project, specifically addressing the compatibility of designs as well as cross-references to the results of that separate study.

Summary Comment ID	Summary Comment	Response
K_SC17	Questions/comments on how the SEHSR project will benefit or harm the communities along the inactive CSX corridor, or other active rail corridors, in terms of freight usage.	The Richmond to Raleigh Project will replace the missing tracks and allow passing sidings along the inactive CSX corridor from the Norlina, NC, area to Collier Yard, south of Petersburg, VA. The project will also add passing sidings along the currently active rail corridors. Together, these improvements will provide an opportunity and capacity for new freight usage, which would be a benefit to industries in those counties that use (or could use) freight as a means of transporting or receiving goods.
K_SC18	Comments about existing passenger rail travel along the corridor being slow and of poor quality due to shared trackage and poor track and train maintenance by freight companies.	The Richmond to Raleigh Project will address these existing problems in the active corridor by providing passing sidings and straightened alignments to improve passenger train travel times as well as prevent blockages or conflicts with freight trains. The Richmond to Raleigh Project will also construct new or improved rail lines and provide increased maintenance along the entire corridor to dramatically improve the quality of the corridor and decrease the chance for breakdowns or delays. Also, it is possible that the VA-NC SEHSR Compact would own the rail corridor from south of Petersburg, VA, to Raleigh, NC (CSX S-Line), which would give passenger trains preference over freight trains.
K_SC19	Comments/questions regarding stopping, idling, and/or starting freight trains along the multiple planned passing sidings, including the perception that such a situation would create more impacts than a traveling freight train.	The passing sidings provided along the Richmond to Raleigh Project corridor are to allow one moving train to pass another moving train (i.e., neither train stops). Idling of either freight or passenger trains is not anticipated along the passing sidings.
K_SC20	Comments or questions about the effect of Alternative NC3 on Norfolk Southern's operations in downtown Raleigh, NC (Section V).	The preferred alternative in Section V is Alternative NC5. With the separation of freight and passenger routes north of Jones St. under Alternative NC5, and the additional capacity created through the Project, it is anticipated that there will not be a substantial change in freight idling times in downtown Raleigh resulting from the Project.
K_SC21	Comments on intermodal freight trains, specifically about whether they will they be stopping or just passing through Raleigh, NC. If they would stop in Raleigh, questions about what their impacts would be.	The Richmond to Raleigh Project EIS document assumes eight additional intermodal trains along with two additional conventional freight trains to account for impacts related to a potential increase in freight traffic. Currently, there is no intermodal freight service through Raleigh, and no known plans for introduction of the service. However, operation of intermodal trains is controlled by the freight railroad companies and is driven by market demand.
K_SC22	Comments that requested the need for all greenways to be jointly planned and linked regionally.	There are several non-profit groups that are planning longer, multi-county or even multi-state greenway systems in the Project Study Area, such as the North Carolina Mountains to the Sea Trail (see http://www.ncmst.org/) and the East Coast Greenway (see http://www.greenway.org/), which is being developed from Maine to Florida, with which the proposed greenway adjacent to the Richmond to Raleigh Project may be incorporated. It is standard for greenway and park planning to attempt to provide inter-connectivity between separate trail and greenway systems to improve regional mobility and reduce automobile dependence and also to capitalize on other existing trails to provide linkages for their systems to avoid costly duplications. Greenway and bicycle path planning are traditionally accomplished by cities and counties along the Project alignment as well as by regional planning and transportation agencies, according to policies generated by the local government(s) with jurisdiction in the area.

Summary Comment ID	Summary Comment	Response
K_SC23	Comments, questions, suggestions or request for details on the proposed multiuse greenway trail system. Also, comments supporting the parallel greenway system as part of the SEHSR project.	The concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Project DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for HSR projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project, the process of developing the environmental documentation for greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This document is currently under development, with completion anticipated at the time of the ROD for the Richmond to Raleigh Project. The Project website will provide additional details on this separate plan and opportunities for its public review and comment.
K_SC24	Statements that there have not been sufficient opportunities for public, local government, or other agency involvement in this project. Statement that public involvement should have been coordinated between this project and the Richmond to Hampton Roads project. Statement that there needs to be additional opportunities for public input going forward.	The SEHSR Corridor project was divided into two tiers of studies that have spanned a decade, providing numerous opportunities for public and agency involvement. The SEHSR Corridor Tier I EIS included extensive public, local government (including elected officials) and agency involvement between 1999 and 2000. Specific agency/local government outreach included: informal communications; formal joint bi-state scoping meeting; informal briefings and small group meetings; written data and input requests; the formation of an Advisory Committee; and use of the same communication tools made available in the public involvement process (newsletters, web site, toll free project line and access to the public workshops and officials workshops). Specific public involvement outreach included: a public opinion survey; public workshops; community outreach tools/techniques; media outreach; community outreach research; and public feedback on public involvement activities. As discussed in Chapter 7 of the Tier II DEIS, the Tier II study also included public, official and agency involvement opportunities between 2003 and 2009. Specific outreach included: an agency scoping meeting; two advisory committee meetings (with participation by representatives of all the affected localities along the Project); agency-specific coordination activities (i.e., meetings with specific agencies as needed); four project newsletters; a continually updated project website; development of periodic press releases; a toll-free project hotline; 18 informational workshops along the Project corridor; a project brochure; and additional coordination with specific property owners affected by the Project (e.g. Section 106 historic resources). The DEIS met the NEPA requirements for a minimum of 45 days of public review time. Eight public hearings for the Tier II DEIS were held along the Project corridor (Richmond, VA; Petersburg, VA; McKenney, VA; Alberta, VA; Norlina, NC; Henderson, NC; Franklinton, NC; and Raleigh, NC). In addition, in 2011 and 2012, public update meetings were held in several sections of the Project to present new alternatives (near Alberta, VA, and in downtown Raleigh, NC) and show other design changes based on comments on the Tier II DEIS (North Raleigh, and Wake Forest, NC, Henderson, NC and Chesterfield County, VA). There will also be design public hearings held after completion of the Record of Decision (ROD). Regarding coordinating the public involvement of the Richmond to Hampton Roads project and this one, the same team at DRPT is involved in both studies, and daily coordination has taken place throughout the planning process. Representatives of this Project attended the public hearings in January 2010 for the Richmond to Hampton Roads project to answer questions about the compatibility of the two projects. Additionally, DRPT representatives attended a town hall style meeting in Norfolk, VA, in October 2010 to answer public questions about the Richmond to Raleigh Project.

Summary Comment ID	Summary Comment	Response
K_SC25	There has been insufficient outreach to low income and protected populations (including Limited English proficiency (LEP)) in affected project areas.	The environmental justice section of the Tier II DEIS (section 4.11.5) concluded that no disproportionately high and adverse effects on low-income and minority populations are anticipated within the overall SEHSR Corridor, and there is a reasonable expectation that minority and low-income populations would share in the benefit of the proposed rail improvements. Although not targeted specifically to EJ communities, substantial outreach was conducted to all populations along the entire project corridor (see K_SC24). In the only county reaching the Project LEP threshold (5% of/1,000 persons within the Study Area in a county speaking English less than "very well"), LEP assistance was provided (see K_SC26).
K_SC26	Comments/questions regarding sufficient outreach provided to Limited English Proficiency (LEP) populations.	Wake County, NC, which includes the City of Raleigh and Town of Wake Forest, was the only county in the Project Study Area to meet the Project threshold that would require need for LEP assistance (5% of - or 1,000 persons within - the Project Study Area within in a county). Therefore, a Spanish translator was provided at the July 2010 public hearing, September 2011 public update meeting, and May 2012 public update meeting held in Wake County. In addition, Spanish translations of all the handouts and display boards were available at the hearing and meetings and all hearing/meeting notification letters sent to property owners were mailed with both English and Spanish versions. For Spanish speakers throughout the entire Project Study Area, there was a link on the Project's DEIS web page that took the reader to info in Spanish about the Project and the toll free project hotline provided an option to hear the outgoing message in Spanish.
K_SC27	Comments/questions regarding consistency or perceived conflicts between the Triangle Transit (TT) proposed regional light rail designs in Wake and Durham Counties and the SEHSR project (Section V).	NCDOT, TT, and the City of Raleigh have been closely coordinating the two separate projects. All potential conflicts between the preferred NC5 alternative in Section V and the revised TT designs (published in July 2011) have been addressed by either TT or the SEHSR Corridor making minor design modifications.
K_SC28	Questions on existing and/or future daily limits on the number of passenger and freight trains in the project corridor.	The Richmond to Raleigh Project contemplates eight additional intermodal freight trains along with two to four additional conventional freight or passenger trains. Construction of the Richmond to Raleigh Project could also allow for conventional passenger service (i.e., local service with more stops in smaller towns) in the future, as demand for service grows. The daily number of trains that could operate within the proposed SEHSR Corridor other is constrained by the number of available “slots” in the dispatch schedule. The number of slots is affected by “choke points” within the active freight corridors north of Petersburg and south of Raleigh. This project provides additional rail capacity between Richmond, VA and Raleigh, NC; however, such points in other locations throughout the corridor will impact the number of available slots for trains operating on the new corridor. Separate environmental studies are planned and/or are underway to address design issues in other sections of the corridor. For the purposes of this environmental document, proposed service within the Richmond, VA, to Raleigh, NC, portion of the SEHSR Corridor consists of four new high speed passenger round trips per day (eight trains).
K_SC29	Comments on the need to study ridership and revenue for the high speed rail line to Hampton Roads in conjunction with this project, to adequately show the benefits of both projects or to compete for federal funding.	Chapter 1 of the Tier II FEIS contains results of the new ridership/revenue study, which assumes all proposed linkages within the Richmond to Raleigh Project are completed, including Hampton Roads and Richmond, VA, to Washington, DC, and the Northeast Corridor.

Summary Comment ID	Summary Comment	Response
K_SC30	Comments against the parallel greenway trail system. Objections to the greenway as part of the SEHSR project due to concerns such as noise, trash, and invasion of privacy.	In December 2006, Virginia's Department of Conservation and Recreation (DCR), and representatives of Dinwiddie, Brunswick, and Mecklenburg counties voiced their support for a multiuse Greenway Concept associated with the SEHSR corridor and its inclusion in the SEHSR Tier II DEIS. The North Carolina Department of Environment and Natural Resources (DENR) also voiced its support for an extension of the Greenway Concept south into North Carolina and terminating at the Neuse River, north of Raleigh, NC Based on the above input, the concept of a greenway located parallel to the Richmond to Raleigh Project from Dinwiddie, VA, to the Neuse River (just north of Raleigh, NC) was introduced in the Richmond to Raleigh Project DEIS. The rationale for its inclusion was to allow the necessary environmental documentation for the greenway to be prepared so that local municipalities could more quickly pursue the construction of the greenway in their jurisdictions. The construction of the greenway was never intended to be funded as part of the Richmond to Raleigh Project because FRA (the source of Federal funding for high speed rail projects) does not have a mechanism to provide funding for greenways. Although the parallel greenway is still being studied along with the Richmond to Raleigh Project, the process of developing the environmental documentation for greenway has changed since publication of the Tier II DEIS. FRA, FHWA, and the states of Virginia and North Carolina have jointly determined that the greenway project is more suitable for a pre-NEPA Greenway Corridor Plan, rather than being included in the Tier II FEIS for the Richmond to Raleigh Project, as previously considered. This is primarily to give the local jurisdictions who will ultimately construct the greenway greater flexibility to pursue various funding types over time rather than limiting them to a particular funding agency's NEPA requirements. The details for the greenway will, therefore, not be contained within the Richmond to Raleigh Project FEIS, but rather in a separate Greenway Corridor Plan. This plan will be similar to a Tier I (corridor) NEPA document but without needing a Federal agency signature. It will focus on project feasibility as well as purpose and need, will serve as the basis for future NEPA documents for individual greenway segments, and will document the type and amount of natural and human environmental impacts. It will address public concerns over the public use on the greenway, including but not limited to noise, trash, and invasion of privacy and trespassing. It will also better serve the state park agencies and local governments in both states, in terms of providing flexibility to pursue various funding types over time. The Project website will provide additional details on this separate plan and opportunities for public review and comment.
K_SC31	Comments objecting to the project in its entirety. Questions about why the public cannot choose NO to ALL project alternatives, thereby choosing NO to the entire project.	This Tier II study is the second phase of the Project. In 2001, a Tier I EIS was prepared for the SEHSR Corridor that focused on the evaluation of nine different Study Area Alternatives compared to a No Build Alternative. The No Build Alternative included existing and committed improvements to highway, air travel, intercity bus, passenger rail (Amtrak and VRE), public transit, and freight services, without any new high speed rail passenger service. (The study referred to this No Build Alternative as the "No Project" option.) The SEHSR Corridor Tier I FEIS (June 2002) and Tier I ROD approved by NCDOT, DRPT, FRA and FHWA (October 2002) selected one of the Build Alternatives, rather than the No Build Alternative, to be carried forward into the current Tier II process. Reasons for this selection included: providing the traveling public – particularly special populations such as the elderly and the disabled – with improved transportation choices; Helping ease existing and future congestion (air, highway, passenger rail) within the corridor; Improving safety and energy effectiveness within the transportation network; Reducing the overall air quality related emissions per passenger mile traveled within the corridor; and, Improving overall transportation system efficiency within the corridor, with a minimum of environmental impact. The No Build Alternative would not provide these benefits; therefore, it was discarded from further study. This Tier II study builds upon the results of the Tier I study in further evaluating the preferred Build corridor only.

Summary Comment ID	Summary Comment	Response
K_SC32	Comments that the project information, surveys, reports, and/or studies are confusing and the commenter could not understand the provided information.	Comment noted. Please contact the appropriate project contact in your state at the following phone number for assistance : NC - Marc Hamel, SEHSR Tier II EIS Project Manager, NCDOT Rail Division, 919-707-4705 VA - Emily Stock, Manager of Rail Planning, Virginia DRPT, 804-786-1052
K_SC33	Comment on an area located outside of the project area or on a project element not under debate (e.g., elements determined during the Tier I process).	This Tier II EIS covers the SEHSR Corridor between Richmond, VA, and Raleigh, NC, as shown on Figure ES-1 in the Tier II DEIS. Comments provided on areas located outside of this defined project corridor are noted, but are not pertinent to the current project and are, therefore, not specifically answered. Also, comments provided on subjects already decided in the Tier I process (e.g., related to use of diesel engines) or even prior to the SEHSR Corridor Tier I EIS (e.g., using the "Incremental Approach" to improve existing rail lines) are noted but not specifically answered. (For additional details on these decisions, please refer to these documents on the Richmond to Raleigh Project website: www.sehsr.org)
K_SC34	Questions about how the rail and roadway alignments were evaluated and selected to ensure a fair and balanced approach.	The purpose of NEPA is to objectively evaluate and report on the Project's Purpose and Need and impacts to facilitate fair and balanced decision-making. The details presented in the Tier II FEIS, including how the preferred alternative for each Project section was selected, demonstrates how the proposed alternatives in the Tier II DEIS were evaluated and amended based on equal consideration of impacts to the human and natural environment, costs, and operability/constructability, along with public and agency comments.
K_SC35	Request to extend public comment period to allow the City of Raleigh to hold a public hearing and comment on alternatives in downtown Raleigh, NC.	Request accommodated.
K_SC36	Statement that the FEIS should expand upon the purpose and need for the project to include "promotion of compact development" and "reduction of greenhouse emissions."	The Purpose and Need for the Richmond to Raleigh Project was established in the SEHSR Corridor Tier I ROD (October 2002). Although new items will not be added to the Purpose and Need, Chapter 1 of the Tier II FEIS provides additional information about the benefits described in the Tier I document.
K_SC37	Comment that changes to land use around stations should be evaluated in the FEIS rather than postponed to later date; if not planned properly now, the project could encourage more sprawl. Statement that the project should provide funding preference to station locations where local plans and ordinances encourage transit, bicycle, and pedestrian connectivity to stations, and that stations should be in city centers where possible.	As described in Section 4.17.3 of the Tier II DEIS, a likely local effect of the Richmond to Raleigh Project is to encourage development of higher density land uses around the planned stations which may limit the growth of urban sprawl. Such improvements are assumed in the various economic benefit studies summarized in the updated Chapter 1 of the Tier II FEIS. Addressing potential land use impacts due to station location can only be provided in general terms, given that the development of future stations is not a part of this Project. The development of the stations, as well as the land around them, is under the control of the local government at that location. Section 3.11.3 of the Tier II DEIS specifies which agencies are responsible for land use planning, regulating development and transportation planning in the two-state project area. Assuming Federal funding will be used for the construction of or improvement to any station, compliance with NEPA will be required, including an evaluation of direct, indirect, and cumulative impacts to land use. State environmental impact analyses may also be required if state funding is used. It should be noted that Chapter 1, Section 4.14.4 (Stations) and Section 4.17.3 (Local Effects/Indirect and Cumulative Effects) of the Tier II FEIS contain expanded discussions related to stations, including likely station design guidelines, the types of information and detailed studies that the station NEPA studies would likely need to contain, as well as FRA's "Station Area Planning Guidelines for High-Speed and Intercity Passenger Rail, (FRA, June 2011)."

Summary Comment ID	Summary Comment	Response
K_SC38	Comment that the project should do more to direct and encourage redevelopment and investment near stations, including mitigation steps to reduce suburban sprawl. Statement that the project should coordinate with local agencies to promote higher density, mixed use, and pedestrian-oriented development at stations, and provide incentives, technical assistance, and best practice examples to help facilitate them.	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) Sections 6001, 6002, 3005, and 3006 link transportation planning and programming with NEPA such that issues of sprawl can be addressed. SAFETEA-LU applies to metropolitan and statewide planning. It directs agencies to "consult, as appropriate, with State and local agencies responsible for land use management, natural resources, environmental protection, conservation, and historic preservation." This Tier II EIS is but one step in the planning process. Consultation with Federal, state, and local agencies, public officials, and citizens has occurred throughout the Tier II process and will continue after the Tier II FEIS and ROD are complete. Subsequent stages of planning (by the appropriate entities undertaking the station development) will provide opportunities for finite, implementable controls, incentives, and restrictions to direct development in a desirable manner, as dictated by laws, regulations, resource agency, interested parties, and citizen input. It should be noted that Chapter 1, Section 4.14.4 (Stations) and Section 4.17.3 (Local Effects/Indirect and Cumulative Effects) of the Tier II FEIS contain expanded discussions related to stations, including likely station design guidelines, the types of information and detailed studies that the station NEPA studies would likely need to contain, as well as FRA's "Station Area Planning Guidelines for High-Speed and Intercity Passenger Rail."
K_SC39	Comment that in terms of multimodal connectivity, the DEIS overwhelmingly focuses on roads. Request that the SEHSR project should provide backbone for larger network of transportation options and the FEIS should be expanded to recognize importance of connections to transit, bicycling, and pedestrian linkages. Comment that improved connections to other modes should be mitigation for traffic and air quality impacts. Statement that stations should be multi-modal and well connected to transit and non-motorized options.	Section 3.11.3 of the Tier II DEIS discussed the associated local and regional transit services planned to connect to the SEHSR Corridor, as well as which agencies are responsible for planning the transportation needs in the two-state project area. Section 4.14.4 in the Tier II DEIS addressed connectivity to the existing public transportation services for each of the potential station locations. An expanded discussion for the Tier II FEIS (Section 4.14) lists all public bus transit service agency that either currently provides, or is anticipated to be expanded to provide, bus or van services for SEHSR Corridor riders at the planned station locations. The expanded text also includes consideration of non-motorized (bicycle and pedestrian) access.
K_SC40	Statement that the FEIS should better document community support for high speed rail in corridor; use Community Facilitated Strategy (CFS) to improve the public outreach and input process into the planning process.	The FEIS provides greater detail on community outreach and public support/opposition to the Project. Chapter 7 of the Tier II FEIS has been expanded to include documentation of outreach efforts. Much of what is recommended as CFS by the commenter was implemented as part of the Project's standard outreach effort in both states, and many design changes were provided in response to citizen input, such as additional pedestrian crossings where at-grade crossings are relocated.

Code L – Comments Related to the Project Designs

Summary Comment ID	Summary Comment	Response
L_SC1	Concern about impacts to surrounding neighborhoods from the bridge design at Durant Road in Raleigh, NC (Section U).	In response to comments received from the public and local officials, a revised bridge and road alignment has been designed for this location. The revised designs were shown at a Public Update Meeting on May, 15, 2012, in Raleigh, NC and are shown in the Map Book Appendix of the Tier II FEIS. The road alignment and bridge over the railroad will be shifted to the north, away from the residential and commercial development on the south side of Durant Road. This northward shift will take the road alignment through City of Raleigh property where Raleigh Fire Station No. 22 is located, requiring the fire station to be relocated; the design has been coordinated with the City of Raleigh.
L_SC2	Request for construction of Highway NC-96 bypass on the north side of the Town of Wake Forest, NC (Sections S and T).	Construction of the Highway NC-96 bypass is outside the scope of this Project. However, in order to maintain the flow of traffic during construction of the bridge over the railroad at Main Street, Highway NC-96 will be realigned north of town within the alignment of the Town of Wake Forest's proposed Highway NC-96 bypass, to intersect with an extension of Cross Street. The Richmond to Raleigh Project design will allow the bypass to be completed in the future as planned. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC3	Concern about impacts to downtown Raleigh, NC, including a request for consideration of an alternative design through the downtown area (Section V).	The preferred alternative in Section V is Alternative NC5, which was developed in response to comments received from the public and local officials. Alternative NC5 was presented at a Public Update Meeting on September 27, 2011 in Raleigh, NC. Development of the new alternative is discussed in Chapter 2 of the Tier II FEIS and information about the reduced impacts is found in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS. With the NC5 alternative, the existing road network in the Five Points, Roanoke Park, Fairview Road and the Norfolk Southern rail yard area will remain unchanged and the existing vehicular and pedestrian access across the Richmond to Raleigh Project rail alignment through the downtown area is preserved except for the crossings at Hargett Street, which would be closed, and Jones Street, which would be closed to vehicular traffic and a pedestrian bridge would be constructed.
L_SC4	Questions about the SEHSR corridor including selection of the corridor; and/or proposal that the rail alignment bypass downtown areas; and/or serve airports instead of/in addition to downtowns; and/or that the rail alignment should bypass small towns that do not have a proposed station.	The preferred corridor between Washington, DC, and Charlotte, NC, was determined by the SEHSR Corridor Tier I FEIS (SEHSR Tier I FEIS) and confirmed by the 2002 ROD by the FRA. The Tier I FEIS established that the SEHSR Corridor would be developed and implemented using an "incremental approach" previously assessed in feasibility studies. This approach minimizes impacts to both the human and natural environments by using existing rail infrastructure and rail ROW as much as possible. Use of existing infrastructure also reduces the initial capital investment required by the system. Towns throughout the corridor developed around the railroads; therefore, bypassing the downtown areas would result in an increase in both cost and impacts. It would also reduce the ability of the Project to address regional transportation needs. Towns that are not designated to receive a HSR stop initially could benefit by access to passenger rail service at defined stations along the SEHSR Corridor, with the future potential for conventional passenger rail service based upon demand. Connectivity to airports will be addressed through coordination with local transportation planning organizations.
L_SC6	Request for a design change in Wake Forest, NC, to the proposed new access road (northward extension of Steeple Run Drive) east of the railroad between Seawell Drive and Ligon Mill Road (Section U).	The road shown in the Tier II DEIS was designed to provide access east of the railroad in conjunction with the proposed closing of Seawell Drive and nearby driveways. In response to requests from property owners, the road has been redesigned. The road alignment was shifted westward, closer to the railroad to minimize property impacts and minimize impacts to a family cemetery. Adjustments to property access at the northern end will be handled during the ROW phase of the Project. The revised impacts associated with these design changes are discussed in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC7	Statement of opinion regarding designs.	Comment noted.

Summary Comment ID	Summary Comment	Response
L_SC8	Concern that designs do not allow for future electrification of the railroad.	The ROD for the SEHSR Corridor Tier I EIS established that the SEHSR Corridor would be developed using an incremental approach and would utilize fossil fuel powered trains. Refer to Chapter 2 of the SEHSR Corridor Tier I DEIS for background information on the basis for the decision. A finding discussed in the SEHSR Corridor Tier I EIS noted that with fossil fuel engines, speed increases above the 110 mph did not generate significant improvements in ridership and revenues, but they did significantly increase costs because of more stringent regulations. It should be noted, however, the bridges and underpasses have been designed to allow for electrification in the future. Conversion to electricity and higher speeds would require additional environmental evaluation at the appropriate time and cooperation with host freight railroads.
L_SC9	Concern that designs will result in problems related to stormwater drainage.	Drainage issues associated with the designs will be dealt with during the final design stage of the Project when detailed survey level data is available. The agency review and permitting process will require that the designs meet current Federal and state floodplain development guidelines.
L_SC10	Questions regarding map terms used, e.g., "What are right of way lines?" and "What are controlled access lines?"	On the public hearing maps, proposed ROW lines are used to show boundaries of publicly owned ROW for roads and highways. Proposed controlled access lines are used to show the boundaries of rail and some highway rights of way where access across or through is limited and controlled by the owner of the railroad or highway. Control of access lines are not an indication of proposed fencing locations. Specific locations for fencing will be determined later during final design in coordination with the owner of the railroad, the operator of the railroad, and local governments.
L_SC11	Request for a bridge over the railroad at Woods Edge Road and/or elimination of a bridge at Pine Forest Drive, south of Chester, VA (Section BB).	In response to numerous comments received from the public and local officials indicating a strong desire to maintain connectivity across the railroad, along with additional analysis of traffic data, the Project designs have been modified to include a bridge over the railroad at Woods Edge Road. The proposed bridge at Pine Forest Drive to the south will be retained; however, the extension of Walthall Industrial Parkway south from Woods Edge Road to an extension of Pine Forest Drive has been removed from the designs. The revised impacts associated with these design changes are discussed in Chapter 4 of the Tier II FEIS, and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC12	Question about proposed rail improvements such as Maximum Authorized Speed, number of tracks, passing sidings, and new construction of rail in a particular location along the corridor.	Refer to Chapter 1 of the Tier II FEIS for details about the general approach of the Project (speed, tracks, sidings, etc.). Refer to Chapter 2 for a description of the location of the Preferred Alternative by section.
L_SC13	Question regarding whether the residents of Meridian Avenue in Richmond, VA, will be able to enter and exit from Bells Road (Section AA).	Residents living on Meridian Avenue will not be able to enter or exit from Bells Road. The designs call for Meridian Avenue to be closed at Bells Road because of the necessary increase in elevation (i.e., grade) for the proposed Bells Road bridge over the railroad. Access to Meridian Avenue will be provided through an extension to Lynhaven Avenue from the Meridian Avenue cul de sac. A map of the designs can be found in the Map Book Appendix of the Tier II FEIS.
L_SC14	Concern about detours and maintenance of traffic during construction of project.	Refer to Chapter 4 of the Tier II FEIS for information regarding planned detours and maintenance of traffic during construction of the Project.

Summary Comment ID	Summary Comment	Response
L_SC15	Request for a design revision to reduce impacts to a farm on St. Tammany Road, located in a voluntary agricultural district in Warren County, NC. Request that an alternative design be developed that would consist of a single road across the property, with a possible culvert crossing for farming access (Section M).	Several modifications were made to the proposed roadwork for the area around the Ridgeway community in response to comments on the Tier II DEIS. The Preferred Alternative has no direct impacts to the referenced property located in the voluntary agricultural district (see Appendix R, maps 101 and 102).
L_SC16	Concerned about ROW impacts to property from road or rail designs, and/or a request for a design revision.	The road and rail alignments have been designed to allow for the maximum footprint anticipated. The designs impacting the properties in question were reviewed. Although design changes were not practicable for the Tier II FEIS (due to the level of information available for the designs), efforts will be made to minimize impacts from roadwork or rail designs during the final design stage of the Project when survey level data is available. The processes that Virginia and North Carolina have established for ROW Acquisition are described in Section 4.11.6 of the Tier II DEIS and the TIER II FEIS.
L_SC17	Question about the need for the proposed southward extension of Tanyard Street between East Green Street and East College Street in Franklinton, NC, and concern that the design will result in an increase in flooding that already occurs in that location (Section S).	In response to comments received from the public, the proposed improvements to Tanyard Street shown in the Tier II DEIS have been removed from the Project designs (i.e., no changes proposed for existing Tanyard Street). Instead, the proposed north-south connection between East Green Street and East College Street has been moved to an alignment near the eastern boundary of the Sterling Mill historic resource. This design includes removal of pavement/road closure at the west end of Bullock Street. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC18	Request that Marina Drive, south of Chippenham Parkway, in Chesterfield County, VA, remain open (Section AA).	Marina Drive currently passes under the existing Falling Creek railroad bridge. There are no proposed changes to this bridge under the Richmond to Raleigh Project. Thus, Marina Drive would not be impacted by the Project.
L_SC19	Request to shift the proposed realignment of Wilson Road in Mecklenburg County, VA, closer to the edge of a property lines to minimize the size of remnants (Section H).	This proposed shift in alignment was evaluated, but the stream along the parcel boundaries prevents the design from being shifted as requested.
L_SC21	Concerns about impacts to the Franklin family farm north of Henderson in Section O and statement of preference for the "easternmost alternative," which has the least impact to the farm.	The preferred alternative in Section O is Alternative NC3, which follows the easternmost alignment. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC22	Request for a pedestrian crossing at Doyle Boulevard in McKenney, VA (Section C).	The proposed Doyle Boulevard bridge over the railroad can accommodate sidewalks.

Summary Comment ID	Summary Comment	Response
L_SC23	Request for the railroad to follow existing rail right of way through McKenney, VA, to avoid the Zehmer Farm/Honeymoon Hill historic resource and also move further away from the McKenney artesian well. Also, request to shift associated roadwork to minimize impacts to the Zehmer Farm (Section C).	The railroad alignment has been redesigned to include a slight eastward shift away from NRHP boundary for the Zehmer Farm/Honeymoon Hill Farm historic resource (the boundary listed in the NRHP in 2009 encompasses an area much larger than the area determined to be eligible for the NRHP as part of the Richmond to Raleigh Project surveys in 2005). This shift also takes the alignment further away from the Town of McKenney's artesian well. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC24	Request for shift in proposed realignment of Keelers Mill Road in Dewitt, VA, in order to avoid a family cemetery (Section C).	The road designs in this area were revised to avoid impacts to the cemetery. Refer to Section 2.2.9 of the Tier II FEIS for additional discussion, and Appendix R for a map of the revised designs.
L_SC25	Question regarding whether or not the project will follow the existing railroad right of way in Brunswick County, VA, near Route 726 (Section E).	The preferred alternative in Brunswick County in Section E is Alternative VA 1. Near Route 726, the VA1 alignment shifts westward, away from the existing rail ROW to straighten a curve. Maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC26	Request for a design revision in Vance County, NC, that would avoid impacts to the Brookston Baptist Church off Brookston Road, which would allow vehicular access to the rear of the church, and avoid disturbing the church cemetery (Section O).	The preferred alternative in this section is Alternative NC3; however, all the alternatives are on common alignment near the Brookston Baptist Church. The Brookston Baptist Church is just north of the Greystone Quarry and the designs in this location are severely constrained by the quarry; therefore, the design request cannot be accommodated as described in the comment. During the final design stage of the Project (when detailed survey data are available), efforts will be made to minimize impacts to the church and cemetery.
L_SC27	General concern about impacts to Chestnut Street in Henderson, NC, and a request to maintain this street as a north/south corridor through the city on the west side of the railroad tracks (Section P).	In response to comments from the public and from officials with the City of Henderson, NC, several revisions have been made to the proposed roadwork designs that were shown in the Tier II DEIS. Section 2.2.11.1 of the Tier II FEIS contains information about the proposed changes that affect the downtown area (including Chestnut Street), and the impacts are discussed in Chapter 4. A proposed roundabout intersection at Garnett Street/Beckford Drive/ Main Street/ Chestnut Street will allow Garnett Street and Chestnut Street to function as a north/south corridor on the west side of the railroad tracks. Maps of the designs can be found in the Map Book Appendix of the Tier II FEIS.
L_SC28	Concern that the change in access to Community National Bank in Henderson, NC, resulting from realignment of Dabney Drive Extension will negatively impact the business operations of the bank. Request that existing alignment of Dabney Drive Extension remain open to maintain existing driveways/access or that new access acceptable to property owner be incorporated into the designs (Section P).	Due to traffic and safety concerns, the existing Dabney Drive Extension intersection with Raleigh Road cannot be retained. However, the location of driveway access to this property will be determined during the final design stage of this Project in coordination with the property owner.

Summary Comment ID	Summary Comment	Response
L_SC29	Concern about the impacts of Alternative NC2 in Section S, where both Alternative NC1 and NC2 straighten a big curve in the existing rail alignment.	Alternative NC1 is the preferred alternative in Section S.
L_SC30	Concern that Forestville Road in Wake Forest, NC, does not show up as being closed on the SEHSR hearing maps for Section U. Request that the closure be shown on all future maps.	The hearing maps do not include a symbol for "Existing Crossing To Be Closed" at Forestville Road because this crossing was previously closed by NCDOT as part of a separate project.
L_SC32	Question regarding why Main Street Station (MSS) in Richmond, VA, was selected as a termini for the project, and/or why Broad Street Station was not considered.	Main Street Station was identified as the northern terminus of the study because of its location along the Tier I-identified preferred route through the City of Richmond, and because it is a functioning passenger rail station in the center of the city. Broad Street station was not considered because of its location off of the mainline, and because it houses the Science Museum of Virginia.
L_SC33	Concern regarding family property in Ridgeway, NC, and whether the grade separation of Ridgeway Warrenton Road could be designed as an underpass instead of an overpass (Section M).	The Project team reviewed the possibility of converting the grade separation to an underpass. However, the Project was re-designed and the grade separation was moved. Based on the re-design, no additional design modifications are needed in this area.
L_SC34	Request for a design change near First Street in DeWitt, VA, to minimize property impacts (Section C). Concern that construction of the Hamilton Arms Road (Route 650) bridge over the railroad will impact an existing septic system, and concern that the property will not support relocation of a drainage field elsewhere on the property.	The designs impacting this property were reviewed; however, the road alignment in this location is constrained by the nearby Bowen House historic property and a shift in alignment is not practicable for the Tier II FEIS based on the level of information available for the designs. Efforts will be made to minimize impacts during the final design stage of the Project when survey level data is available. If the septic field is impacted, the impact and ability/inability to relocate a septic field within the boundaries of an impacted parcel would be considered during negotiations that are part of the ROW acquisition process.
L_SC35	Request for an underpass of the railroad on Old Lane in Chester, VA, rather than closing the crossing (Section AA). Comment that this would improve traffic flow from Hopkins Road to Chester Road and reduce congestion on Centralia Road, which is already substantial (Section AA).	The Richmond, VA, to Raleigh, NC, Project has been designed to consolidate and grade separate (through bridges or underpasses) all railroad-roadway crossings. A grade separation in the vicinity of Old Lane could not be provided due to several design constraints, most notably the location of the rail interlocking that trains use to switch between the CSX A-line and S-line. However, additional traffic analysis for this area was conducted following the Tier II DEIS which indicated a need for additional traffic accommodations such as turn lanes for the Hopkins Road and Centralia Road intersection, which provides access to Chester Road. The road work designs have been revised to include these accommodations. These design revision were shown at a Public Update Meeting on February, 26, 2013 in Chesterfield, VA. Refer to Chapter 4 of the Tier II FEIS for information about impacts, including a discussion about the traffic analysis. Maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC36	Request to use the old train trestles located north of West Hundred Road in Chester, VA, to build a pedestrian and bicycle pathway over the railroad (Section BB).	The trestles referenced are within former rail ROW that abuts but does not cross the Richmond to Raleigh Project corridor; the ROW is owned by Chesterfield County. The County's Thoroughfare Plan shows use of the ROW for a County road in the future. The Richmond to Raleigh Project would not prevent the County from building a bridge over the corridor in this location in the future.

Summary Comment ID	Summary Comment	Response
L_SC37	Request for a design change for Glebe Road in DeWitt, VA, due to a concern that the DEIS designs create a dangerous and awkward new traffic pattern that is not supported by the existing traffic patterns (in which little traffic passes via Shippings Road and onto Glebe Road). Request to tie Glebe Road into the intersection of Hamilton Arms and Route 1 to provide a more similar traffic pattern and safer travel (Section C).	The suggestion of realigning Glebe Road to connect with Hamilton Arms at Route 1 was evaluated, but not found to be practicable due to greater property impacts. The designs developed for the Tier II DEIS and shown in the Tier II FEIS meet the American Association of State Highway and Transportation Officials (AASHTO) Federally adopted design standards.
L_SC38	Request for a design change in Wake Forest, NC, for Ligon Mill Road and the proposed bridge over the railroad; request that the road be shifted to the north in order to avoid impacts to the Cooke property located on the south side of Ligon Mill Road, just west of the railroad (Section U).	Numerous alternative designs have been evaluated at this location in an effort to reduce property impacts, but the designs are constrained by the curvature of Ligon Mill Road, as well as dense residential development on the east side of the railroad. The alternative designs were found not to be practicable; however, efforts will be made to minimize impacts from the roadwork during the final design stage of the Project when survey level data is available.
L_SC39	Request for a design change in Wake Forest, NC, to reduce property impacts from the designs shown in the DEIS that provide access from Ligon Mill Road into the Smith Creek neighborhood (Section U).	The proposed bridge over the railroad for Ligon Mill Road requires a change to the existing westernmost entrance to the Smith Creek neighborhood. In response to public comments an alternative to the design shown in the Tier II DEIS was developed. The public was invited to comment on the revised designs at a Public Update Meeting on May 15, 2012 in Raleigh, NC. The revised impacts associated with these design changes are shown in Chapter 4 of the Tier II FEIS and maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC40	Request to include a vehicle and/or pedestrian crossing at Elm Avenue in Wake Forest, NC (Section U).	In response to comments received from the public and local officials regarding the closure of Elm Avenue proposed in the Tier II DEIS, a road underpass was subsequently designed that would allow Elm Avenue to remain open. This design was presented at a Project Update Meeting on May 15, 2012. The response from both the public and Town of Wake Forest officials was that the impacts resulting from the design were too severe. These impacts included the relocation of businesses on Elm Avenue and impacts to several properties along White Street, including the Chamber of Commerce. Based on further coordination with the Town of Wake Forest, it was determined the most appropriate design for Elm Avenue would be to close the crossing to vehicular traffic, but provide for non-vehicular accessibility with a pedestrian bridge. The pedestrian bridge (designed to greenway standards) would not result in the same degree of property impacts as the vehicular underpass; however, it would similarly preclude vehicular access to Railroad Street (which is located within the existing, active CSX railroad ROW). In order to provide a means of entry to the properties along Railroad Street, the new access road shown at the Project Update Meeting is needed. This access road would result in the potential relocation of one business, as well as property impacts to the rear of the Railroad Street properties. Several alternative designs for this access road were reviewed in coordination with the North Carolina Historic Preservation Office and the design presented in the Tier II FEIS was determined to minimize impacts to the Wake Forest Historic District.

Summary Comment ID	Summary Comment	Response
L_SC41	Comment that the primary route of SEHSR should not be through Richmond MSS because of several reasons, including: the route between MSS and Centralia will remain speed-restricted, has clearance issues, presents freight train conflicts, and has dangerous grade crossings; people will not use MSS; and the "A" line has better capacity and operating characteristics.	The SEHSR Corridor Tier 1 study evaluated the corridor through Richmond without specifically designating stations. Subsequent studies focused on HSR from the Richmond area north will address issues associated with routing trains by Main Street Station.
L_SC42	General question regarding how the SEHSR trains will connect with the Northeast Corridor (NEC).	The SEHSR Corridor will connect with the Northeast Corridor (NEC) in Washington, DC, allowing HSR travel northward to New York, Boston, and beyond. The union of these two high speed corridors would create the greatest trip lengths within the Amtrak system, and thus the greatest potential revenues. The updated ridership/revenue report discussed in Chapter 4 of the Tier II FEIS contains forecasts for trips between Charlotte, NC, and the NEC. The current SEHSR Corridor plans would allow a passenger to connect between the SEHSR Corridor and NEC with a single seat ticket for the entire trip.
L_SC43	Request to shift a proposed new service road to the edge of a farm located on the north of Wise Five Forks Road (rather than the middle of the property) in order to utilize an existing path in the area (Section L).	The road alignment has been shifted closer to the referenced path. A map of the design change can be seen in the Map Book Appendix of the Tier II FEIS.
L_SC44	Request related to property access, access to existing roads, or across the existing railroad corridor.	Owners of parcels with current, legal access to existing roads will have access to their parcels maintained (or will be compensated if it is not possible to maintain the access); driveway access to these parcels will be determined during final design when survey level data is available. Questions related to ownership of land within the existing rail corridor and/or easements across railroad rights of way can be directed to the freight railroads - CSX: (904) 359-3200 or Norfolk Southern: (404) 962-5742.
L_SC45	Request for a design change in Raleigh, NC (Section V) to include a grade separation (bridge or underpass) of Wolfpack Lane.	In response to comments on the Tier II DEIS from local officials and the public, a bridge over the railroad was designed for Wolfpack Lane. The design was coordinated with City of Raleigh staff, and the public was invited to comment on the alternative at an update meeting on May 15, 2012. The design, which accommodates vehicular, pedestrian and bicycle traffic was favorably received, and has been added to the Tier II FEIS. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC46	Request from the Mallinckrodt/Covidien business in Raleigh, NC, for the SEHSR designs to accommodate issues specific to their plant operations, including emergency response, use of existing railroad spur, hazardous materials, and access across the railroad corridor (Section U).	The Project Team has initiated dialog with Mallinckrodt/Covidien and will continue to work with them through the final design process to ensure their concerns are addressed to the fullest extent possible.
L_SC47	Design request addressed by municipal or county government in separate correspondence.	Responses to requests from government staff were evaluated and changes were made, where possible, as described in Chapter 2.

Summary Comment ID	Summary Comment	Response
L_SC48	Request to use North Cross Street in Youngsville, NC, as a connector to Fleming Road rather than Naussau Street (Section T).	In response to comments from individuals and from local officials, the roadwork for Youngsville, NC, that was proposed in the Tier II DEIS has been redesigned. The new designs utilize Cross Street as a connection to HWY NC-96 (rather than Nassau Street) during the construction of the Main Street bridge over the railroad. The new designs are discussed in Chapter 2 of the Tier II FEIS and the impacts are discussed in Chapter 4. Maps can be found in the Map Book Appendix of the Tier II FEIS.
L_SC49	Request that bridge sections spanning the Roanoke River and Lake Gaston be constructed in such a manner as to protect the ecosystem of the shores, bottoms, and surfaces of the river and lake. Recommendation that all construction of the span use the cantilever architecture.	The Project designs plan to use the existing railroad bridge piers across the Roanoke River and Lake Gaston provided they are determined to be structurally sound.

Code M – Comments Handled Separately

Summary Comment ID	Summary Comment	Response
M_SC1	Requested project information.	Requested information sent to commenter.
M_SC2	General project or process question(s).	Questions answered individually via phone, email or mail
M_SC3	Specific property impact questions.	Individual responses made via phone, email or mail.
M_SC4	Requested to be added to project mailing list.	Added to mailing / interested parties list
M_SC5	Notification that comments will be submitted separately.	Comment noted. Referenced comments responded to separately.
M_SC6	Submittal of information, including notification of perceived errors or inaccuracies.	Information received and filed.
M_SC7	Indication that commenter was not included on listing of property owners who received letters regarding the project.	Confirmed that owners name and correct address were included on the Project mailing list.