



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

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Charles A. Kilpatrick, P.E.
Commissioner

February 21, 2014

Ms. Irene Rico
Division Administrator
Federal Highway Administration
400 North 8th Street, Suite 750
Richmond, Virginia 23219-4825

**SUBJECT: Request for Record of Decision
Interstate 64 Peninsula Study Environmental Impact Statement**

From: Approximately Exit 255 in the City of Newport News

To: Approximately Exit 247 in the City of Newport News

State Project No 0064-M11-002, P101; UPC 92212

Federal Project Number: NHS-064-3(479)

FEIS Date: November 26, 2013

Dear Ms. Rico:

The Federal Highway Administration (FHWA), in accordance with provisions of the National Environmental Policy Act of 1969, as amended, (NEPA) and 23 CFR 771, approved a Final Environmental Impact Statement (FEIS) on November 26, 2013 for the proposed project, which involves the construction of additional general purpose lanes along Interstate 64 (I-64) between the City of Richmond and the City of Hampton (Attachment 6). The FEIS covered the full 75 miles of the study corridor.

The FEIS identified the preferred alternative as Alternative 1. At full build conditions, the preferred alternative would add one to three additional general purpose lanes along the corridor, depending on the identified capacity needs (Attachment 6). The FEIS also prescribed a means by which Alternative 1 could be implemented in operationally independent sections, as funding is identified. Operationally independent sections can be built and function as a viable transportation facility even if the rest of the work described in the Final EIS is never built. As stated in the FEIS, it is possible that the full number of lanes associated with the preferred alternative for a particular operationally independent section may not be constructed initially. In addition, the decision to widen to the outside or inside of the existing corridor would be made on a section by section basis.

The FEIS goes on to state that a Record of Decision (ROD) would be issued for each operationally independent section that is identified along the 75 mile corridor. The FEIS does not place any restrictions on the phasing for construction purposes for the operationally independent sections. As an operationally independent section is advanced, the environmental analysis in the FEIS would be

updated as necessary and, provided that the section has met the transportation planning and air quality requirements, FHWA would issue a ROD for that section.

This proposed section is approximately six miles with the termini located west of Exit 255 (Jefferson Avenue/Route 143) in the east and east of Exit 247 (Yorktown Road/Route 238) in the west. These locations provide logical termini, as improvements will tie back into the existing facility and not extend beyond or impact the existing interchanges. Exit 250 (Fort Eustis Boulevard/Route 105) is the only interchange located within this section. Impacts to this interchange would be avoided by confining lane widening to the median. Attachment 1 demonstrates the proposed section meets the definition of an operationally independent section. The attachment also documents previous communication between FHWA and VDOT that the proposed section would include widening to the median. Given the limited amount of time that has passed since the approval of the FEIS, our offices have concurred that attachments to this letter meet the required needs for updated environmental analyses. The attachments also demonstrate that the proposed operationally independent section has met the transportation planning and air quality requirements (Attachment 4). This information was presented at VDOT's recent federal partnering meeting (February 12th), and the partners had no objections or substantive comments.

This Request for Record of Decision (Request) has been prepared in accordance with the guidance prescribed in the FEIS. While the FEIS assessed environmental consequences at a study corridor level, this Request assesses the environmental consequences resulting from implementing the proposed section to determine if those environmental consequences result in significant environmental impacts not already considered in the FEIS¹ (Attachment 2). Overall, conditions in the study corridor have changed very little since November 2013 when the FEIS was approved. The proposed section is located in a densely developed portion of the FEIS study corridor when compared to areas between Richmond and Williamsburg. Based on the reviews of existing data, VDOT has concluded that the implementation of the proposed section would not result in additional significant impacts not already considered in the previously approved FEIS.

With this submission, VDOT is requesting a Record of Decision for this operationally independent section from FHWA. If you have any questions or need any further information, please contact Scott Smizik at 804-371-4082 or by email at Scott.Smizik@VDOT.Virginia.Gov.

Thank you for your attention to this matter.

Sincerely,
VIRGINIA DEPARTMENT OF TRANSPORTATION

Stephen J. Long
State Environmental Administrator



¹ Previous NEPA documentation is available at http://www.virginiadot.org/projects/hamptonroads/i-64_peninsula_study.asp.

cc: John Simkins, FHWA
Jim Utterback, VDOT
Jim Long, VDOT
Bruce Duvall, VDOT
Angel Deem, VDOT
Scott Smizik, VDOT

Attachments

- 1) Description of the Proposed Section
- 2) Issues Evaluation Checklist
- 3) Indirect and Cumulative Effects
- 4) Relevant Communication Following the FEIS
- 5) Response to Comments on the FEIS
- 6) Figures

Attachment 1: Description of the Proposed Section

This proposed section is approximately six miles with the termini located west of Exit 255 (Jefferson Avenue/Route 143) in the east and east of Exit 247 (Yorktown Road/Route 238) in the west. These locations provide logical termini, as improvements will tie back into the existing facility and not extend beyond or impact the existing interchanges. Exit 250 (Fort Eustis Boulevard/Route 105) is the only interchange located within this section. Impacts to this interchange would be avoided by confining lane widening to the median.

This section also meets the definition of an operationally independent section. As noted in the FEIS and defined in FHWA guidance *Operational Independence and Non-concurrent Construction*², an operationally independent section can be built and function as a viable transportation facility even if the rest of the work described in the FEIS is never built. The proposed improvements would add one (1) additional general purpose lane eastbound and one (1) additional general purpose lane westbound to I-64. As documented in the FEIS, the full build of the Preferred Alternative calls for two additional general purpose lanes to be constructed in both directions beginning at Exit 247 (Yorktown Road/Route 238) and extending east beyond Exit 255 (Jefferson Avenue/Route 143) (Attachment 6). These recommendations are based on analysis included in the Traffic Technical Report associated with the FEIS, which found the need for two additional lanes to initiate at Exit 247 and extend beyond Exit 255. This section would contribute to this defined need at the desired western limit and terminate at Exit 255, where the existing collector/distributor lanes will facilitate a smooth transition back into existing mainline conditions. To further fulfill the definition of an operationally independent section, the environmental commitments made in the FEIS, specifically those documented in Appendix L, would be adhered to for this section.

Widening to the inside of the median was selected for the proposed section based on the following:

- Avoids the need for modification of existing interchanges;
- Reduces property impacts; and,
- Reduces impacts to natural and cultural resources.

The Hampton Roads Transportation Planning Organization (HRTPO) has taken the following actions to include this proposed section in the appropriate planning documents:

- 1) June 20, 2013 – Passed a resolution endorsing six-lane options to provide immediate congestion relief between Exit 255 (Jefferson Avenue) and Exit 242 (Humelsine Parkway). The resolution called for aggressive action to complete the six-lane option between Exit 255 and Exit 250 (Fort Eustis Boulevard).
- 2) October 17, 2013 – Identified nine priority projects for funding. This listing included a section from Exit 255 to Exit 250 and a second section from Exit 250 to Exit 242.
- 3) November 22, 2013 – Provided VDOT with updates to the 2034 Long Range Transportation Plan to include a section from Exit 255 to Exit 250 for construction. The update also included documenting planned obligations for all the subsequent phases in the Transportation Improvement Program. The subsequent phase, “Preliminary Engineering”, was determined to

be acceptable to make this Request, since the phase for which federal funds were expended for the NEPA document is a study phase in the TIP.

- 4) January 16, 2014 – Approved an update to the documentation described in #3 to expand the project limits to Mile Marker 258.
- 5) January 23, 2014 – Provided VDOT with documentation for #4.

Attachment 2: Issues Evaluation Checklist

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
Transportation				
Traffic Volumes/Patterns/Time	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	Implementation of the proposed section would improve traffic conditions to Level of Service C and would contribute to the purpose and need of the FEIS. More detailed traffic analysis would be developed as part of the final design to confirm LOS C would be achieved. See Attachment 1 for updates to transportation planning documents.
Transportation Plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A			
Socioeconomics and Land Use				
Land Use Conversion	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation, aerial photo mapping, planning corridor drawings for the proposed section, and City of Newport News Comprehensive Plan.	No	Land use has not changed within the study area that extends 500 feet from existing pavement. Land use surrounding the eastern end of the proposed section is zoned for commercial, office, and medium/high density residential. Areas surrounding the Fort Eustis interchange also include some heavy industry and then transition to park districts. The park district encompasses New Port News Park/Lee Hall Reservoir. This designation extends west until just before the western terminus of the proposed section where mixed use, high-density multiple family dwellings, and commercial uses are zoned. No modifications to any interchanges would occur.
Development	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		No	
Consistent with Area's Comprehensive Plan	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The City of Newport News Comprehensive Plan, <i>Framework for the Future 2020</i> , acknowledges the need for the widening of Interstate 64. The city has not updated its plan since the publication of the FEIS.

³ New information consists of data that was not included in the FEIS. This may include new information or the presentation of data for the proposed section that was not called out in the FEIS.

⁴The proposed section would not achieve the full-build prescribed in the FEIS. Therefore, many of the impacts have been reduced from those estimated in the FEIS.

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
Populations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The 2010 Census documented a population of 180,719 for the City of Newport News. The census tracts that the proposed section passes through are some of the highest populated tracts in the city. See Attachment 3 for more details on populations.
Emergency Services	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	There are no emergency service facilities located within the 500 foot planning considered in the FEIS. As projected in the FEIS, improvements to the proposed section could assist in improving response times for emergency services.
Potential Relocations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	The FEIS reported 214 residential, 80 business, and 11 rural impacted parcels for the preferred alternative. This assumed widening to the outside. By widening to the inside, these figures were reduced to 212 residential, 80 business, and 11 rural impacted parcels. Within the proposed section, the FEIS identified one rural parcel (Newport News Park), 21 residential parcels, and 23 business parcels that could be impacted by the build alternatives. Three of these residential impacts would now be avoided by no modifications being made to the Fort Eustis interchange. Additional impacts would be avoided by not achieving the full-build of the preferred alternative during this phase of construction.
Environmental Justice Populations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The proposed section passes through or is adjacent to census block groups with environmental justice populations that are higher than that of the City of Newport News. As noted in the FEIS, the proposed general purpose lanes would be constructed along an existing corridor and, as such, improvements are not expected to have a disproportionately high and adverse effect on minority or low-income populations. The additional lanes would be constructed in the median, thereby minimizing any impacts on Environmental Justice populations as compared to constructing lanes on the outside of the existing roadway. See Attachment 3 for additional information on environmental justice populations.
Farmlands	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS reported that there are no prime farmlands, prime farmlands of statewide importance, or agricultural/forestal districts within the City of Newport News. This finding remains valid for the proposed section.

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
Energy				
Energy	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	As stated in the FEIS, traffic volumes and capacity are projected to result in increased traffic on I-64. However, much of that is expected to be traffic that would still exist under the No-Build conditions because traffic would use other roads to avoid a severely congested I-64. The total amount of vehicles, and vehicle-miles traveled, in the region would not substantially change. In addition, the capacity of I-64 would be improved. Therefore, there would be less idling and/or reduced speeds for drivers on I-64, which in turn would result in less fuel being burned during their trip as compared to the No-Build conditions.
Air Quality				
Air Quality Criteria	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	There have been no changes to air quality criteria since the publication of the FEIS.
Conformity	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of regional financially constrained long-range transportation plans.	No	<p>The Final Rule by the EPA on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications Approach, Attainment Deadlines and Revocation of the 1997 Ozone Standards for Transportation Conformity Purposes, published in the Federal Register on May 21, 2012 and effective on July 20, 2012 includes the statement "this rule provides for the revocation of the 1997 ozone NAAQS for transportation conformity purposes to occur 1 year after the effective date of designations for the 2008 ozone NAAQS."</p> <p>The Hampton Roads region is an attainment area for the 2008 standard and was a maintenance area for the 1997 standard. Therefore, given the statement regarding the 1997 standard as quoted above, the conformity requirement does not currently apply to the Hampton Roads region.</p>
Air Quality Impacts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	A quantitative carbon monoxide analysis was conducted for the FEIS which concluded that the implementation of the preferred alternative would not cause or contribute to any violations of the NAAQS. This analysis was based on the full-build prescribed in the FEIS, which would not be achieved through the proposed section.

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
Regional Compliance with the PM Standards	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The study area is located in Attainment Area for PM ₁₀ and PM _{2.5} NAAQS.
Regional Compliance with the Ozone Standards	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The study area is located in an Attainment Area for ozone.
Air Toxic Analysis	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The results of the analysis completed for the FEIS are consistent with the national mobile source air toxics (MSAT) emission trends as predicted by MOBILE6.2 from 1999-2050. The results of the analysis indicate that no meaningful increases in MSAT have been identified and are not expected to cause an adverse effect on the human environment
Noise				
Noise Criteria Existing Noise Conditions Noise Impacts	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	Individual receptor sites that exceeded the Noise Abatement Criteria (NAC) were documented in the FEIS and are assumed to remain the same for the purposes of this Request. The FEIS identified a total of 442 residences, one park, and one pool that would be impacted in the proposed section by the maximum decibel level that would be produced by the full build at the design year (2040). All of these impacted properties are located in the eastern end of the proposed section. The analysis identified feasible and reasonable barriers that would mitigate a high percentage of these impacts. These mitigation measures would be further analyzed and incorporated into the final design of the proposed section, as appropriate. This analysis was based on the full-build prescribed in the FEIS, which would not be achieved through the proposed section.
Natural Resources				
Wildlife and Wildlife Habitat	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	As reported in the FEIS, the proposed section consists of widening along an existing corridor in a developed area. Therefore, the proposed activities would not affect any substantial forest resource and impacts to terrestrial habitat would be limited to the displacement of small sections of remaining, often disjunct, non-contiguous tracts of forests within the existing median of I-64. The existing interstate highway

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				poses a barrier to wildlife movements that would not be substantially altered. The extension of culverts could lead to the direct loss of fish and macroinvertebrates within the construction zone and would permanently alter the available habitat in the impacted areas. However, these areas would likely be colonized again, following the construction activities. This analysis was based on the full-build prescribed in the FEIS, which would not be achieved through the proposed section.
Threatened and Endangered Species and Critical Habitat	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation, planning corridor drawings for the proposed section, and online review of USFWS Information, Planning, and Consultation (IPaC) system.	No	To meet the future commitments outlined in Appendix L of the FEIS, the USFWS IPaC was consulted to document any threatened or endangered species along the proposed section. As illustrated in Attachment 4, there are no threatened or endangered species identified along or adjacent to the proposed section.
Wildlife and Waterfowl Refuges	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	No wildlife or waterfowl refuges exist along or within the proposed section.
Surface Waters	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	<p>The proposed section is located in the Lower James River basin. The existing interstate includes two water crossings within this section: Warwick River and the Lee Hall Reservoir. The first is located east of the western terminus, as the interstate crosses Warwick River. Warwick River is a tributary to the Lee Hall Reservoir. This reservoir, which is formed from the damming of the Warwick River, is surrounded by the Newport News City Park and is an important source of drinking water for the Hampton Roads Peninsula. The second crossing occurs where I-64 crosses the reservoir just west of the Fort Eustis interchange. As part of the FEIS, VDOT contacted the City of Newport News Waterworks to document any planning issues or concerns the agency had with the Preferred Alternative. This communication and the Waterworks response were documented in the FEIS.</p> <p>As part of this Request, VDOT again coordinated with the</p>

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				Waterworks to confirm the Waterworks' position on the Preferred Alternative and to advance coordination for the proposed section. On January 27, 2014, the Waterworks responded stating its previous comments were still valid and current. The response also included additional information on the Lee Hall Reservoir dam, spillways, and control structure improvement projects (Attachment 4).
Public Water Supply	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		Yes	The Lee Hall Reservoir is the only public water supply within the boundaries of the proposed section as documented in the FEIS. See previous comment.
Submerged Aquatic Vegetation	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and VIMS interactive SAV map	No	There is no submerged aquatic vegetation within the proposed section.
Floodplains	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS did not identify any floodplains within the proposed section and online FEMA mapping supports this finding.
Wetlands	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	Within the proposed section, the FEIS identified the potential for impacts to 4,100 linear feet of stream and 2.6 acres of palustrine forested wetlands. Available information supports this estimate of potential impacts.
Visual Quality				
Visual and Aesthetics	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	Yes	Implementation of the proposed section would include basic improvements along an existing interstate highway functioning at capacity. As documented in the FEIS, the visual effects are expected to be minimal. The view of the interstate and from the interstate would not be dramatically altered since viewers already see the existing interstate. The introduction of new sound barriers could alter some views and widening to the median would result in the partial removal of established stands of trees. This analysis was based on the full-build prescribed in the FEIS, which would not be achieved through the proposed section.

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Historic Properties				
Architectural Resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The Battle of Yorktown (DHR 099-5283; VA009) occupies much of the land surrounding the western half of the proposed section. As documented in the FEIS, the Virginia Department of Historic Resources (DHR) has concurred that there would be no adverse effect to this resource under the Preferred Alternative. There are no other architectural resources within the proposed section.
Archaeological Resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	On November 20, 2013, FHWA, DHR, the National Park Service, and VDOT executed a Section 106 Programmatic Agreement (PA) regarding the I-64 Peninsula Study corridor. The PA acknowledges that studies and consultation with the SHPO have been completed for buildings, structures, nonarchaeological districts, and objects meeting the criteria for listing on the NHPR; however, to address outstanding issues associated with archaeological resources, the PA sets forth a process whereby survey, assessment, and possible treatment of areas within the corridor would occur. VDOT is currently conducting an archaeological investigation of the land contained within the proposed section. DHR has concurred that any archaeological sites that may be present within the proposed section would be important chiefly for the information they contain. Therefore, pursuant to 23 CFR 774.13(b), the archaeological sites would not be Section 4(f) resources.
Section 4(f) Resources				
Section 4(f)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	<p>The City of Newport News Park, which includes the Lee Hall Reservoir, straddles much of the proposed section. In the DEIS, the site was identified as a 4(f) resource. Between the publication of the DEIS and FEIS, the City of Newport News concurred that the impact to the park would be de minimis and this finding was documented in the FEIS. On January 30, 2014, the city again concurred that the impact would be de minimis (Attachment 4).</p> <p>The Yorktown Battlefield also is adjacent to the proposed section. As documented in the FEIS, DHR concurred that the improvements would have no adverse effect to this resource. DHR also concurred with the potential de minimis finding under Section 4(f).</p>

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Contaminated Sites				
Hazardous Waste Sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	None of the Sites of Potential Concern identified in the FEIS are within or in close proximity to the proposed section.
Indirect & Cumulative Impacts				
Socioeconomic Impacts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			See Attachment 3
Natural Resource Impacts	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A			See Attachment 3.
Construction Impacts				
Construction & Operations Employment	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The Hampton Roads Transportation Planning Organization has programmed \$144 million dollars into its constrained long-range transportation plan for the proposed section. This level of investment is anticipated to have measurable benefit to construction and operations employment.
Air Quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS provides specific guidance to help minimize potential construction-related air quality and this guidance will be adhered to for the implementation of the proposed section.
Noise	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS provides specific guidance to help minimize potential construction-related noise and this guidance will be adhered to for the implementation of the proposed section.
Water Quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS provides specific guidance to help minimize potential construction-related water quality and this guidance will be adhered to for the implementation of the proposed section.
Maintenance & Control of Traffic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS provides specific discussions of maintenance of traffic, include a maintenance of traffic plan, public communications plan, and transportation operations plan. This guidance will be adhered to for the implementation of the proposed section

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Health & Safety	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS recommends that the maintenance of traffic plan be designed to provide for the health and safety of the public and construction workers.
Pollution Control	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	Appendix H of the FEIS documents VDOT's commitments to pollution control.
Permits				
Section 404 Permits	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	<p>The FEIS suggests these permits may be required and this assumption remains valid for the proposed section. Permits would be obtained during the final design process. There is reasonable assurance that the Section 404 permit will be obtained based on 1) the Corps supporting Alternative 1 in their comments on the Final EIS, and 2) their lack of objections at the February 12, 2014 partnering meeting.</p> <p>According to Virginia Department of Game and Inland Fisheries mapping, neither the Warwick River nor the Lee Hall Reservoir are considered navigable waters. Neither of these water bodies are tidally influenced. Therefore, Section 10 and/or Coast Guard permits are not anticipated.</p>
Section 10 Permits	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	
Virginia Water Protection Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	
Subaqueous Bed Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	
Coast Guard Permit	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	

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Coastal Barriers & Coastal Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and DEQ web site.	No	The proposed section is located within the Virginia Coastal Zone. As stated in the FEIS, compliance with coastal zone requirements would be accomplished through the Joint Permit Application process.
Mitigation Measures				
Relocations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	All relocations and real property acquisition would be in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Displaced property owners would be provided relocation assistance advisory services together with the assurance of the availability of decent, safe, and sanitary housing. Relocation resources would be made available to all displaced without discrimination.
Farmlands	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS reported that there are no prime farmlands, prime farmlands of statewide importance, or agricultural/forestal districts within the City of Newport News.
Noise	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS identified feasible and reasonable barriers that would mitigate a high percentage of the predicted noise impacts. The noise analysis is considered preliminary, and mitigation decisions will be reconsidered in the design phase when better geometric data becomes available.
Threatened & Endangered Species	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Review of previous NEPA documentation, planning drawings for the proposed section, and online review of USFWS IPaC system.	No	Based on current site conditions and project plans, no mitigation is required.
Floodplains	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The FEIS did not identify any floodplains within the proposed section and online FEMA mapping supports this finding.
Wetlands	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	Wetland permits and mitigation are anticipated. The mitigation measures for stream and wetland impacts would be determined as part of the permitting process during final design in consultation with the regulatory agencies. The current compensatory mitigation to impact ratios for non-tidal forested, scrub-shrub and

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
				emergent wetlands are 2:1, 1.5:1 and 1:1, respectively. The typical compensatory mitigation to impact ratio for tidal emergent wetlands is 2:1.
Water Quality	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	Stormwater management facilities will be designed in accordance with specifications set forth in Section 3.14 of the Virginia Erosion and Sediment Control Handbook (1992) and VDOT's Annual Erosion and Sediment Control and Stormwater Management Standards and Specifications, as approved by VDCR.
Aquatic Resources	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	<p>Wetland permits and mitigation are anticipated. The mitigation measures for stream and wetland impacts would be determined as part of the permitting process during final design in consultation with the regulatory agencies. The current compensatory mitigation to impact ratios for non-tidal forested, scrub-shrub and emergent wetlands are 2:1, 1.5:1 and 1:1, respectively. The typical compensatory mitigation to impact ratio for tidal emergent wetlands is 2:1.</p> <p>VDOT will minimize effects to aquatic resources by following Best Management Practices (BMPs) and implementing appropriate erosion and sediment control practices in accordance with VDOT's Road and Bridge Specifications, state, and local regulations.</p>
Historic Properties	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	The executed Programmatic Agreement for this study provides agreed upon levels of mitigation.
Hazardous Waste Sites	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	<p>Any additional hazardous materials discovered during construction of the proposed section or during demolition of existing structures will be removed and disposed of in compliance with all applicable federal, state, and local regulations. All necessary remediation would be conducted in compliance with applicable federal, state, and local environmental laws and would be coordinated with the EPA, the DEQ, and other federal or state agencies as necessary.</p> <p>The selection of mitigation measures for specific sites would include avoidance and/or minimization of impacts through</p>

Issue/Resource	New Information? ³	Method of Review	Have the Impacts Changed? ⁴	Comment
				redesign or alignment shift, and remediation/closure by responsible parties prior to state acquisition of contaminated properties.
Maintenance & Control of Traffic	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	Maintenance of traffic along the interstate and existing secondary routes is a part of final design and will be duly considered by VDOT.
Pollution Control	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Review of previous NEPA documentation and planning corridor drawings for the proposed section.	No	Appendix H of the FEIS documents VDOT's commitments to pollution control.

Attachment 3: Indirect and Cumulative Effects

Appendix L of the FEIS includes a commitment to review and update the systematic process utilized to analyze indirect and cumulative effects in the Final Environmental Impact Statement (FEIS). This attachment to the Request is designed to satisfy this commitment.

Indirect Effect Analysis

The indirect effect analysis was conducted in accordance with the *Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects*, (National Cooperative Highway Research Program (NCHRP), Report 466, 2002). This report specifies an eight-step process for determining indirect effects and used as a guide to assess the potential for indirect effects for this Request. The eight steps followed are:

- 1) Initial Scoping
- 2) Identify Study Area Direction and Goals
- 3) Inventory Notable Features
- 4) Identify Impact-Causing Activities
- 5) Identify Potentially Significant Indirect Effects for Analysis
- 6) Analyze Indirect Effects
- 7) Evaluate Analysis Results

These steps, and the actions taken to fulfill these requirements, are described below.

1) Initial Scoping

The first step in the indirect effects analysis includes the initial scoping activities and the identification of the study area in order to set the stage for the remaining steps. An extensive scoping process was undertaken at the onset of the EIS. Given the limited time that has passed since the publication of the FEIS, and the fact that the proposed section is within the corridor of the Preferred Alternative in the Final EIS, no formal scoping was necessary for this Request.

As part of the scoping process for the FEIS, the study areas for each resource/feature were proposed in order to analyze a full range of potential direct and also indirect effects. Descriptions of the scoping process and the scoping meetings that were held with the resource and regulatory agencies along with the public can be found in the FEIS. In addition, in accordance with the FEIS Coordination Plan, participating agencies were given the opportunity to comment on the impact methodologies during the scoping process and none of them submitted any comments on the indirect or cumulative effect analysis impact methodologies.

Socioeconomic study areas were established to analyze neighborhoods and community facilities; environmental justice; displacements and relocations; economic activity; land use; and parks, recreation areas and open space within the proposed section. The socioeconomic study area for this Request is made up of the eight Census Block Groups that border the proposed section.

Multiple resource boundaries were reviewed to assess the effects the proposed section would have on natural and physical resources. Based on readily available data from federal, state and local sources, the resources were analyzed to determine the potential for indirect effects created by the proposed section. The resources include: Waters of the United States including wetlands; surface and groundwater supply; floodplains, threatened and endangered species; wildlife and habitat; historic properties; and Section 4(f) resources. The study area for indirect effects to these resources also extends beyond the direct impact study area, in order to identify impacts occurring “downstream” from the proposed section.

2) Identify Study Area Direction and Goals

This second step in the indirect effects analysis focuses on assembling information regarding general trends and goals within the study area. The trends and goals in question are independent of the proposed transportation project and typically concern social, economic, ecological, and/or growth-related issues.

According to the NCHRP Report 466, evidence indicates that transportation investments result in major land use changes only in the presence of other factors. These factors include supportive local land use policies, local development incentives, availability of developable land, and a good investment climate. An understanding, therefore, of community goals, combined with a thorough knowledge of demographic, economic, social, and ecological trends is essential in understanding the dynamics of project-influenced changes in development location. Later in the eight-step process, it will be important to compare study area goals with potential impacts. Conflict between impacts and goals is a key determinant of impact significance and an indicator of effects that merit further analysis. The following sections describe the proposed section, along with the existing and planned land use in the immediate areas in order to provide insight as to the direction and goals for the area.

a. Proposed Section

This proposed section is approximately six miles with the termini located west of Exit 255 (Jefferson Avenue/Route 143) in the east and east of Exit 247 (Yorktown Road/Route 238) in the west. These locations provide logical termini, as improvements will tie back into the existing facility and not extend beyond or impact the existing interchanges. Exit 250 (Fort Eustis Boulevard/Route 105) is the only interchange located within this section. Impacts to this interchange would be avoided by confining lane widening to the median (Attachment 1).

In addition to possessing logical termini, this section also meets the definition of an operationally independent section. As noted in the FEIS and defined in FHWA guidance *Operational Independence and Non-concurrent Construction*⁵, an operationally independent section can be built and function as a viable transportation facility even if the rest of the work described in the FEIS is never built. The proposed improvements would add one (1) additional general purpose lane eastbound and one (1) additional general purpose lane westbound to I-64. As documented in the FEIS, the full build of the preferred alternative calls for two additional general purpose lanes to be constructed in both directions beginning at Exit 247 (Yorktown Road/Route 238) and extending east beyond Exit 255 (Jefferson Avenue/Route 143) (Attachment 6). These recommendations are based on analysis included in the FEIS Traffic Technical Report, which found the need for two additional lanes to initiate at Exit 247 and extend beyond Exit 255. The proposed section would contribute to this defined need at the desired western limit and terminate at Exit 255, where the existing collector/distributor lanes would facilitate a smooth transition back into existing mainline conditions. To further fulfill the definition of an operationally independent section, the environmental commitments made in the FEIS, specifically those documented in Appendix L, would be adhered to for this section.

b. Demographics

Table 1 provides a summary of the historic population changes in the socioeconomic study area and the surrounding area. Between 1990 and 2010, the City of Newport News population increased by approximately 7%. This is a much lower rate of growth than experienced by neighboring counties. This trend reveals that the rural areas are growing more quickly than the urban areas, which are already more densely developed. The estimated population growth illustrated in Table 2 further supports this finding. Due to

⁵ http://www.fhwa.dot.gov/ipd/project_delivery/resources/operational_construction/guidance_operational_independence.htm.

changes in Census boundaries in the last couple of decades, information is unavailable to provide an accurate history of population in the socioeconomic study area.

Table 1: Historic Population Trends, 1990-2010				
Area	1990	2000	2010	Percent Change from 1990 to 2010 (%)
City of Hampton	133,793	146,437	137,436	2.7
James City County	34,859	48,102	67,009	92.2
City of Newport News	170,045	180,697	180,719	6.3
York County	42,422	56,297	65,464	54.3
Socioeconomic Study Area	N/A	N/A	11,305	N/A
Virginia	6,187,358	7,079,030	8,001,024	29.3
United States	248,709,873	281,421,906	308,745,538	24.1

Table 2: Projected Population, 2010-2030				
Area	2010	2020	2030	Percent Change from 2010 to 2030 (%)
James City County	67,009	82,781	100,294	49.7
York County	65,464	76,376	86,823	32.6
City of Newport News	180,719	182,415	183,372	1.5
City of Hampton	137,436	144,655	144,650	5.3
Socioeconomic Study Area	11,305	11,411*	11,470*	1.5
Virginia	8,001,024	7,079,030	8,001,024	29.3
United States	308,745,538	281,421,906	308,745,538	24.1

* Extrapolated from City of Newport News data by using same percent change between each decade.
 The Virginia Employment Commission (VEC) currently only projects population to 2030.

c. Employment

The main industries in Newport News include shipbuilding, military, and aerospace. The largest employers in the City include:

- Northrop Grumman Shipbuilding, Inc.;
- Riverside Regional Medical Center;
- Newport News Public Schools;
- U.S. Department of Defense;
- Canon; and,
- Ferguson Enterprises Inc.

Several of these major employers have locations within the study area.

According to the 2010 Census, approximately 70% of the City's population is in the labor force. The study area has a slightly higher percentage (75%).

d. Land Use Patterns and Plans

The City of Newport News Comprehensive Plan, *Framework for the Future 2030*, breaks down existing land use by type. An estimated 30% of the City's land is developed for residential uses and 19% is owned by the military or other federal agency. Approximately 58% of the City's land use is classified as commercial and office, transportation facilities, public right of way use, community facilities and parks/open space. As of January 1, 2000, less than 9% of City land remained vacant and undeveloped. Since much of the land is developed, the City has set goals to protect residential neighborhoods from incompatible infill development and commercial or industrial intrusions and instead plans to support neighborhoods with adequate public facilities.

The land use adjacent to the proposed section is classified in the City's comprehensive plan as commercial, very low density, light density, medium density, high density, heavy industrial, parks and open space, and community facilities. Outside of the Newport News Park, the majority of the land within the study area is developed.

e. Environmental Regulations

There are many federal regulations intended to protect, enhance, and/or rehabilitate the natural and human environments. A number of the most pertinent regulations are summarized below.

Section 404, Clean Water Act: Section 404 regulates the discharge of dredged, excavated, or fill material in wetlands, streams, rivers, and other U.S. waters. The United States Army Corps of Engineers is the federal agency authorized to issue Section 404 Permits for certain activities conducted in wetlands or other U.S. waters. The proposed section will most likely require a Section 404 permit. This permit would require the discussion of the measures employed throughout planning and design in order to avoid/minimize effects to "Waters of the U.S." The Section 404 permit application also could include a compensatory mitigation proposal, which outlines the plan to provide compensation to offset permanent losses of Waters of the U.S.

Coastal Zone Management Act: This act preserves, protects, develops, and (where possible) restores and enhances resources of the coastal zone. It is applicable to all projects significantly affecting areas under the control of the State Coastal Zone Management Agency for which a plan is approved. Projects must comply with federal consistency regulations, management measures, and the appropriate approved state plan for Coastal Zone Management Programs. The proposed section is located within the Coastal Zone.

Safe Drinking Water Act: Ensures public health and welfare through safe drinking water. The Safe Drinking Water Act regulates actions which may have a significant impact on an aquifer or wellhead protection area which is the sole or principal drinking water.

National Historic Preservation Act: Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their actions on districts, sites, buildings, structures, and objects significant in American architecture, archeology, and culture. It also requires that the Advisory Council on Historic Preservation be given an opportunity to comment.

State

The Commonwealth of Virginia has a series of environmental plans that are implemented at both the state and local levels. These include:

Waste Management: The Division of Land Protection and Revitalization (DLPR) is responsible for implementing the Virginia Waste Management Act, as well as meeting Virginia's Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) obligations as mandated by federal policy. Under these directives, the DLPR regulates solid and hazardous waste; oversees cleanup of contaminated sites; facilitates revitalization of environmentally distressed properties; monitors groundwater resources; conducts inspections of aboveground and underground storage tank systems; etc.

Air Pollution: The Department of Environmental Quality's Air Division oversees implementation of the Virginia Air Pollution Control Law, as well as ensuring federal obligations of the Clean Air Act are met. These two regulations ensure that projects conform to state and federal requirements, covering things such as industrial facilities and mobile sources (vehicle emissions).

Stormwater Management: Virginia's Stormwater Management Program requires that erosion and sediment control, as well as stormwater, be controlled during land disturbing activities and that appropriate permits be acquired. While the State provides oversight, erosion and sediment control permits are typically administered by the local municipality, and stormwater permits are administered by the Virginia Department of Environmental Quality.

City of Newport News

The City of Newport News Comprehensive Plan, *Framework for the Future 2030* establishes a number of environmental goals, including to:

- Surpass federal air quality standards,
- Improve the water quality of the James River, its tributaries and ultimately the Chesapeake Bay,
- Redevelop the City in a manner that improves the water quality of the James River and its tributaries, and
- Preserve and protect the natural features and environment of Newport News that are intrinsic to water quality.

3) Inventory Notable Features

The environmental screening conducted as part of this Request can be used as a tool to identify notable features, or specific valued, vulnerable, or unique elements of the environment. The study area contains notable human and natural environment features that were inventoried and described in more detail in the FEIS. The objective of this step of the process is to identify specific environmental issues within the indirect

effects analysis study area against which the proposed section may be assessed. The following sections discuss the notable features that were identified as part of this Request.

a. Socioeconomics and Land Use

Neighborhoods and Community Facilities

Neighborhoods and housing communities found in the vicinity of the I-64 corridor, specifically in the urban areas like the City of Newport News, are typically older, built out, and in varying stages of revitalization. Neighborhoods within Newport News that are located in close proximity to the proposed section include: Turnberry, Warwick Lawns, Hanover Heights, Courthouse Green, and Lee Hall. The only community facility identified in the FEIS that is found within the proposed section study area is the Full Gospel First Church of Virginia, located at 145 Richneck Road.

Environmental Justice

Based on 2010 Census data, all eight of the block groups in the socioeconomic study area have a minority population of 29%⁶ or greater. 2010 Census data also indicates that one of the block groups within the study area (321.23) had a median household income below the U.S. Department of Health and Human Services poverty guidelines for 2013 (\$23,550).

b. Natural Resources

Waters of the United States, Including Wetlands

The FEIS *Natural Resources Technical Memorandum* is the source of information for the natural resources identified in this Request. The proposed section is located in the Lower James River basin. The existing interstate includes two water crossings within this section. The first is located east of the western terminus, as the interstate crosses Warwick River. Warwick River is a tributary to the Lee Hall Reservoir. This reservoir, which is formed from the damming of the Warwick River, is surrounded by the Newport News City Park and is an important source of drinking water for the Hampton Roads Peninsula. The interstate crosses the reservoir west of Exit 250. A number of wetlands and non-tidal and tidal surface water systems (including both wetlands and stream channels) are located along the study area, as well. Additional detail on these resources is provided in Attachment 2 of this Request.

Water Quality

The Lee Hall Reservoir is listed as an impaired water by the Virginia Department of Environmental Quality (VDEQ). The Total Maximum Daily Load (TMDL) for this waterway has not been completed. The Warwick River is not listed as impaired water. There are no fish consumption advisories in place for either of these resources. For more information regarding water quality issues along the study area, refer to the FEIS Natural Resources Technical Memorandum.

Floodplains

There are no Federal Emergency Management Association (FEMA) mapped 100-year floodplains in the study area.

Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Consultation (IPaC) (Attachment 4) indicates that there are no threatened or endangered species within or adjacent to the proposed section. This is consistent with the findings documented in the FEIS.

⁶ 2012 Census data indicates that 29% of Virginia's population identifies as minority

c. Section 4(f) Resources

Newport News Park and the Yorktown Battlefield are both identified Section 4(f) resources that exist within the study area.

4) Identify Impact Causing Activities

Steps 2 and 3 of the indirect effects analysis focus on the identification of trends, goals, and notable features. The next steps involve identification and assessment of impacts that may come into conflict with these goals and features. Gaining an understanding of project design features and the range of impacts they may cause is the first step toward the identification of indirect effects. Project impact-causing activities are relevant to two of the three types of indirect effects identified in the *Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects*, (NCHRP, Report 466, 2002):

1. Encroachment-Alteration Effects – Effects that alter the behavior and functioning of the physical environment are related to project design features but are indirect in nature because they can be separated from the project in time or distance.
2. Access-Alteration Effects (Project-Influenced Effect) – Changes in traffic patterns and the alteration of accessibility attributable to the design of the project can influence the location of residential and commercial growth in the study area.

Induced growth-related effects, the third type of indirect effect, are attributable to induced growth itself not project design features.

An assessment of known project design features and their impact-causing activities has been included in Table 3; additional features and activities may be identified and refined during final design.

Impact-Causing Activities*	Design Features*	Present? (Yes/No/Unknown)	If Yes, General Types of Impacts
Modification of Regime	Introduction of Exotic Flora	No	
	Modification of Habitat	No	
	Alteration of Ground Cover	Yes	Groundcover within the proposed section, including the areas within the interchange improvements, would be removed to accommodate the construction of the proposed section. The precise areas and limits of removal would be determined in the final design phase of the proposed section
	Alteration of Groundwater Hydrology	No	
	Alteration of Drainage	Yes	Additional impervious areas would be created due to the additional roadway/shoulder area and drainage patterns may be altered but would be designed in accordance with VDOT’s Road and Bridge Specifications and VDOT’s Erosion and Sediment Control Plan

Table 3: Impact-Causing Activities and Design Features

Impact-Causing Activities*	Design Features*	Present? (Yes/No/Unknown)	If Yes, General Types of Impacts
	River Control and Flow Modification	No	
	Channelization	Yes	Channelization of water resources may be necessary to accommodate the proposed section construction and would be designed in accordance with VDOT's Road and Bridge Specifications; mitigation would be approved by the resource and regulatory permitting agencies
	Noise and Vibration	Yes	Noise levels would be altered along proposed section and interchange areas as a result of new roadway and future traffic volumes. Noise assessment was conducted and preliminary abatement measures were evaluated as part of the EIS. A more detailed evaluation would be completed during final design in accordance with VDOT's Highway Traffic Noise Impact Analysis Guidance Manual
Land Transformation and Construction	New or Expanded Transportation Facility	Yes	The widening of the I-64 mainline would be designed in accordance with VDOT's Road and Bridge Specifications
	Service or Support Sites and Buildings	No	
	New or Expanded Service or Frontage Roads	No	
	Ancillary Transmission Lines, Pipelines and Corridors	No	
	Barriers, Including Fencing	Yes	Barriers and fencing such as limited access fencing and noise abatement barriers would be placed where necessary and would not limit or interfere with the safety of the traveling public
	Channel Dredging and Straightening	No	
	Channel Revetments	No	
	Canals	No	
	Bulkheads or Seawalls	No	
	Cut and Fill	Yes	Cut and fill activities would occur along the proposed section and interchange areas as a result of new roadway. A more detailed evaluation would be completed during final design in accordance with VDOT's Road and Bridge Specifications and VDOT's Erosion and Sediment Control Plan

Table 3: Impact-Causing Activities and Design Features

Impact-Causing Activities*	Design Features*	Present? (Yes/No/Unknown)	If Yes, General Types of Impacts
Resource Extraction	Surface Excavation	Yes	Excavations would be conducted in accordance with VDOT's Road and Bridge Specifications
	Subsurface Excavation	Yes	Excavations would be conducted in accordance with VDOT's Road and Bridge Specifications
	Dredging	No	
Processing	Product Storage	No	
Land Alteration	Erosion Control and Terracing	Yes	Erosion control would be designed in accordance with VDOT's Road and Bridge Specifications and VDOT's Erosion and Sediment Control Plan
	Mine Sealing and Waste Control	No	
	Landscaping	Yes	Landscaping would be designed and implemented in accordance with VDOT's Road and Bridge Specification and would serve to reduce runoff and improve aesthetics along the proposed section.
	Wetland or Open Water Fill and Drainage	Yes	Wetland impacts would occur as a result of proposed section construction within the proposed section and interchange areas. Impacts would be avoided and minimized during the final design phase. Mitigation would be approved by the resource and regulatory permitting agencies.
	Harbor Dredging	No	
Resource Renewal	Reforestation	No	
	Groundwater Recharge	No	
	Waste Recycling	No	
	Site Remediation	No	
Changes in Traffic (including adjoining facilities)	Railroad	No	
	Transit (Bus)	No	
	Transit (Fixed Guideway)	No	
	Automobile	Yes	As an existing interstate highway, automobile travel would continue within the proposed section. The proposed section would result in improved travel times and automobile movements within the I-64 mainline and at the interchanges
	Trucking	Yes	As an existing interstate highway, truck travel would continue within the proposed section. The proposed section would result in improved travel times and truck movements within the I-64 mainline and at the interchanges
	Aircraft	No	
	River and Canal Traffic	No	
	Pleasure Boating	No	

Table 3: Impact-Causing Activities and Design Features

Impact-Causing Activities*	Design Features*	Present? (Yes/No/ Unknown)	If Yes, General Types of Impacts
	Communication	No	
	Operational or Service Charge	No	
Waste Emplacement and Treatment	Landfill	No	
	Emplacement of Spoil and Overburden	Yes	In cut and fill areas with borrow and spoil, there may be changes to the existing topography and natural environment, which would be assessed during the permitting process
	Underground Storage	No	
	Sanitary Waste Discharge	No	
	Septic Tanks	No	
	Stack and Exhaust Emission	No	
Chemical Treatment	Fertilization	Yes	Proper Erosion and Sediment Controls would be utilized in accordance with VDOT's Road and Bridge Specifications in order to minimize runoff of chemicals
	Chemical Deicing	No	
	Chemical Soil Stabilization	Yes	Proper Erosion and Sediment Controls would be utilized in accordance with VDOT's Road and Bridge Specifications in order to minimize runoff of chemicals
	Weed Control	Yes	Proper weed control measures would be utilized in accordance with VDOT's Road and Bridge Specifications in order to minimize runoff of chemicals
	Pest Control	No	
Access Alteration	New or Expanded Access to Activity Center	No	
	New or Expanded Access to Undeveloped Land	No	
	Alter Travel Circulation Patterns	No	
	Alter Travel Times between Major Trip Productions and Attractions	Yes	Improved travel times would benefit the region and the economy by encouraging travel and tourism

Table 3: Impact-Causing Activities and Design Features

Impact-Causing Activities*	Design Features*	Present? (Yes/No/ Unknown)	If Yes, General Types of Impacts
	Alter Travel Costs between Major Trip Productions and Attractions	Yes	Improved travel times would decrease the travel costs, therefore benefiting the region and the economy by encouraging travel and tourism

* The terms included in these columns come from similar listings in the *Desk Reference for Estimating the Indirect Effects of Proposed Transportation Projects*, (NCHRP, Report 466, 2002)

5) Identify Potentially Significant Indirect Effects for Analysis

The objective of this step is to compare the list of project impact-causing actions with the lists of goals and notable features to explore potential cause-effect relationships and establish which effects are potentially significant and merit subsequent detailed analysis (or, conversely, which effects are not potentially significant and require no further assessment).

The following describes the potential indirect effects of the implementation of the proposed section on the notable resources/features identified through the previous steps of this analysis.

a. Socioeconomics and Land Use

The proposed section would increase traffic volumes on I-64 due to the increased capacity within the proposed section. Although the Request does not address the full-build of the preferred alternative, the proposed section is anticipated to improve traffic conditions to Level of Service C (Attachment 2). Because additional lanes would be constructed in the existing median and no new interchanges are proposed as part of the proposed section, improvements are unlikely to induce development. These findings were supported by communication with the City of Newport News on January 28, 2014 (Attachment 4) which stated the City does not believe there would be any negative indirect effects from the implementation of the proposed section.

Neighborhoods and Community Facilities

Indirect effects on neighborhoods and community facilities are often seen when a project makes important community resources, such as grocery stores, social facilities, schools, or places of worship, less accessible. In this case, the proposed section would be confined to the median of an existing interstate and not impact existing interchanges. As noted in the City of Newport News’ letter of January 28, 2014 (Attachment 4), the proposed section would result in commuters using the improved interstate system for inter-state/regional travel and avoiding local road systems that are not designed to function in this capacity.

Neighborhoods and neighborhood leaders have been and would continue to be provided with opportunities to review and comment on study and design material. FHWA and VDOT held numerous meetings and comment periods throughout the development of the FEIS. Several of these events were held in close proximity to the proposed section. Table 4 lists these opportunities.

Table 4: Public Involvement Opportunities in Proximity to the Proposed section

Citizen Information Meeting	March 23, 2011	City Center Conference Room 700 Town Center Drive Newport News
Citizen Information Meeting	April 25, 2012	City Center Conference Room 700 Town Center Drive Newport News
Location Public Hearing	December 12, 2012	City Center Conference Room 700 Town Center Drive Newport News
Design Public Hearing	Spring/Summer 2014	TBD

None of the comments received during these events expressed concern over neighborhood and community facilities within or adjacent to the proposed section. As noted in Attachment 4, VDOT and the City of Newport News will remain in close communication to ensure unanticipated impacts to communities are avoided.

Environmental Justice

Because the proposed section occurs on an existing interstate and does not include any interchange improvements, existing minority or low-income populations would not be disproportionately impacted by the proposed section. By widening to the inside of the existing median, impacts are further reduced. The minority and low-income populations adjacent to the proposed section were provided opportunities to review and comment on study and design material. Table 4 lists the dates and locations of these opportunities. The location of these meetings was selected, in part, due to the public transportation options that could meet the needs of low-income populations. None of the comments received during these events expressed concern over environmental justice populations within or adjacent to the proposed section. As noted in Attachment 4, VDOT and the City of Newport News will remain in close communication to ensure unanticipated impacts to communities are avoided.

b. Natural Resources

Waters of the United States, Including Wetlands

Because the Request proposes the widening of an existing interstate, it is anticipated that the proposed section would impact Waters of the United States, including wetlands. Total direct impacts are estimated in Attachment 2 of this Request. Most of the systems being impacted have already been altered and affected by the original construction of the interstate, the reservoir, and surrounding development.

As noted in Appendix H of the FEIS, VDOT is committed to meeting stormwater management requirements along the proposed section. By meeting these requirements, indirect impacts to wetlands outside of the area of direct impact should be beneficial, through the reduction in stormwater volume and pollutant loads. Because the proposed section would include widening of existing bridges over wetlands and streams, indirect effects due to shading are possible. While it is possible that the original construction of I-64 years ago may have disrupted hydrology of wetlands and stream systems, it is unlikely that further disruptions in the hydrology of these systems would occur. According to its letter of January 28, 2014 (Attachment 4), the City anticipates the inclusion of stormwater management facilities to be a benefit to the quality of the Lee Hall Reservoir and its surrounding resources.

Water Quality

Implementation of the proposed section would result in increased impervious surface and subsequent stormwater runoff. However, a number of Stormwater Management (SWM) facilities would be included in the design and VDOT would perform downstream channel improvements to meet the technical criteria Part IIB of the current Virginia Stormwater Management Program Regulations (Section 4VAC50-60-62 et. seq.). The water quality requirements would be addressed by the proposed SWM facilities and offsite nutrient credit purchases. A large portion of the water quantity (channel and flood protection) requirements would be addressed by the SWM facilities (i.e. “controlled” SWM areas). The remaining “uncontrolled” areas flowing directly into the existing receiving channels will be analyzed for downstream erosion and improvements would be made accordingly. All new and existing pervious and/or impervious areas draining into or through the study area would need to meet the Part IIB requirements. For all impaired waters within the proposed section (i.e. Lee Hall Reservoir), any pollutant increases from this proposed section would be expected to be minimized with the use of approved erosion and sediment control measures during construction and the implementation of the above mentioned SWM facilities to the maximum extent practical. For this reason, it is anticipated that indirect effects to surface and groundwater resources would be minimal. According to its letter of January 28, 2014 (Attachment 4), the City anticipates the inclusion of stormwater management facilities as part of the highway construction to be a benefit to the quality of the Lee Hall Reservoir and its surrounding resources.

Floodplains

There are no FEMA mapped 100-year floodplains in the study area.

Threatened and Endangered Species

There are no threatened and endangered species within or adjacent to the proposed section.

c. Section 4(f) Resources

As part of the FEIS, the Virginia Department of Historic Resources (DHR) concurred that roadway improvements would have no adverse effect to the Yorktown Battlefield. DHR also concurred with the potential de minimis finding for this resource under Section 4(f).

In its January 28, 2014 letter, the City of Newport News stated that there were no anticipated increases in noise at Newport News Park and recreational opportunities on the Lee Hall Reservoir would not be impacted. On January 30, 2014, the City reaffirmed its concurrence with an anticipated de minimis finding under Section 4(f) at the Newport News Park.

d. Summary

As presented in the analysis completed for Step 5, the proposed section is not expected to make more than minor changes or alterations in the behavior and function of the affected environment caused by proposed section encroachment or induced growth. The proposed section should experience some growth and development in the study time frame with or without the proposed section, as evidenced by population and employment projections; however, this growth would be consistent with local comprehensive plans. Additionally, only minor changes to traffic patterns and accessibility are anticipated, as I-64 is an existing corridor, no new interchanges are proposed as part of the proposed section and any improvements to I-64 would be largely within the existing right of way.

The indirect effects of the proposed section to natural resources, specifically Waters of the United States, including wetlands and water quality would not be significant. These resources are regulated under permits and/or approval processes by state and federal agencies, therefore limiting the potential for any indirect

effects to be allowed to occur without requiring coordination of any impacts or required mitigation to resources. In addition, direct and indirect impacts on resources protected by other environmental laws (e.g., Waters of the United States) would be further assessed and mitigated in the future final design and permitting stages. Overall, based on this analysis, the indirect effects are not considered potentially significant.

6) Analyze Indirect Effects

The objective of this step is to analyze potentially significant effects identified in Step 5 by determining magnitude, probability of occurrence, timing and duration, and degree to which the effect can be controlled or mitigated. As noted in Step 5, no potentially significant effects were identified for the proposed section. Notwithstanding, qualitative techniques were employed to estimate the magnitude of the effects identified in Step 5 and describe future conditions with and without the proposed transportation improvement. Descriptions of future conditions are included in Step 5.

As previously described in Step 5, the potential for growth and land use changes as a result of the proposed section was analyzed. The proposed section is urban or suburban in nature, and the proposed section is not likely to cause a substantial change in type or intensity of land use. The proposed section should experience growth and development in the study time frame with or without the proposed section, as evidenced by population and employment projections; however, this growth would be consistent with the City's comprehensive plan. The implementation of the proposed section is not likely to influence if growth would occur in the I-64 corridor.

As described in Step 5, the indirect effects to natural resources, specifically Waters of the United States, including wetlands; water quality; floodplains; and threatened and endangered species would not be significant. These resources are regulated under permits and/or approval processes by state and federal agencies, therefore limiting the potential for any indirect effects to be allowed to occur without requiring coordination of any impacts or required mitigation to resources.

In addition to the socioeconomic and natural resources, indirect impacts also were considered for Section 4(f) resources. As a result of the Section 4(f) analysis and coordination with the officials with jurisdiction, de minimis impact findings are likely for the two resources within the proposed section, indicating that the magnitude of the impact would be minimal on each of these resources (Attachment 2).

7) Evaluate Analysis Results

Assessing the magnitude of indirect effects, which was the goal of the previous two steps, involved making several types of assumptions regarding the nature of the impact-causing activities, the nature of the cause-effect relationships, and how the environment would be affected by the impacts. The objective of Step 7 is to evaluate the potential for uncertainty in these assumptions in order to better understand the indirect effects.

However, since no potentially significant indirect effects were anticipated in Step 6, according to NCHRP Report 466, it is not necessary to apply more detailed sensitivity or risk analysis techniques suggested for Step 7, even if detailed techniques have been used in other steps in the analysis. The key criteria in assessing the need for detailed evaluation are (1) whether the analysts or stakeholders believe that there is any level of uncertainty regarding the underlying assumptions used to estimate the indirect effects, and (2) whether changes in the underlying assumptions can be expected to result in significant changes in the findings.

Based on this analysis, there is minimal uncertainty regarding the assumptions made, and the likelihood of variation in the assumptions is unlikely to significantly alter the findings. However, direct and indirect

impacts on resources protected by other environmental laws (e.g., Waters of the United States) would be further assessed and mitigated in the future final design and permitting stages of the proposed section.

8) Assess Consequences and Develop Mitigation

The purpose of estimating indirect effects of proposed transportation projects is to contribute to the body of information that will support a decision about whether to proceed with the plan or project, as proposed; to formulate a revised plan or project; or to otherwise mitigate adverse indirect effects associated with the proposed plan or project. The objective of this step is to assess the consequences of the analyzed indirect effects in the context of the full range of effects and to develop strategies to address unacceptable indirect effects.

As demonstrated in the FEIS and attachments to this Request, there has been no substantial controversy identified over the proposed section or its impacts. No potentially significant indirect effects were identified and no indirect effects have been determined to be unacceptable to the agencies or the public. However, direct and indirect impacts on resources protected by other environmental laws would be further assessed and mitigated in the future final design and permitting stages of the proposed section.

Cumulative Effect Analysis

In accordance with Council on Environmental Quality (CEQ) regulations, cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR § 1508.7). A cumulative impact includes the total effect on a natural resource, ecosystem, or human community due to past, present, and future activities or actions of Federal, non-Federal, public, and private entities. Cumulative impacts may also include the effects of natural processes and events, depending on the specific resource in question. Cumulative impacts include the total of all impacts to a particular resource that have occurred, are occurring, and would likely occur as a result of any action or influence, including the direct and reasonably foreseeable indirect impacts of a Federal activity. Accordingly, there may be different cumulative impacts on different environmental resources. However, not all of the resources directly impacted by a project will require a cumulative impact analysis. The resources subject to a cumulative impact assessment are determined on a case-by-case basis.

Methodology

In determining cumulative effects for this Request, the analysis followed the five-part evaluation process outlined in *Fritiofson v. Alexander*, 772 F.2d 1225 (5th Cir. 1985), as described in FHWA’s Guidance: *Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process* (<http://www.environment.fhwa.dot.gov/projdev/qaimpact.asp>):

1. What is the geographic area affected by the project?
2. What are the resources affected by the project?
3. What are the other past, present, and reasonably foreseeable actions that have impacted these resources?
4. What were those impacts?
5. What is the overall impact on these various resources from the accumulation of the actions?

Each of these parts of the evaluation process is outlined below.

1) Geographic Area

The geographic limits for the cumulative effects analysis were determined to go beyond those used for the direct impact analysis. Therefore, the geographic limits for the analysis for cumulative effects reach beyond the defined study area. Multiple boundaries such as political/geographic boundaries (i.e., planning corridor districts and Census Tracts or Block Groups) were reviewed to determine the appropriate areas for the cumulative effects analysis. Study area boundaries for each resource were individually determined based on study requirements and available data. The study areas for the resources and socioeconomic features as well as the temporal boundaries for the timeframe of the cumulative impact analysis are described below.

Resources Study Areas

Multiple resource boundaries were reviewed to assess the effects of each resource for the proposed section. Based on readily available data from federal, state and local sources, the resources were mapped using GIS mapping techniques, and analyzed to determine the potential for cumulative effects created by the proposed section.

Socioeconomic Study Area

Socioeconomic study areas were established to analyze neighborhoods and community facilities; environmental justice; displacements and relocations; economic activity; land use; and parks, recreation areas and open space within proposed section. The socioeconomic study area for this proposed section is made up of the eight Census Block Groups that border the proposed section in the City of Newport News.

Timeframe for Analysis

The analysis of cumulative effects must consider past, present, and reasonably foreseeable future actions. The temporal boundary used for the time frame for this cumulative effects assessment spans from the 1960s, when construction of I-64 within the study corridor began, to 2040 which is the modeled design year for the FEIS.

2) Affected Resources

During the indirect effects analysis, an inventory and assessment of notable features and/or resources was performed. These resources were reviewed for potential cumulative effects. Existing conditions information for these resources is contained under Step 3 of the pervious section of this attachment. Other affected resources that were not notable and therefore were not included in the cumulative effects analysis can be found described in the FEIS and associated technical documents.

3) Past, Present, and Reasonably Foreseeable Actions

As discussed under Step 4 of the previous section, there are a number of development activities and actions that have occurred and/or are planned to occur that could contribute to cumulative effects on resources affected by the proposed section. In addition to those previously mentioned a number of others are described below.

Past Actions

Traditional development patterns have generally followed a relatively sprawling land use pattern. Low-density residential uses have developed in isolation from employment centers and shopping centers. Office parks, shopping centers, apartments and single-family subdivisions generally creep further and further from urban areas into the more suburban or rural areas of the corridor. According to real estate data, the neighborhoods that surround the proposed section were initially developed prior to World War II; however,

they all experienced a great deal of growth and revitalization in the 1970s. Growth in many of these neighborhoods continued into the 1980s and 1990s.

In addition to general growth patterns, Table 5 lists past transportation improvement projects to the mainline of I-64 along with the interchanges in the vicinity of the proposed section. These projects have occurred since the construction of I-64 was initiated in the early 1960s. Since then, a number of studies and improvement projects have been completed along the corridor, including:

- A Major Investment Study (June 1999),
- Widening projects (various projects between 1979 and 2006),
- Interchange upgrades (various projects between 1981 and 2001),
- A contraflow lane reversal system from Interstate 295 (I-295) to Route 60 east of the Hampton Roads Bridge Tunnel (2006).

Table 5: Past Projects within the Study Area		
Approximate Location	Approximate Date	Project Description
Exit 255	1946	Newport News/Williamsburg International Airport (Patrick Henry Field) opens
Exit 255	1977	Major bridge reconstruction at Route 173 (Denbigh Boulevard)
Exit 247	1981	Major bridge reconstruction at Route 143 (Jefferson Avenue)
Exit 250	1982	Major bridge reconstruction at Industrial Park Drive
Exit 264	1981	First widening project; included 1.2 miles of widening to I-664
Exit 258 to Exit 261	Between 1990 and 1995	4.0-mile section of I-64 was widened from 4 to 6 lanes in two projects
Exit 258	2000	Major bridge reconstruction at Harpersville Road
Just west of Exit 255 to Exit 264	2001	Addition of high occupancy vehicle (HOV) lanes
Just west of Exit 255 to Exit 264	2006	10.7 mile eight-lane widening project
0.5 mile west of Bland Boulevard in Newport News, to the I-664/I-64 interchange in Hampton	2006	Eight-lane widening project was completed in 2006, along a 10.7 mile stretch of I-64

In addition to these transportation studies, one of the most notable developments within the operationally independent section was the establishment of Newport News Park and the Lee Hall Reservoir. During the 1960s, the City of Newport News was focused on expanding and protecting its water supplies. One of the growing supplies was the Lee Hall Reservoir. In an effort to protect the reservoir watershed from future development, the City established the park in 1966.

Present and Reasonably Foreseeable Future Activities and Actions

The City of Newport News Comprehensive Plan states that less than 9% of its land area was vacant in the year 2000. Therefore, future development will rely on redevelopment of existing parcels. This goal is highlighted by the City’s planned regional, community, and employment centers which should be developed in existing commercial or industrial areas. These areas are designed to revitalize the city, bring in new jobs, and improve the quality of life. Several of these centers are located adjacent to the proposed section.

In addition to this general focus on future development, Table 6 lists the reasonably foreseeable projects through the FEIS design year 2040 planning horizon, including projects and development assumptions contained in the Tidewater Super-Regional Travel Model used for the FEIS. Although all of the projects in Table 6 are not funded for construction, it is reasonable to include them as part of the cumulative effects analysis since they are part of the super-regional model. Additional detail on this model is available in the FEIS and associated technical documents.

Table 6: Reasonably Foreseeable Future Projects within the Project Study Area		
Project Name	Approximate Location	Project Description
Warwick Boulevard Corridor Study	Between Oyster Point Road and Fort Eustis Boulevard	Revitalization of commercial and residential properties
Jefferson Avenue Corridor Study	Between 25 th and 36 th Streets	Revitalization of commercial and residential properties
Atkinson Boulevard	From Atkinson/Warwick Boulevard interchange to Jefferson Avenue	New four-lane divided roadway extending over CSX railroad and the interstate
Fort Eustis Boulevard Bridge Replacement	Fort Eustis Boulevard	Replacement of bridge over CSX railroad
Denbigh Boulevard Bridge Replacement	Denbigh Boulevard	Replacement of bridge over CSX railroad and interstate
Middle Ground Boulevard Extension	From Middle Ground Boulevard/Jefferson Avenue interchange to Warwick Boulevard	New four-lane divided roadway, with bike path, that will bridge over CSX railroad
Warwick Boulevard-Fort Eustis Boulevard to West City Line	Route 60 from Fort Eustis Boulevard to Oakland Industrial Park	Relocate Route 60 to new alignment
I-64/Bland Blvd Interchange	Between Exit 250 and Exit 255; City of Newport News	New interchange for multimodal facility
Hampton Roads Bridge-Tunnel	Hampton Roads Harbor	Improvements to existing bridge-tunnel
Patriot’s Crossing/Third Crossing	Hampton Roads Harbor	New bridge-tunnel
Midtown/Downtown Tunnel	Hampton Roads Harbor	Improvements to existing bridge-tunnel
Norfolk International Terminals	Hampton Roads Harbor	Ongoing expansions and improvements
Craney Island Eastward Expansion	City of Portsmouth	Expansion of the dredged material placement area

Table 6: Reasonably Foreseeable Future Projects within the Project Study Area		
Project Name	Approximate Location	Project Description
Craney Island Marine Terminal	Hampton Roads Harbor	Construction of a new port terminal
Craney Island Road and Rail Connector	City of Portsmouth	Multimodal link to provide road and rail access to the marine terminal
US 460 Corridor Improvements	Southeastern Virginia between Petersburg and Chesapeake	Proposed toll road paralleling existing US 460
CSX Peninsula Line	Hampton Roads Peninsula Area	Addition of a second track
Richmond-Hampton Roads Passenger Rail	From Richmond through Petersburg to Norfolk	New rail service
Southeast High Speed Rail	Washington, DC to Charlotte, NC	New rail line with connections in Richmond

In addition to these projects, the City of Newport News has initiated a dam improvement project at Lee Hall Reservoir. The construction phase of this project is anticipated to begin in spring or summer of 2014 and extend through 2016.

4) Impacts

The potential cumulative impacts that would result through the implementation of the proposed section are described in the following paragraphs.

Socioeconomic and Land Use

Transportation projects affect existing and future land use in several ways. These include directly converting land from its existing use to transportation use, limiting or precluding planned future developments from occurring, and indirectly inducing unplanned development as well as supporting and enhancing planned development. However, because the proposed section would involve acquiring right of way along an existing interstate corridor, would focus improvements within the existing median, and would not involve any interchange modifications; these usual impacts would be limited. Anticipated impacts are further reduced by not achieving the full-build design described in the FEIS. While the proposed section may result in conversion of land use and potential displacements, the proposed section is anticipated to have an overall positive impact on the regional economy by improving mobility. These findings were supported by communication with the City of Newport News on January 28, 2014 (Attachment 4) which stated the City does not believe there would be any negative indirect effects from the implementation of the proposed section.

Neighborhoods and Community Facilities

Since the proposed improvements would be focused within the existing interstate median, substantial impacts to existing neighborhoods and community facilities are not anticipated. Property impacts reported in the FEIS would be substantially reduced, as widening would occur on the inside of the median and would not achieve the full-build design. The estimates included in the FEIS are conservative estimates and the actual calculation of relocations is expected to decrease as the proposed section final design is developed and more detailed roadway right of way requirements are determined.

In examining the cumulative effects of the proposed section with past, present and reasonably foreseeable future actions, it was determined that as a result of these federal and state regulations, along with local planning efforts, a substantial contribution of effects from the proposed section to neighborhoods and community facilities is not anticipated.

Environmental Justice

Based on 2010 Census data, all eight of the block groups in the socioeconomic study area have a minority population of 29%⁷ or greater. 2010 Census data also indicates that one of the block groups within the study area (321.23) had a median household income below the U.S. Department of Health and Human Services poverty guidelines for 2013 (\$23,550). As stated previously, minority and low-income populations are often identified in close proximity to major road networks. There are several studies and/or construction projects occurring along I-64 in the region that would have the potential to impact these populations. However, because I-64 is an existing transportation facility, the individual populations do not bear a disproportionate burden from these projects, including the proposed section. In examining the cumulative effects of the proposed section with past, present and reasonably foreseeable future actions, it was determined that a substantial contribution of effects from the proposed section to low-income and/or minority populations is not anticipated.

Natural Resources

Waters of the United States, Including Wetlands

As identified FEIS, many of the systems have been heavily manipulated through past ditching or filling activities associated with the road development and previous transportation improvements and the development of the Lee Hall Reservoir. Despite the high degree of previous disturbance, these systems may still provide ecological functions such as wildlife habitat, flood control and water quality benefits such as nutrient uptake and sediment trapping. Federal and state regulations and permit requirements would reduce impacts to these resources and provide for appropriate mitigation. The proposed section also would include stormwater management and erosion and sediment control features that are consistent with current regulations. These standards exceed those that were in place when the existing interstate highway was constructed. Therefore, by reducing the stormwater volume and pollutant load, these projects would beneficial cumulative effects on Waters of the United States. These findings are supported by the City of Newport News' letter of January 28, 2014 (Attachment 4).

In examining the cumulative effects of the proposed section with past, present and reasonably foreseeable future actions, it was determined that these federal and state regulations and the permitting process would limit temporary and permanent effects to jurisdictional wetland and stream systems within the study area, and thus a substantial contribution to effects on from the proposed section on Waters of the United States is not anticipated.

Water Quality

Cumulative impacts to water quality are as described in the previous section.

Floodplains

There are no 100-year floodplains within the study area. Therefore, the implementation of the proposed section would not contribute to cumulative impacts to floodplains.

⁷ 2012 Census data indicates that 29% of Virginia's population identifies as minority

Threatened and Endangered Species

There are no threatened or endangered species within or adjacent to the study area. Therefore, the implementation of the proposed section would not contribute to cumulative impacts to threatened and endangered species.

Section 4(f) Resources

The FEIS identified several 4(f) resources along the I-64 corridor. Two of these resources, the Newport News Park and the Yorkton Battlefield, fall within the study area for the proposed section. As explained in Attachment 2, the City of Newport News concurred that the impacts on Newport News Park would be de minimis. For Yorktown Battlefield, DHR concurred that roadway improvements would have no adverse effect on the Yorktown Battlefield. Cumulative effects are part of the overall assessment of effects under Section 106. In examining the cumulative effects of the proposed section with past, present and reasonably foreseeable future actions, it was determined that substantial cumulative effects to Section 4(f) resources are not anticipated.

5) Overall Impact

The purpose of this cumulative analysis was to assess substantial effects on resources within the study area that result from past, present, and reasonably foreseeable future projects, in addition to the proposed section. Overall, implementation of the proposed section is not expected to substantially alter development patterns within the proposed section and is not anticipated to substantially contribute to the cumulative impacts of resources evaluated as part of this study.

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Ms. Irene Rico
Federal Highway Administration
February 21, 2014
Page 40

Attachment 4: Relevant Communication Following the FEIS

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MCKINLEY PRICE, CHAIR, LINDA T. JOHNSON, VICE CHAIR
DWIGHT L. FARMER, EXECUTIVE DIRECTOR/SECRETARY

January 24, 2014

Mr. James S. Utterback, PMP
Hampton Roads District Administrator
Virginia Department of Transportation
1700 North Main Street
Suffolk, VA 23434



Re: Allocation of HRTF Revenue – I-64 Peninsula Widening - Segment 1

Dear Mr. ^{Jim} Utterback:

This is to certify that the HRTPO Board, at its meeting on January 16, 2014, unanimously approved the allocation of \$44 million from the Hampton Roads Transportation Fund (HRTF) to Segment 1 of the I-64 Peninsula Widening project. Given that Interstate projects are generally fully funded using state/NHPP funds, the HRTPO Board believes this allocation should be viewed as a significant commitment by the Region toward the entire I-64 Peninsula project, which is comprised of widening I-64 from Jefferson Avenue (Exit 255) to Route 199 west of Williamsburg (Exit 234) and improving the Fort Eustis Boulevard interchange.

The current Six-Year Improvement Program includes Segment 1 with a cost estimate of \$100 million and allocations of \$100 million through FY 2019, however, updated cost estimates and an alternative recommended by VDOT to extend Segment 1 approximately 2 miles further west than previously described, resulted in a new cost estimate of \$144 million for Segment 1.

The HRTPO Board approved the extension of Segment 1 as well as an amendment to the HRTPO FY 2012-2015 Transportation Improvement Program (TIP) to account for the changes described above. The specific TIP revisions are described below:

- **I-64 Peninsula Widening – Segment 1, UPC #104905**
 - Modify termini to be 1.55 miles west of Route 143 Jefferson Avenue (Exit 255) to 0.5 miles east of Route 238 Yorktown Road (Exit 247).
 - Revise cost estimate.
 - Allocate \$44 million of Hampton Roads Transportation Fund (HRTF) funds in FY 2014.

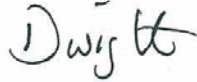
Attached is a copy of the page that has been revised in the FY 2012-2015 Transportation Improvement Program (TIP) to reflect the above noted amendment. The complete TIP, as revised, may be accessed at www.hrtpotip.org.

JDR

James S. Utterback, PMP
January 24, 2014
Page 2

Please advise me of any additional information you may need in regard to the foregoing.

Sincerely,



Dwight L. Farmer
Executive Director/Secretary

MK/kg
Attachment

CC:	Mr. Aubrey L. Layne, Jr.	Secretary of Transportation
	Mr. Charles A. Kilpatrick	Commissioner of VDOT
	Mr. W. Sheppard Miller, III	Commonwealth Transportation Board
	Mr. Hollis D. Ellis	Commonwealth Transportation Board
	Mr. John Malbon	Commonwealth Transportation Board

I-64 Peninsula Widening - Segment 1
UPC # 104905

OVERVIEW

Description: Widening of I-64 to 6-lanes from 1.55 miles west of Rte 143 Jefferson Ave. (Exit 255) to 0.50 miles east of Route 238 Yorktown Road (Exit 247).

Street (Route): I-64 (64)

Length (mi): 5.48

Jurisdiction/Agency: Hampton Roads District-wide

System: Interstate

Scope: Reconstruction w/ Added capacity

Oversight: Federal Oversight

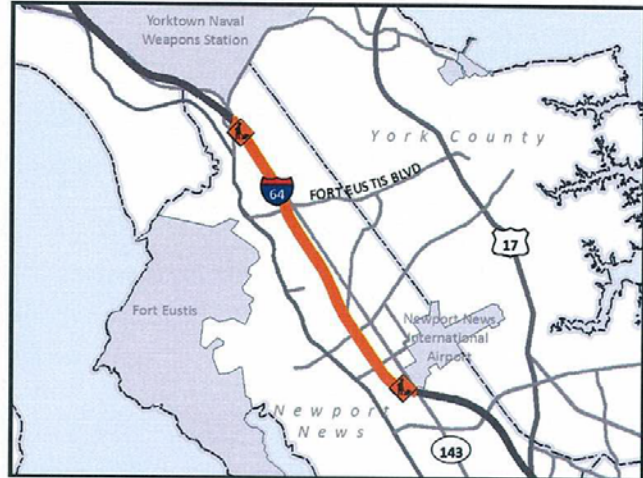
Administered By: VDOT

Regionally Significant for Air Quality: Yes

CMAQ: No

RSTP: No

Project Status: Preliminary Engineering Underway



HRTPO Notes

Revised 7/18/13: Amendment to add new project to TIP.

Revised 1/23/2014: Amendment to update project termini and phase cost estimates, and allocate \$44,000,000 FY 2014 HRTF.

SCHEDULE

	Start	End	Status
Preliminary Engineering	7/1/2013	7/1/2015	Underway
Right of Way	7/1/2015	7/1/2017	FFY 2015
Construction	7/1/2017	7/1/2019	FFY 2017

COSTS AND EXPENDITURES

	Cost Estimates	Total Expenditures	Percent Expended	Recent Expenditures			
				Latest Quarter	Previous 3 Quarters		
				3	2	1	
Preliminary Engineering	\$10,000,000	\$46,579	0%	\$45,142	\$1,437	-	-
Right of Way	\$10,000,000	\$0	0%	\$0	-	-	-
Construction	\$124,000,000	\$0	0%	\$0	-	-	-
TOTAL	\$144,000,000	\$46,579	0%				

ALLOCATIONS

Fund Source(s)	Previous	FY 2012	FY 2013	FY 2014	FY 2015	TOTAL
HRTF	\$0	\$0	\$0	\$44,000,000	\$0	\$44,000,000
SOFTMATCH	\$0	\$0	\$0	\$74,718	\$0	\$74,718
NH	\$0	\$0	\$0	\$298,872	\$0	\$298,872
TOTAL	\$0	\$0	\$0	\$44,373,590	\$0	\$44,373,590

SCHEDULED OBLIGATIONS

Phase	Fund Source(s)	Previous	FY 2012	FY 2013	FY 2014	FY 2015	Match
PE	AC	\$0	\$0	\$7,701,128	\$0	\$0	\$1,925,282
PE	NH	\$0	\$0	\$298,872	\$0	\$0	\$74,718
Subtotal		\$0	\$0	\$8,000,000	\$0	\$0	\$2,000,000
TOTAL		\$0	\$0	\$8,000,000	\$0	\$0	\$2,000,000

Source of Project Data: Virginia Department of Transportation.





MCKINLEY PRICE, CHAIR, LINDA T. JOHNSON, VICE CHAIR
DWIGHT L. FARMER, EXECUTIVE DIRECTOR/SECRETARY

January 23, 2014

Mr. James S. Utterback, PMP
Hampton Roads District Administrator
Virginia Department of Transportation
1700 North Main Street
Suffolk, VA 23434

Re: Hampton Roads 2034 Long Range Transportation Plan (LRTP) Amendment

Dear ^{Jim} ~~Mr. Utterback~~:

This to certify that the HRTPO Board, at its meeting on January 16, 2014, approved an amendment to the Hampton Roads 2034 LRTP, subject to receiving no adverse comments, to add the following project:

- **I-64 Peninsula Widening – Segment 1.**
 - Modify the termini of Segment 1 to be 1.55 miles west of Route 143 Jefferson Avenue (Exit 255) to 0.5 miles east of Route 238 Yorktown Road (Exit 247).
 - Update the project cost to \$144,000,000 from the following sources:
 - \$100,000,000 National Highway Performance Program Funds.
 - \$44,000,000 Hampton Roads Transportation Fund (HRTF) Funds.

This amendment was made available for public review and comment from January 9, 2014 through January 23, 2014, and no comments were received. The Hampton Roads 2034 LRTP, as revised, may be accessed at www.hrtpo.org.

Please advise me of any additional information you may need in regard to the foregoing.

Sincerely,

A handwritten signature in blue ink that reads "Dwight".

Dwight L. Farmer
Executive Director/Secretary

JDP/kg



Office Of The City Manager

City of Newport News

Virginia 23607

2400 Washington Avenue
(757) 926-8411
Fax (757) 926-3503

January 28, 2014

Virginia Department of Transportation | Hampton Roads District
District Manager - Project Management Office
Attn: Bruce Duvall, P.E.
1992 South Military Highway
Chesapeake, Virginia 23320

Re: I-64 Peninsula Widening Project (UPC 104905)

Dear Mr. Duvall:

The City of Newport News is in support of VDOT's project to widen I-64 from the Jefferson Avenue interchange (1.55 miles west of Route 143 Exit 255) to Yorktown Road (0.50 miles east of Route 238 Exit 247) at an estimated cost of \$144 million. We understand this widening will include a 5th and 6th lane in the median with full width shoulders, widening any bridges needed within the median, leaving a landscaped median where possible, adding appropriate stormwater management and sound barrier walls, along with adjustments to sign structures. We further understand that there will be limited new right-of-way and easements, no new interchanges, and no rehabilitation or repairs to existing pavement or bridges within the corridor.

In 2004 our City Council passed a resolution in support of the future eight-lane widening of I-64; this project being the beginning of that future widening. That resolution requested landscaping within the median, which this project will be providing. Newport News Mayor McKinley Price chaired the Hampton Roads Transportation Planning Organization (HRTPO) when they recently took historic action to commit \$44 million from the newly establish Hampton Roads Transportation Fund toward this project.

You have asked that we comment on the indirect effects this project has on the City of Newport News. While we believe there will be indirect effects, we do not believe there will be negative effects. The following effects are noted:

1. We expect commuters to use the widened and improved I-64 versus parallel routes. Interstates in urban areas do not function just for inter-state or inter-regional travel but in many cases function as local streets in the network. We do not expect this to negatively affect land use, population density or growth rates.

Smizik, Scott (VDOT)

From: Lunsford, Andy [slunsford@nngov.com]
Sent: Thursday, January 30, 2014 10:03 AM
To: Smizik, Scott (VDOT)
Cc: John.Simkins@dot.gov
Subject: RE: I-64 Widening/Newport News Park

My apologies for not responding sooner, but the weather threw us a curveball. Yes, the letter from the City Manager does represent my re-concurrence with the 4(f) de minimis finding. In addition to my previous correspondence, I would like to request to keep the reservoir (on both sides of the interstate) open to watercraft during construction. We also have a small boat ramp and parking area between the interstate and Rt. 143 that we are requesting for it to remain open (for public use) during construction and still provide adequate public access after the project is complete.

Andy Lunsford
Park Operations Superintendent
Newport News Parks, Recreation & Tourism
13560 Jefferson Avenue
Newport News, VA 23603
(757)886-7912

From: Smizik, Scott (VDOT) [<mailto:Scott.Smizik@vdot.virginia.gov>]
Sent: Wednesday, January 29, 2014 11:46 AM
To: Lunsford, Andy
Cc: John.Simkins@dot.gov
Subject: I-64 Widening/Newport News Park

Good morning Andy –

I received a copy of the attached letter from your City Manager. Does this letter represent your re-concurrence with the 4(f) de minimis finding? Or should I anticipate receiving additional communication from your office?

Thanks again for your cooperation in this effort.

Scott Smizik
Location Studies Project Manager
Virginia Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, Virginia 23219
Voice: (804) 371-4082
Cell: (804) 338-7083
Fax: (804) 786-7401
Scott.Smizik@VDOT.Virginia.gov

Smizik, Scott (VDOT)

From: Duvall, Bruce L. P.E. (VDOT)
Sent: Thursday, January 30, 2014 2:25 PM
To: Harris, Ron
Cc: John.Simkins@dot.gov; Morris, Dave; Dewhirst, Scott; 'tslaughter@nngov.com'; Lunsford, Andy; Smizik, Scott (VDOT); Hedrick, Janet P.E. (VDOT)
Subject: I-64 Widening/Newport News Waterworks (UPC 104905)
Categories: Red Category

RE: I-64 Peninsula Widening Project (UPC 104905)
VDOT Proj. No. 0064-965-264, P101, R201, C501

Hello Mr. Harris –

My name is Bruce Duvall and I am the Design Project Manager for the 6-lane widening of I-64 on the Peninsula. As you may know, this project is proposing to widen I-64 from approx. 1.55 miles west of Route 143 Jefferson Ave (Exit 255) to 0.50 miles east of Route 238 Yorktown Road (Exit 247). The scope of work includes adding one 12-foot lane and one 12-foot shoulder in each direction, with the widening to occur in the median of the interstate. With this project now transitioning from the environmental document phase to the design phase for the first segment of the I-64 corridor, I wanted to introduce myself and offer my contact information.

The Virginia Department of Transportation is advancing this project as a design build project and plans to conduct a design public hearing this spring. You will receive more pertinent information on the details of the public hearing as we advance the project and refine those particular elements. However, in the meantime, please feel free to contact me if you have any questions regarding design, mitigation, or construction related activities. I can be reached by phone at (757) 494-5480 or by email at bruce.duvall@vdot.virginia.gov

Thank you,

Bruce Duvall, P.E.



District Manager - Project Management Office |
Virginia Department of Transportation | Hampton Roads District |
1992 South Military Highway, Chesapeake, VA 23320 |
757.494.5480 tel | 757.494.5490 fax | bruce.duvall@vdot.virginia.gov |

From: Smizik, Scott (VDOT)
Sent: Monday, January 27, 2014 10:53 AM
To: Harris, Ron
Cc: Duvall, Bruce L. P.E. (VDOT); John.Simkins@dot.gov; Morris, Dave; Dewhirst, Scott; 'tslaughter@nngov.com'; Lunsford, Andy
Subject: RE: Interstate 64 Peninsula Study

Ron –

Thanks very much for your prompt response and for this additional information. It will be included in the package VDOT submits to FHWA to request the Record of Decision, along with information provided by the Parks and Recreation department.

Please do not hesitate to contact us in the future.

Scott Smizik

Location Studies Project Manager
Virginia Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, Virginia 23219
Voice: (804) 371-4082
Cell: (804) 338-7083
Fax: (804) 786-7401
Scott.Smizik@VDOT.Virginia.gov

From: Harris, Ron [<mailto:reharris@nngov.com>]
Sent: Monday, January 27, 2014 10:49 AM
To: Smizik, Scott (VDOT)
Cc: Duvall, Bruce L. P.E. (VDOT); John.Simkins@dot.gov; Morris, Dave; Dewhirst, Scott; 'tslaughter@nngov.com'; Lunsford, Andy
Subject: RE: Interstate 64 Peninsula Study

Scott-

Thanks for the opportunity to refresh our comments on this important transportation project. Our earlier comments included in the email below are still valid and current, so I won't repeat them here.

I would like to provide you with an update of the dam improvement project noted in my April 12, 2013 email. We have completed our 90% design benchmark for improvements to our Lee Hall Reservoir (LHR) dam, spillways, and control structures. We estimate that the construction phase of this project will begin in late spring or early summer this year, and be completed by the end of 2016. Based on the schedule I have seen for the Interstate project, there should be some overlap of the projects. During most of our construction work we will be lowering the reservoir upper pool to 18 ft (NAVD 88) and will establish a single LHR pool elevation of 19 ft (NAVD 88) at the end of construction. During construction water levels in the LHR will continue to fluctuate based on water demand and precipitation.

I have enclosed a table below that was prepared by our design consultant (Gannett Fleming). It includes water surface elevation forecasts for a series of flood stages that may be helpful for the design of the Interstate crossing. The column labeled "**Peak Upper Pool WSE, Proposed**" includes the reservoir elevation levels applicable to the I-64 crossing location. We can provide additional information relating to the hydrologic modeling and reports if needed.

Table 4. Existing vs. Proposed Condition Reservoir Levels for Various Flood Events

Flood Event (-)	Precipitation (inches)	Peak Tailwater WSE HEC-RAS STA 4500 IS (feet, NAVD88)		Peak Lower Pool WSE HEC-RAS STA 4500 IS (feet, NAVD88)		Peak Upper Pool WSE HEC-RAS STA 4500 IS (feet, NAVD88)	
		Existing	Proposed	Existing	Proposed	Existing	Proposed
PMF	36.16	17.6	17.3	23.7	22.5	36.5	36.4
50% PMF	18.08	12.6	12.7	21.2	20.9	31.9	31.7
1,000-year	14.70	11.8	11.8	21.0	20.8	28.7	28.5
500-year	12.90	11.4	11.4	20.9	20.8	27.5	27.3
200-year	10.70	10.7	10.7	20.8	20.7	26.1	25.9
100-year	8.25	9.8	9.8	20.6	20.6	24.2	24.0
50-year	7.40	8.9	8.9	20.5	20.5	23.7	23.4
25-year	6.60	6.9	7.0	20.1	20.3	23.2	22.4
10-year	5.75	6.2	6.6	19.6	20.2	22.6	21.7
5-year	4.80	5.1	5.7	19.1	20.1	22.1	21.2
2-year	3.65	4.5	5.2	18.5	19.9	21.4	20.5
"Normal"	0	1.3	1.3	16.5	19.0	19.6	19.0

General Assumptions:

- PMP is estimated from HMR-51; 200-year thru 1,000-year precipitation estimated from NOAA Atlas 14; 2-year thru 100-year precipitation
- Critical storm duration identified in TM-1 is the 24-hour event
- PMP is distributed using HMR-51/52; frequency precipitation distributed using the conservatively intense SCS distribution
- Overtopping elevations: 34.6-36.2 (sloping) @ CSX causeway, and ~19.5-20.8 (irregular) on the Lower Dam, represented in HEC-RAS "exist"
- 50-foot-wide bascule gate at lower dam remains in closed position (i.e., gate is "up") during the flood event
- No debris obstructions within CSX culvert.

Existing Condition Assumptions:

- Starting Water Surface Elevation (WSE): 19.64 ft @ Upper Pool and 16.5 ft @ Lower Pool
- Actual day-to-day normal pool elevations are governed by NNWW operations: pumped inflow to reservoir, sluice gate settings, and water
- Hydraulic control structure for Upper Pool is present at CSX railroad embankment
- Two 3x6 foot sluice gates at CSX Hydraulic Control Structure are opened 50% (3 feet) at storm "time zero"

Proposed Condition Assumptions:

- Starting Water Surface Elevation (WSE): 19.0 ft @ Upper and Lower Pools
- Labyrinth spillway (dual crest Elevs. 19.0 & 20.55) and armored auxiliary spillway (crest Elev. 20.55) are in-place at Lower Dam
- Hydraulic control structure for Upper Pool is removed from CSX railroad embankment

It is my understanding that our Parks & Recreation Department will be providing you with any issues that are associated with potential recreational impacts. Again, we appreciate being included in the process.

Regards,

Ron Harris, PG
Chief of Water Resources

Newport News Waterworks
Quality. Reliability. Community.

757.926.1097
757.504.7535 cell
757.926.1168 fax

-----Original Message-----

From: Smizik, Scott (VDOT) [<mailto:Scott.Smizik@vdot.virginia.gov>]
Sent: Thursday, January 23, 2014 3:01 PM
To: Harris, Ron
Cc: Duvall, Bruce L. P.E. (VDOT); John.Simkins@dot.gov
Subject: Interstate 64 Peninsula Study
Importance: High

Good afternoon Ron -

Following up on our phone conversation this morning, I wanted to send an email to close the loop on our conversations from April. The comments you provided were included in the Final Environmental Impact Statement (FEIS) which was published in December (http://www.virginiadot.org/projects/hamptonroads/i-64_peninsula_study.asp). In addition to your comments, the FEIS includes a resolution from the Hampton Roads Transportation Planning Organization endorsing the project and prioritizing a segment of the study corridor for advanced study and design.

Since that time, the HRTPO has taken additional actions to prioritize a specific section of the interstate for improvement. This section includes the area that passes over the Lee Hall Reservoir. In the coming weeks, VDOT will formally request a Record of Decision (ROD) from the Federal Highway Administration (FHWA). If/when FHWA issues the ROD, VDOT will commence full design work on this section of the interstate.

Prior to making the request, I wanted to touch base with you to ensure your comments below are still valid and see if you had anything else to add. In addition, I have cc'd Bruce Duvall on this email. Bruce is the project manager for the future design effort and would be your VDOT point of contact for any future questions/coordination.

If you do have any additional comments or would like to provide written concurrence on your previous comments, I would ask that you provide that to me within the coming week. If you have any questions, please do not hesitate to call or email.

Thank you again for your participation in this process.

Scott Smizik, AICP
Location Studies Project Manager
Virginia Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, Virginia 23219
Voice: (804) 371-4082
Cell: (804) 338-7083
Fax: (804) 786-7401
Scott.Smizik@VDOT.Virginia.gov

From: Harris, Ron [reharris@hngov.com]
Sent: Friday, April 12, 2013 8:34 AM
To: Smizik, Scott (VDOT)
Cc: Morris, Dave; Rich, Andrew
Subject: RE: I-64 widening study; Lee Hall reservoir

Thanks for the update Scott-

We appreciate the opportunity to provide VDOT with our concerns during your planning and impact-study phase. The I-64 widening project will cross Lee Hall reservoir (LHR) and the major tributaries of Lebanon and Curtis Run. As you are aware, LHR is one of two terminal drinking water reservoirs serving most of the lower Peninsula. Our terminal reservoirs store and supply water directly to the drinking water treatment plants (WTPs). The tributaries supply natural flows and serve as conduits for water transferred to the terminal reservoirs from our western storage reservoirs and/or the Chickahominy River. During the summer and fall seasons, a high percentage of the water stored in LHR is provided via transfers that use these tributaries. The hydraulic retention time in LHR ranges from 3 to 5 weeks depending on demand at the WTP.

Protection of both the tributaries and LHR from sedimentation and runoff associated with the construction activities is our primary concern, especially given the duration of construction for complex transportation projects. We realize that it is difficult to design and implement foolproof protections but we are recommending you consider designing for the highest possible storm intensity based on the sensitivity of the receiving waters. Adequate inspection will also be key to ensuring that construction activities do not result in turbidity or sedimentation issues. We would expect that the erosion and sediment control measures include booms capable of containing turbid runoff should the land-based measures fail, or prove inadequate.

We may also want to consider a bathymetric survey for some portions of the reservoir to document depth (for boom deployment) and sediment thickness prior to construction.

Fuel storage and handling for construction equipment will need to consider proximity to the reservoir and we would suggest that fuel related activities be limited to areas outside of the LHR watershed. Note also that the Jones Run crossing and basin east of the Fort Eustis Blvd I-64 interchange is diverted to below the LHR dam.

In addition to our concerns during construction, we would like to offer our reservoir modeling data for your use during design of the crossing(s). In response to new VA dam safety regulations and as part of our climate-ready preparedness we are completing our final designs for major upgrades to our LHR dam and spillways. We have evaluated the probable maximum flood (PMF) and other flood flows for our current and future dam/spillway configurations. We can also provide an estimated schedule for bidding and construction of the dam project. In summary, pending regulatory permit approval, LHR will be operated as a single reservoir pool following the upgrades. Currently we have a lower pool south of the CSX tracks, and a higher pool north of the CSX tracks including the I-64 corridor. Our modeling includes reservoir level predictions over a range of potential flood flows, using improved methodology for our watershed characteristics.

Lastly, it is our preference that the crossing of LHR be designed to take advantage of the existing median areas in lieu of adding embankment areas to accommodate the new lanes. This will minimize impacts to our shoreline and near-shore habitat areas. We hope this information is helpful as you continue with the planning and design of this important project.

Ron Harris, PG
Chief of Water Resources

Newport News Waterworks
Quality. Reliability. Community.
757.926.1097
757.504.7535 cell
757.926.1168 fax

From: Smizik, Scott (VDOT) [<mailto:Scott.Smizik@vdot.virginia.gov>]
Sent: Thursday, April 11, 2013 8:34 AM
To: Harris, Ron
Cc: Morris, Dave; Rich, Andrew
Subject: RE: I-64 widening study; Lee Hall reservoir
Importance: High

Good morning Ron -

Thanks for your email. We are under a bit of a time crunch right now, so an email would be great. If you would like to follow up with a letter, that is fine. We greatly appreciate you taking the time to review and provide comments. As you may be aware, the Draft EIS was made available for public review from November 2, 2012 through January 7, 2013. The City of Newport News provided formal comment on the project during that time; however, the U.S. Army Corps of Engineers and Environmental Protection Agency provided comment asking us to see specific comments from the Newport News reservoir. This led us to reach out to your team.

We are currently responding to comments and drafting the Final EIS. We anticipate having a Final EIS available for public review by the end of this year. For more information on the project, you may want to check out the project web site at: http://www.virginiadot.org/projects/hamptonroads/i-64_peninsula_study.asp.

Thank you again for your assistance in this process. If you have any questions or require additional information, please do not hesitate to call or email.

Scott Smizik
Location Studies Project Manager
Virginia Department of Transportation
Environmental Division
1401 East Broad Street
Richmond, Virginia 23219
Voice: (804) 371-4082
Cell: (804) 338-7083
Fax: (804) 786-7401
Scott.Smizik@VDOT.Virginia.gov

From: Harris, Ron [<mailto:reharris@nngov.com>]
Sent: Wednesday, April 10, 2013 4:06 PM
To: Smizik, Scott (VDOT)
Cc: Morris, Dave; Rich, Andrew
Subject: I-64 widening study; Lee Hall reservoir

Scott-

Andrew Rich relayed a message that VDOT is doing some planning work related to widening of I-64, including the crossing of our drinking water reservoir at primary tributary in Lee Hall. We would like to provide you with some planning-level information and considerations to make sure that you are aware of the relatively unique nature of this portion of this reach of the interstate. This would include our plans for upgrading our outlet works for the reservoir that will have some bearing on the normal and flood stage levels in the reservoir.

Ms. Irene Rico
Federal Highway Administration
February 21, 2014
Page 54

Would you prefer a letter from Waterworks, or is an email adequate for our response? We were also curious where you are with the scoping and evaluations that would be part of the EIS process for this work. Thanks again the opportunity to coordinate with VDOT on this important project.

Ron Harris, PG
Chief of Water Resources
Newport News Waterworks
Quality. Reliability. Community.
757.926.1097
757.504.7535 cell
757.926.1168 fax



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Ecological Services
6669 Short Lane
Gloucester, Virginia 23061



Date:

Online Project Review Certification Letter

Project Name:

Dear Applicant:

Thank you for using the U.S. Fish and Wildlife Service (Service) Virginia Field Office online project review process. By printing this letter in conjunction with your project review package, you are certifying that you have completed the online project review process for the referenced project in accordance with all instructions provided, using the best available information to reach your conclusions. This letter, and the enclosed project review package, completes the review of your project in accordance with the Endangered Species Act of 1973 (16 U.S.C. 1531-1544, 87 Stat. 884), as amended (ESA), and the Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c, 54 Stat. 250), as amended (Eagle Act). This letter also provides information for your project review under the National Environmental Policy Act of 1969 (P.L. 91-190, 42 U.S.C. 4321-4347, 83 Stat. 852), as amended. A copy of this letter and the project review package must be submitted to this office for this certification to be valid. This letter and the project review package will be maintained in our records.

The species conclusions table in the enclosed project review package summarizes your ESA and Eagle Act conclusions. These conclusions resulted in “no effect” and/or “not likely to adversely affect” determinations for listed species and critical habitat and/or “no Eagle Act permit required” determinations for eagles regarding potential effects of your proposed project. We certify that the use of the online project review process in strict accordance with the instructions provided as documented in the enclosed project review package results in reaching the appropriate determinations. Therefore, we concur with the “no effect” and “not likely to adversely affect” determinations for listed species and critical habitat and “no Eagle Act permit required” determinations for eagles. Additional coordination with this office is not needed.

Candidate species are not legally protected pursuant to the ESA. However, the Service encourages consideration of these species by avoiding adverse impacts to them. Please contact this office for additional coordination if your project action area contains candidate species.

Should project plans change or if additional information on the distribution of listed species, critical habitat, or bald eagles becomes available, this determination may be reconsidered. This certification letter is valid for one year.

Applicant

Page 2

Information about the online project review process including instructions and use, species information, and other information regarding project reviews within Virginia is available at our website http://www.fws.gov/northeast/virginiafield/endspecies/project_reviews.html. If you have any questions, please contact Kimberly Smith of this office at (804) 693-6694, extension 124.

Sincerely,

/s/ Cynthia A. Schulz

Cindy Schulz
Supervisor
Virginia Field Office

Enclosures - project review package



United States Department of the Interior



FISH AND WILDLIFE SERVICE
VIRGINIA ECOLOGICAL SERVICES FIELD OFFICE
6669 SHORT LANE
GLOUCESTER, VA 23061
PHONE: (804)693-6694 FAX: (804)693-9032
URL: www.fws.gov/northeast/virginiafield/

Consultation Tracking Number: 05E2VA00-2014-SLI-0843

January 16, 2014

Project Name: I-64 Section 1

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project.

To Whom It May Concern:

The enclosed species list identifies threatened, endangered, and proposed species, designated critical habitat, and candidate species that may occur within the boundary of your proposed project and/or may be affected by your proposed project. The species list fulfills the requirements of the U.S. Fish and Wildlife Service (Service) under section 7(c) of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 *et seq.*).

New information based on updated surveys, changes in the abundance and distribution of species, changed habitat conditions, or other factors could change this list. Please feel free to contact us if you need more current information or assistance regarding the potential impacts to federally proposed, listed, and candidate species and federally designated and proposed critical habitat. Please note that under 50 CFR 402.12(e) of the regulations implementing section 7 of the Act, the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally as desired. The Service recommends that verification be completed by visiting the ECOS-IPaC website at regular intervals during project planning and implementation for updates to species lists and information. An updated list may be requested through the ECOS-IPaC system by completing the same process used to receive the enclosed list.

The purpose of the Act is to provide a means whereby threatened and endangered species and the ecosystems upon which they depend may be conserved. Under sections 7(a)(1) and 7(a)(2) of the Act and its implementing regulations (50 CFR 402 *et seq.*), Federal agencies are required to utilize their authorities to carry out programs for the conservation of threatened and endangered species and to determine whether projects may affect threatened and endangered species and/or designated critical habitat.

A Biological Assessment is required for construction projects (or other undertakings having

similar physical impacts) that are major Federal actions significantly affecting the quality of the human environment as defined in the National Environmental Policy Act (42 U.S.C. 4332(2) (c)). For projects other than major construction activities, the Service suggests that a biological evaluation similar to a Biological Assessment be prepared to determine whether the project may affect listed or proposed species and/or designated or proposed critical habitat. Recommended contents of a Biological Assessment are described at 50 CFR 402.12.

If a Federal agency determines, based on the Biological Assessment or biological evaluation, that listed species and/or designated critical habitat may be affected by the proposed project, the agency is required to consult with the Service pursuant to 50 CFR 402. In addition, the Service recommends that candidate species, proposed species and proposed critical habitat be addressed within the consultation. More information on the regulations and procedures for section 7 consultation, including the role of permit or license applicants, can be found in the "Endangered Species Consultation Handbook" at:

<http://www.fws.gov/endangered/esa-library/pdf/TOC-GLOS.PDF>

Please be aware that bald and golden eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*), and projects affecting these species may require development of an eagle conservation plan (http://www.fws.gov/windenergy/eagle_guidance.html). Additionally, wind energy projects should follow the wind energy guidelines (<http://www.fws.gov/windenergy/>) for minimizing impacts to migratory birds and bats.

Guidance for minimizing impacts to migratory birds for projects including communications towers (e.g., cellular, digital television, radio, and emergency broadcast) can be found at: <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/towers.htm>; <http://www.towerkill.com>; and <http://www.fws.gov/migratorybirds/CurrentBirdIssues/Hazards/towers/comtow.html>.

We appreciate your concern for threatened and endangered species. The Service encourages Federal agencies to include conservation of threatened and endangered species into their project planning to further the purposes of the Act. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment



United States Department of Interior
Fish and Wildlife Service

Project name: I-64 Section 1

Official Species List

Provided by:

VIRGINIA ECOLOGICAL SERVICES FIELD OFFICE
6669 SHORT LANE
GLOUCESTER, VA 23061
(804) 693-6694
<http://www.fws.gov/northeast/virginiafield/>

Consultation Tracking Number: 05E2VA00-2014-SLI-0843

Project Type: Transportation

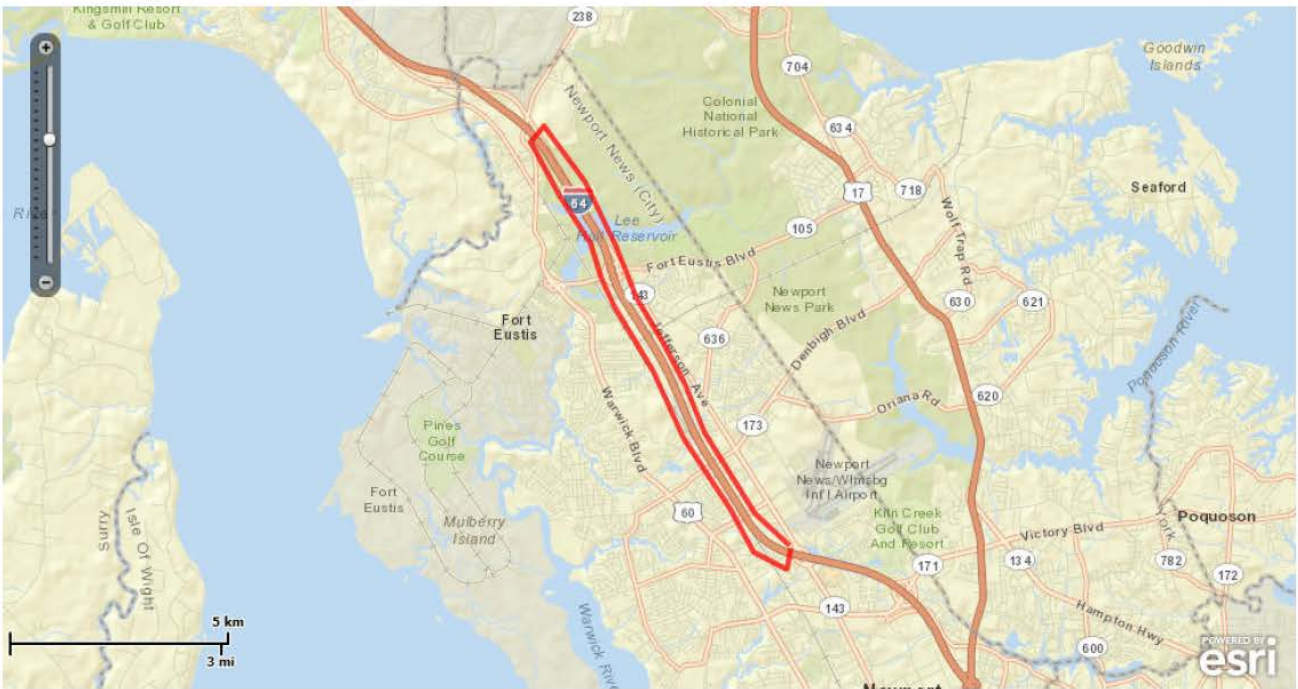
Project Description: First operationally independent section to be advanced from the Interstate 64 Peninsula Study/EIS



United States Department of Interior
Fish and Wildlife Service

Project name: I-64 Section 1

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-76.514932 37.1252579, -76.5149359 37.1252617, -76.5279822 37.1419579, -76.5279842 37.1419611, -76.5331335 37.1520855, -76.5389691 37.16084, -76.5454919 37.1695946, -76.5454938 37.1695975, -76.5509865 37.1805391, -76.5588816 37.1936653, -76.5695094 37.2051346, -76.5729157 37.2018789, -76.5653726 37.190681, -76.5574768 37.1811086, -76.5574735 37.1811031, -76.5547275 37.1739922, -76.5512956 37.167976, -76.5413401 37.154844, -76.5413386 37.1548417, -76.5334431 37.1408869, -76.5214279 37.1263818, -76.5214268 37.1263803, -76.5152503 37.1173514, -76.5066945 37.1138037, -76.5056699 37.1181611, -76.5056666 37.1181682, -76.5056609 37.1181735, -76.5056536 37.1181762, -76.5056458 37.118176, -76.5056387 37.1181727, -76.5056334 37.118167, -76.5056307 37.1181597, -76.5056309 37.1181519, -76.5066609 37.1137716, -76.5066647 37.1137639, -76.5066713 37.1137584, -76.5066796 37.1137562, -76.5066881 37.1137577, -76.5152712 37.1173167, -76.51528 37.1173239, -76.5214593 37.1263569, -76.533475 37.1408627, -76.533477 37.1408657, -76.5413727 37.1548209, -76.5513282 37.1679529, -76.5513297 37.1679551, -76.554763 37.1739737, -76.5547643



United States Department of Interior
Fish and Wildlife Service

Project name: I-64 Section 1

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37.193691, -76.5588484 37.1936877, -76.5509519 37.1805591, -76.5509511 37.1805578, -
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76.5059818 37.1187202, -76.5059766 37.1187144, -76.5059739 37.1187071, -76.5059743
37.1186993, -76.5059776 37.1186922, -76.5059834 37.118687, -76.5059907 37.1186843, -
76.5059985 37.1186847, -76.5060056 37.118688, -76.514932 37.1252579)))

Project Counties: Newport News, VA



United States Department of Interior
Fish and Wildlife Service

Project name: I-64 Section 1

Endangered Species Act Species List

There are a total of 0 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed on the **Has Critical Habitat** lines may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

There are no listed species identified for the vicinity of your project.




United States Department of Interior
Fish and Wildlife Service

Project name: I-64 Section 1

Critical habitats that lie within your project area

There are no critical habitats within your project area.



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HELP / FAQ

MAPPING PORTAL

Layers

Bald Eagle

- Eagle Nests
- Eagle Nests Buffer 330'
- > Eagle Nests Buffer 660'

A 660' "secondary buffer" around each eagle nest, where human activities are considered to impact the integrity of the "primary buffer" (e.g. construction of high-density developments, multi-story buildings, new roadways). [More info](#)

Waterbirds

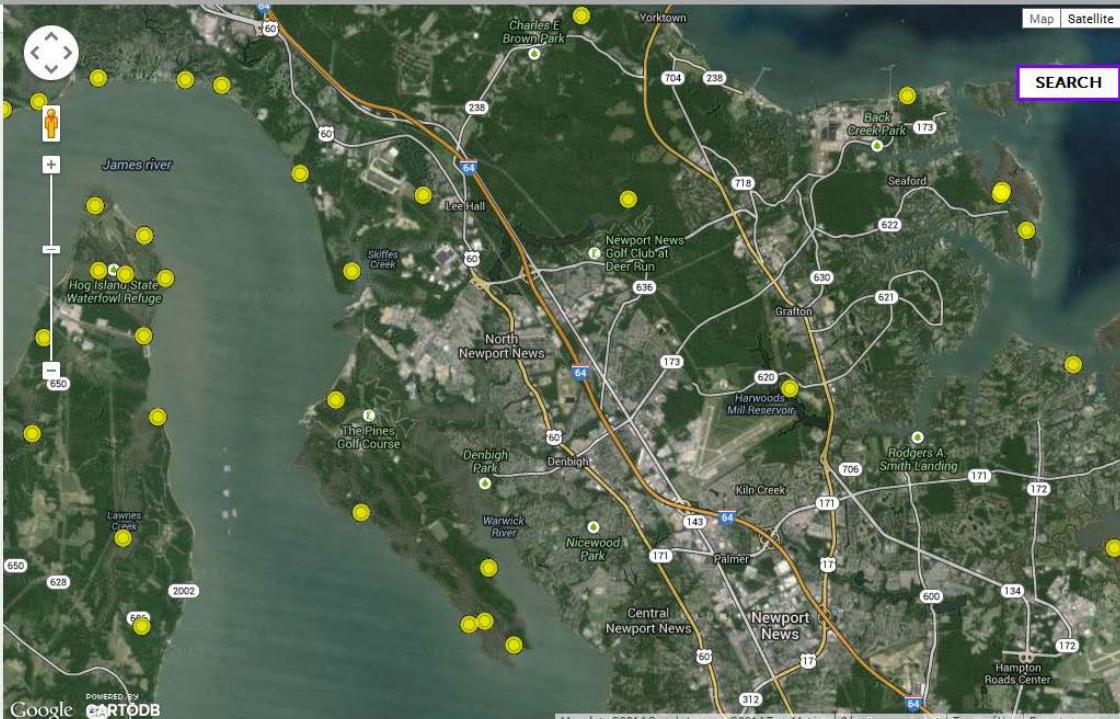
- Colonial Waterbirds 2003
- Colonial Waterbirds 2008
- Chesapeake Bay Herons 2013

Osprey

- Chesapeake Bay Osprey Nests 1995-1996
- OspreyWatch Nests

Other Species

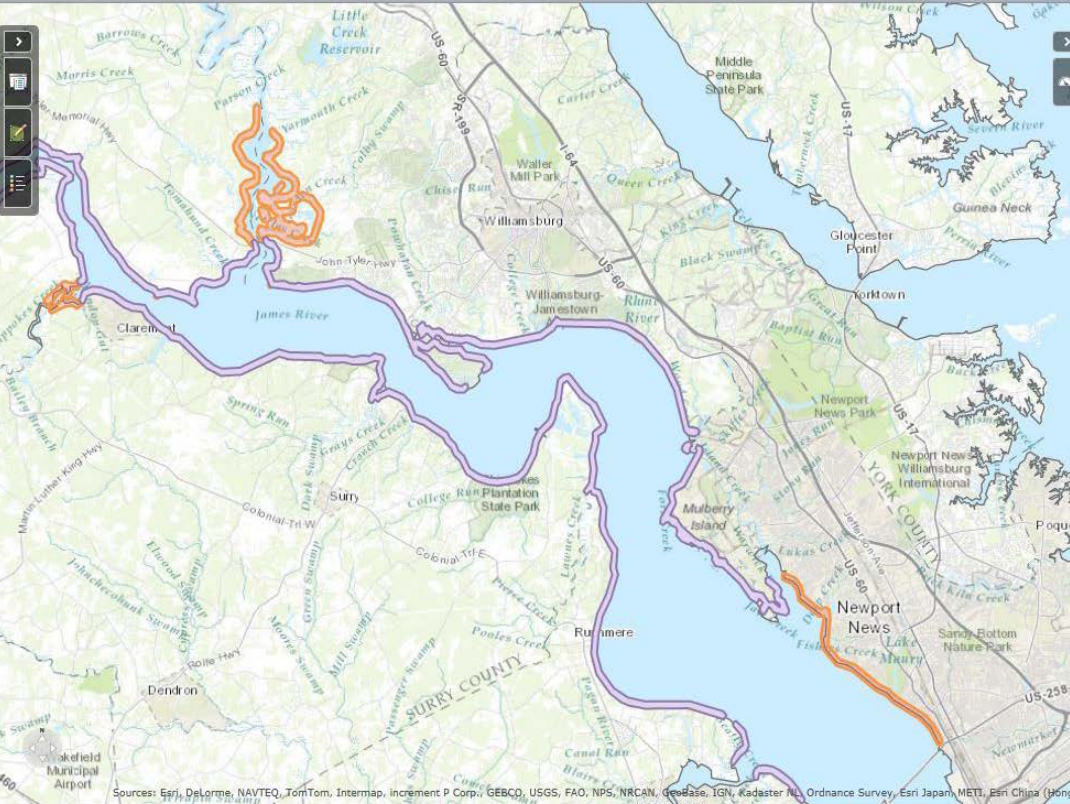
- Nighjar Survey Network Routes



SEARCH

USFWS Bald Eagle Concentration Areas - Virginia
Mapping Presentation
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Bald Eagle Concentration Areas

This map depicts designated Bald Eagle Concentration Areas in the State of Virginia. The Intent of this map is to provide information to the public about shoreline areas that are used by bald eagles during both the summer and winter periods when large numbers of birds will concentrate along shoreline areas. If a projects action area lies within the boundary of a concentration area, it may be necessary to obtain a permit issued under the Bald and Golden Eagle Act (16 U.S.C. 668-668c, 54 Stat. 250) as amended.

Time-Of-Year Restrictions

- *Summer Concentration Area (May 15 – August 31)
- *Winter Concentration Area (December 15 – March 15)

Tool Tips

- * Click on "Eagle Concentration Area" within your project area to determine which time of year restrictions apply to your project.
- * Click on "Bookmarks" (icon next to "Find Places" on tool bar) to zoom to locations or add new ones
- * Click on left toolbar [>] to display map image or legend

Sources: Esri, DeLorme, NAVTEQ, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, Geobase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, and the GIS User Community
esri

Attachment 5: Responses to Comments on the FEIS

The FEIS was made available on the VDOT web site for agency and public review on December 3, 2013. The Notice of Availability was published in the Federal Register on December 13, 2013. As part of the Notice of Availability, FHWA solicited comments on the FEIS and set a comment due date of January 27, 2014. Comments were received from the following agencies and organizations:

- Hampton Roads Transportation Planning Organization (HRTPO)
- Virginia Department of Aviation (DOAVA)
- Virginia Department of Forestry (DOF)
- U.S. Army Corps of Engineers (USACE)
- U.S. Environmental Protection Agency (EPA)

One private citizen also submitted two separate nonsubstantive comments which are not included in this attachment.

The table below presents the comments, organized by agency/organization, along with VDOT's responses to these comments.

Agency/ Organization	Comment	Draft Response
<p>HRTPO</p>	<p>Apparent inconsistency in requirements for issuance of a ROD:</p> <p>a. Page ES-5, under "Phased Approach for Implementation and Future NEPA Process"</p> <p>The FEIS states: "The Metropolitan Planning Regulations (23 CFR 450) and the Clean Air Act (CAA) Transportation Conformity Rule (40 CFR 93) require that a project located in a metropolitan planning area and/or in a CAA nonattainment or maintenance area by contained in a conforming, fiscally-constrained LRTP. FHWA may issue a Record of Decision (ROD) only if the project improvements are included in a conforming, fiscally-constrained LRTP."</p> <p>b. Page ES-7, under "Unresolved Issues"; under ""MPO/TPO Actions"</p> <p>The FEIS states: "Following publication of the Final EIS, it is anticipated that the Richmond Area MPO and the Hampton Roads TPO would update their respective LRTPs to identify operationally independent section(s) as funding becomes available. Once that occurs and the environmental analyses are updated as necessary, FHWA would issue a ROD for that section."</p> <p>c. On page 11-17, under "Future Decision-Making Process"</p> <p>The FEIS states: "The Metropolitan Planning Regulations (23 CFR 450) and the Clean Air Act (CAA) Transportation Conformity Rule (40 CFR 93) require that a project located in a metropolitan planning area and/or in a CAA nonattainment or maintenance area by contained in a conforming, fiscally-constrained LRTP. With the identification of reasonably available funding for an operationally independent section, the section can be added to the LRTP to meet the fiscal constraint requirements and can then be included in a regional transportation conformity analysis. Once the air conformity effort is complete, the TIP/STIP can be updated. At that point, FHWA can issue a Record of Decision (ROD) provided that the appropriate NEPA studies and documentation have been updated."</p>	<p>The language outlined in point 1c most accurately reflects the requirements for issuing a Record of Decision (ROD), except that only the subsequent phase is required to be in the TIP/STIP. See Attachment 1 of this Request for more information.</p> <p>Note: Highlighting and italics are part of the original comment.</p>

Agency/ Organization	Comment	Draft Response
	<p><i>The section quoted in item lc indicates that, in addition to inclusion in a conforming, fiscally constrained LRTP, the TIP/ST/P would need to be updated to include the new project (operationally independent section) in order for FHWA to issue a ROD. The sections quoted in item la and item lb do not mention inclusion of the project in the TIP/STIP as a requirement for the issuance of a ROD.</i></p> <p><i>Appendix L, page 1, under "Agency Coordination and Public Involvement throughout the Phased Implementation", includes language similar to that shown under item lc, indicating that a project would need to be included in the LRTP and TIP/ STIP before FHWA would issue a ROD.</i></p> <p><i>The requirements for the issuance of a ROD should be consistent throughout the document.</i></p>	
HRTPO	<p>Minor issue regarding conformity requirements for Hampton Roads:</p> <p>There are several instances in the FEIS that mention the transportation conformity rule as it applies to revisions of the HRTPO LRTP and TIP. It should be noted that the transportation conformity rule does not currently apply to Hampton Roads (see below for further explanation).</p> <p><i>The Final Rule by the EPA on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications Approach, Attainment Deadlines and Revocation of the 1997 Ozone Standards for Transportation Conformity Purposes, published in the Federal Register on May 21, 2012 and effective on July 20, 2012 includes the statement "this rule provides for the revocation of the 1997 ozone NAAQS for transportation conformity purposes to occur 1 year after the effective date of designations for the 2008 ozone NAAQS."</i></p> <p><i>The Hampton Roads region is an attainment area for the 2008 standard and was a maintenance area for the 1997 standard. Therefore, given the statement regarding the 1997 standard as quoted above, the conformity requirement does not currently apply to</i></p>	<p>Comment noted. The language in Appendix L accurately reflects the conformity requirements.</p> <p>Note: Italics part of original comment.</p>

Agency/ Organization	Comment	Draft Response
	<p><i>Hampton Roads.</i></p> <p>One way to resolve possible confusion on this issue is to add the words "if required", as was done in Appendix L, page 1, which includes the following:</p> <p>"Once funding is identified through the construction phase for an operationally independent section that section can be added to the respective LRTP to meet the fiscal constraint requirements and can then be included in a regional transportation conformity analysis, if required."</p>	
HRTPO	<p>On page 1-6, the condition of structures is detailed in regards to sufficiency rating and vertical clearance. It is also important to note which structures are classified as structurally deficient and functionally obsolete as those classifications are better indicators of the condition of each structure than sufficiency ratings are.</p> <p>It should also be noted that replacement or reconstruction funds are allocated to bridges with low sufficiency ratings only for those structures classified as structurally deficient or functionally obsolete.</p>	<p>Sufficiency rating was used in the Final Environmental Impact Statement (FEIS) as a common metric by which to compare different structures. It is understood that funding to replace or reconstruct bridges is allocated only for those structures classified as structurally deficient or functionally obsolete.</p>
HRTPO	<p>Revisions made regarding HRTPO staff comments on DEIS:</p> <p>Thank you a) for including the full name of the "Hampton Roads Regional Transit Vision Plan"; and b) for noting that funding must be identified in order to include projects in MPO long range transportation plans.</p>	<p>Comment noted.</p>
DOAVA	<p>As presented, the Department believes that the plan, if implemented, should provide a means for improved landside access to the Richmond International Airport (RIC) and the Newport News/Williamsburg International Airport (PHF) by enhancing the travel times for Virginia Citizens.</p>	<p>Comment noted.</p>

Agency/ Organization	Comment	Draft Response
DOAVA	<p>The Department recognizes and supports the effort to advance the Level of Service (LOS) in this important Corridor of Statewide Significance (CoSS) as identified in the VTRANS2035 Update. We would also encourage close coordination with the Richmond Regional Planning District Commission and the Hampton Roads Transportation Planning Organization as well as the respective airport commissions in order to further refine the access opportunities for these airports such an investment may create.</p>	<p>The role the regional planning commissions play in the implementation of operationally independent sections is described in Appendix L of the FEIS. It should be noted, however, that the study area for the FEIS did not extend beyond interstate ramps. Therefore, implementation of future operationally independent sections would not likely address specific access to regional airports.</p>
DOF	<p>DOF appreciates being solicited for its comments on this FEIS and as a participating agency in VDOT's environmental review processes, requests that it continue as a participating agency for any further reviews and consultation as operationally independent sections move into the design phase in keeping with VDOT's planned phased approach for implementation under the NEPA process.</p>	<p>Given the limited amount of time that has passed since the completion of the comment period on the FEIS (January 27, 2014), coordination with DOF was not necessary for this Request. VDOT made this Request available on its web site for review and comment in March 2014. VDOT also intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting, and construction of the proposed section. The design-build process would include the appropriate level of agency coordination through the permitting process.</p> <p>Implementation of future operationally independent sections may require more extensive agency and public involvement.</p>
DOF	<p>DOF endorses James City County's comment (Locality 11.3) that "Any development plan should include an active tree preservation program before, during, and after construction. The expansion should be built around the idea of corridor preservation and landscaping as the core design issue".</p>	<p>The proposed section is entirely within the City of Newport News. . As reported in the FEIS, the proposed section consists of widening along an existing corridor in a developed area. Therefore, the proposed activities would not affect any substantial forest resource and impacts to terrestrial habitat would be limited to the displacement of small sections of remaining, often disjunct, non-contiguous tracts of forests within the existing median of I-64.</p>
DOF	<p>DOF also supports VDOT's stated commitment in the FEIS to develop a landscaping plan to examine various landscaping opportunities and treatments for each of the operationally independent sections of the project corridor as they advance into the detailed design phase and would like to continue to coordinate with</p>	<p>As indicated in the FEIS, as operationally independent sections of the Preferred Alternative advance into the detailed design phase, a landscaping plan would be developed to examine various landscaping opportunities and treatments for the project area.</p>

Agency/ Organization	Comment	Draft Response
	VDOT on the plans as appropriate.	
DOF	The forestland functions and values of the land inside the lanes will not normally be as important from a conservation perspective as forestland that is conserved outside the lanes and contiguous to other forest blocks. It is too isolated.	<p>The preferred alternative allows for inside/outside widening to be selected on a section by section basis. This allows for the value of resources in the median or outside the existing right of way to be taken into account, along with other factors, when making decisions on future implementation.</p> <p>The proposed section includes widening to the inside of the existing median. This decision was made, in part, to avoid impacts to contiguous natural resources outside the existing right of way.</p> <p>In addition, the proposed section does not include the full-build option for the preferred alternative, further reducing potential impacts to surrounding resources.</p>
DOF	DOF also owns three state forests that appear to be potentially adjacent to or near the I-64 study corridor and Alternatives 1A/2A could impact forestry operations at those state forests. DOF therefore concurs with Comment 1.5 of the United States Army Corps of Engineers that Alternatives 1B/2B “may more effectively minimize fragmentation of aquatic resources and wildlife and riparian corridors, than the other alternatives” because those two alternatives propose construction of additional lanes within the median strip.	<p>The preferred alternative allows for inside/outside widening to be selected on a section by section basis. This allows for the value of resources in the median or outside the existing right of way to be taken into account, along with other factors, when making decisions on future implementation.</p> <p>There are no state forests within or adjacent to the proposed section. The proposed section includes widening to the inside of the existing median. This decision was made, in part, to avoid impacts to contiguous resources outside the existing right of way.</p> <p>In addition, the proposed section does not include the full-build option for the preferred alternative, further reducing potential impacts to surrounding resources.</p>
DOF	Due to the project’s location, a large percentage of the potentially impacted forestland will consist of non-tidal wetland forests which will be mitigated under the current regulatory regime pertaining to wetlands. It is also noted however, that two of the most pervasive endangered or threatened species potentially impacted by this project prefer upland forests.	As part of the Request for a Record of Decision on the proposed section, the U.S. Fish and Wildlife Service’s Information, Planning, and Consultation (IPaC) system was consulted. There are no threatened or endangered species or bald eagles within or adjacent to the proposed section.

Agency/ Organization	Comment	Draft Response
DOF	<p>In the summary of federal, state, and local government and representative public comments on the DEIS, the US EPA noted in comment 3.1 that “[t]he document is focused heavily on mitigation and little to no discussion on avoidance and minimization”. DOF concurs with this observation and notes that Alternatives 1B/2B represent stronger avoidance and minimization opportunities for upland forest protection than do Alternatives 1A/2A. Reducing the rate of upland forest conversion to non-forest land use options is a major priority to DOF in the design and planning for the Operationally Independent Sections going forward under VDOT’s proposed phased approach for implementing the Preferred Alternative and DOF reiterates its request to be involved in those efforts.</p>	<p>The preferred alternative allows for inside/outside widening to be selected on a section by section basis. This allows for the value of resources in the median or outside the existing right of way to be taken into account, along with other factors, when making decisions on future implementation.</p> <p>The proposed section includes widening to the inside to avoid and/or reduce potential impacts. Impacts are further reduced by not achieving the full-build level of development. VDOT made this Request available on its web site for review and comment in March 2014. VDOT also intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting, and construction of the proposed section. The design-build process would include the appropriate level of agency coordination through the permitting process.</p>
DOF	<p>DOF recommends that on and off-site mitigation are planned and budgeted for as part of the Interstate 64 Peninsula Study Review project so funds may be available for upland forestland mitigation.</p>	<p>It is anticipated that upland forestland mitigation would be considered if it is included as a permit requirement.</p>
USACE	<p>We agree with your purpose and need statement, "to alleviate existing and accommodate future capacity and improve roadway deficiencies and safety in the corridor between Richmond and Hampton in Virginia."</p>	<p>Comment noted.</p>
USACE	<p>We note that you have set a Level of Service (LOS) of "C" as the goal along the entire mainline corridor, based on .. A Policy on Geometric Design of Highways and Streets," published by the American Association of State Highway transportation Officials (AASHTO). However, it is also stated in the Highway Capacity Manual (Transportation Research Board), that LOS "D" is often used and acceptable as a standard on urban highways as well, particularly for peak periods. We note that some of the interchanges and intersections are already being designed to an LOS "D" or less under all Build Alternatives.</p>	<p>A description of why Level of Service (LOS) C was set as the goal along the entire corridor is included in the FEIS. This description states that “A Policy on Geometric Design of Highways and Streets”, published by the American Association of State Highway Transportation Officials (AASHTO), is referenced in the Code of Federal Regulations and is used to provide the level of service standard for highways on the National Highway System (NHS), which includes Interstate 64 (I-64). The LOS standard for mainline operations along freeway facilities is LOS B in rural areas and LOS C in urban areas. Based on FHWA guidelines, I-64 is considered both a</p>

Agency/ Organization	Comment	Draft Response
		<p>rural and an urban freeway in different sections of the corridor. To be consistent, a goal of LOS C or better was established for the mainline sections of I-64. The same goal would be applied to the ramps and weave areas (the crossing of two or more traffic streams traveling in the same direction along a substantial length of highway) on I-64.</p>
<p>USACE</p>	<p>We have reviewed the information in the FEIS Appendix I, "Summary of Potential Impacts to Waters of the United States Applying Level of Service (LOS) D to the Corridor," which indicated that designing for an LOS "D" rather than an LOS "C" would result in the following reductions in impacts: 0.71 acres less palustrine forested wetland impacts, 0.11 acres less tidal emergent wetland impacts, 4,073 fewer linear feet of perennial stream channel impacts, and 133 fewer linear feet of ephemeral stream channel impacts; and no difference in palustrine shrub/shrub or emergent wetland, intermittent or palustrine channel, or other waters of the U.S. impacts. While these differences appear to be relatively insignificant given the scope of the entire 75-mile project corridor, no accompanying information was provided to explain how they were quantified. In other words, how would the corridor footprint be different in design for an LOS "D" versus an "LOS "C"? Please explain.</p>	<p>The rationale for the selection of a LOS C goal along the 75-mile corridor is provided in the previous response.</p> <p>In order to provide the wetland impact data included in Appendix I of the FEIS; traffic modeling was conducted to determine the lane requirements necessary to achieve LOS D throughout the entire 75 mile corridor. This analysis found that the primary differences between the LOS C and LOS D lane requirements occurred in urban areas. That is, designing to LOS D would only have measurable reductions on the overall footprint in the urban areas along the 75-mile study corridor.</p> <p>As noted in the FEIS, potential impacts to surface waters did not substantially decrease by applying LOS D to the corridor (where appropriate). Potential impacts to stream channels (especially perennial channels) decreased by the greatest amount. This is due to the fact that there are few wetlands or streams in the urban areas, and the wetland systems are primarily in the median. There are a substantial number of perennial stream systems along the entire corridor, both in the urban and rural sections.</p>
<p>USACE</p>	<p>Since this is a widening project, we concur that each widening and/or interchange phase constructed in this manner would likely have independent utility.</p>	<p>FHWA and VDOT have agreed that each Request for ROD will demonstrate that the given section is operationally independent. This finding has been documented for the proposed section in Attachment 1 of this Request.</p>
<p>USACE</p>	<p>We share the Environmental Protection Agency's (EPA's) concern that this approach could make indirect and cumulative impacts more difficult to track and evaluate throughout the life of the project as a whole.</p>	<p>Appendix L in the FEIS commits to providing updated Indirect and Cumulative Effect analysis for each operationally independent section. The Request for ROD included an indirect and cumulative effect analysis consistent with the methodology used for the FEIS and focused on the proposed section. No significant indirect or</p>

Agency/ Organization	Comment	Draft Response
		cumulative effects were identified. See Attachment 3.
USACE	<p>We request that you advise us of all future decisions related to phasing as they are made. We also request to be notified of and to have access to all future NEPA documents for phases of this project that may require Corps authorization, including any Categorical Exclusion documents, Environmental Assessments, or supplements to this document. Decisions about planning and implementation also should be made available to the public at a single, readily accessible location.</p>	<p>Given the limited amount of time that has passed since the completion of the comment period on the FEIS (January 27, 2014), it was not necessary to conduct additional agency scoping for this Request. The proposed section was presented to federal agencies at VDOT's recent federal partnering meeting (February 12, 2014). Implementation of future operationally independent sections may require more extensive agency and public involvement.</p> <p>VDOT made this Request available on its web site for review and comment in March 2014. VDOT also intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting and construction of the proposed section.</p> <p>The U.S. Army Corps of Engineers (USACE) will be notified of all future NEPA documents for operationally independent sections that require USACE authorization. Throughout the development and implementation of operationally independent sections, public information would be posted on VDOT's website.</p>
USACE	<p>The Norfolk District does not have enough information at this point to make a determination of least environmentally damaging practicable alternative (LEDPA); therefore, we must do so for each phase of the project. We support Alternative 1, provided it is implemented in a manner that avoids and minimizes aquatic or other important resources impacts, phase by phase, as it may be practicable to widen to one side or to the other of the existing corridor in specific locations to avoid such resources. The planning of each phase also must fully consider alignments that allow for the avoidance and minimization of impacts in subsequent and adjoining phases.</p>	<p>FHWA and VDOT anticipate approaching operationally independent sections as an individual units that would receive its own ROD, its own LEDPA determination, and subsequent design and permitting efforts.</p> <p>The U.S. Army Corps of Engineers support for Alternative 1 is noted. As stated in the FEIS and illustrated in this Request, the ROD for an operationally independent section would identify the decision to widen to the outside or inside of the existing corridor.</p> <p>The proposed section is to be implemented by widening to the median. This decision was made, in part, to avoid impacts to contiguous natural resources outside the existing right of way.</p> <p>The FEIS does not place any restrictions on the phasing for construction purposes for the operationally independent sections. As</p>

Agency/ Organization	Comment	Draft Response
		<p>noted in the FEIS and defined in FHWA guidance Operational Independence and Non-concurrent Construction, an operationally independent section can be built and function as a viable transportation facility even if the rest of the work described in the FEIS is never built. The proposed section meets the definition of an operationally independent section and, therefore, does not dictate the location of the lanes for future operationally independent sections.</p> <p>By widening to the inside of the median and then tying back into the existing roadway, the proposed section provides additional flexibility in addressing interchanges and/or achieving the full-build design.</p>
USACE	<p>FHWA, as lead Federal agency, will need to include with its subsequent NEPA documents the results of any up-to-date consultation that is necessary for Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act as per the Programmatic Agreement stipulations, and/or Essential Fish Habitat (EFH), for each phase.</p>	<p>Appendix L of the FEIS establishes the actions that must be taken before, during, and following the issuance of a ROD for each operationally independent section. These actions include up-to-date consultation that is necessary for Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act as per the Programmatic Agreement stipulations, and/or EFH. For this proposed section, there will be no effect on threatened and endangered species or Essential Fish Habitat. The Programmatic Agreement will govern the Section 106 aspects of the proposed section.</p>
USACE	<p>We continue to encourage transportation systems management and/or travel demand management (TSM/TDM) improvements be pursued independently or as part of any of the Build Alternatives. Attendant features of such alternatives, such as park and ride facilities, should be located outside of jurisdictional waters of the U.S.</p>	<p>As stated in the FEIS, the identification of the preferred alternative does not preclude future implementation of TSM/TDM improvements along the corridor. These improvements would be made outside of the implementation of operationally independent sections and would be included in appropriate NEPA documentation.</p>
USACE	<p>We note that you have eliminated all of the tolled alternatives from consideration. However, if for any reason this changes and tolls will be required for any of the phases, we recommend that you conduct and include a toll-diversion analysis in future NEPA documents, as tolls can alter the effectiveness of a project at meeting its purpose and need.</p>	<p>The preferred alternative documented in the FEIS does not include tolling. If tolling or managed lanes were to be considered for an operationally independent section, the FEIS would be reevaluated.</p>

Agency/ Organization	Comment	Draft Response
USACE	Please note that prior to the submittal of a permit application, a full jurisdictional determination will be required to identify all waters of the U.S., including wetlands, utilizing the current methodology at that time. Currently, applicants are required to utilize the 1987 Corps Wetland Delineation Manual and the appropriate Regional Supplement (Atlantic and Gulf Coast Plain Region or Eastern Mountains and Piedmont Region). In addition, either Preliminary or Approved JD's are acceptable for purposes of a permit application, and the appropriate forms must be filled out for whichever is desired.	Comment noted regarding the permit application procedures. The project will be delivered via a design-build approach.
USACE	We reiterate our comments on the DEIS concerning alternatives. Based on the information we have at this time, there does not appear to be a large difference in impacts overall between the previously-identified alternatives. We note that the total potential impacts to waters of the U.S. for the previously-identified alternatives are as follows: for Alternative 1A/2A (widening to the outside) they are 66.11 acres of wetlands and 112,237 linear feet of tributaries; for Alternative 1B/2B (widening to the median side), they are 64.95 acres and 113,544 linear feet of tributaries; and for Alternative 3 (managed lanes) they are 66.73 acres and 112,516 linear feet of tributaries. We also understand that these impact figures are based on the footprints of the proposed roadway expansion, and that they were given as a worst-case scenario. These figures will likely change to some degree with further refinement based on IDs for each phase, and depending on which sections will be widened to the median and which will be widened to the outside, and which aquatic resources will be spanned.	We concur with the U.S. Army Corps of Engineers' understanding of the impacts.
USACE	After reviewing the costs for each alternative, it is not clear why widening to the median side would not be less expensive, since seemingly there would be less land acquisition and less earthwork utilizing this alternative. We do recognize that many of the land acquisitions are needed for interchange expansions, which are the same for all alternatives. We also recognize the fact that the footprints for the urban ends of the project are the same because there is no median there into which to widen. However, please explain why the overall cost would not be less for widening to the median side.	As described in the FEIS, the costs developed for each alternative are planning level estimated costs. Table 5 in the Alternatives Development Technical Report illustrates that right-of-way costs for Alternative 1B (inside widening) are approximately \$25 million less than right-of-way costs for Alternative 1A (outside widening). The construction costs for 1B, however, are higher than 1A. A general explanation for this increase is related to effort required to address center-line piers and other structures that cannot be avoided through inside widening.

Agency/ Organization	Comment	Draft Response
		As noted in the FEIS, more specific cost estimates are to be developed for each operationally independent section. The current planning level cost estimate for the proposed section is \$144 million. VDOT intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting and construction of the proposed section.
USACE	With respect to the crossings of the tidal waterways, it appears that the I-64/I-664 interchange should utilize the northern alignment and the median as much as practicable, to avoid and minimize impacts on the 21.73 acres of tidal wetlands immediately to the south. Also, for the Queens Creek crossing, it appears that impacts should be minimized by widening into the median and to the south, if practicable.	Comment noted. The I-64/I-664 interchange and Queen's Creek are not part of the proposed section.
USACE	Spanning is preferred for stream and wetland crossings, particularly where there are high-quality streams, large expansive wetland areas, organic soil bottomland wetlands, tidal waters and wetlands, threatened or endangered species habitat, cultural resources, or otherwise unique and valuable resource areas. Should new or replacement box or pipe culverts be installed, they must be countersunk below streambeds to allow for passage of aquatic species in accordance with the current requirements. In addition, if streams must be relocated, it is recommended that you incorporate natural channel design principles into the design.	Comment noted. The project will be delivered via a design-build approach.
USACE	Jurisdictional manmade ditches are typically not as valuable as natural streams and may not require as much or any compensation. Therefore, as each phase is planned and for future permit applications, you should differentiate the potential impacts to streams versus ditches, and consider these differences in avoidance and minimization decisions.	Comment noted.

Agency/ Organization	Comment	Draft Response
USACE	<p>We reiterate our previous comments for consideration in each design phase of the project. The existing I-64 facility appears to include very few stormwater treatment facilities. While we recognize that construction of the facility predated such requirements, we are concerned about the cumulative water quality impacts of the existing and proposed roadway footprint. This is particularly true since some of the receiving waters are public water supplies, impaired waters, or both. After we had made these comments on the DEIS document, your response indicated that the stormwater management plans would be planned in accordance with the most up-to-date requirements, and that none of the project is designed yet. While we recognize that some project phases may not be designed for some time, we recommend that you address early in the development of each phase the long-term treatment of storm water post construction, including at least a preliminary estimate of the number, locations, and types of stormwater facilities. All facilities should be located outside of jurisdictional waters of the U.S. In addition, we recommend that you incorporate the use of low impact development (LID) facilities, such as constructed wetlands or other designs, which may be more effective at removing sediment and other pollutants than traditional stormwater management facilities, while also potentially reducing direct impacts to aquatic resources.</p>	<p>The Virginia Department of Transportation (VDOT) is committed to implementing applicable stormwater management and pollution control measures as part of the project. VDOT's practice is generally to maintain both water quality and quantity post-development equal to or better than pre-development, as described at the time of this study in Minimum Requirements for the Engineering, Plan Preparation and Implementation of Post Development Stormwater Management Plans (Instructional and Informational Memorandum Number: IIM-LD-195.7, VDOT – Location and Design Division). One of the mitigation measures used to achieve this goal is the implementation of a monitoring program to measure pollutant concentrations at several outfall locations before, during, and after construction. If pollutant levels exceed established thresholds, actions would be taken to mitigate impacts and the affected public would be notified as required. Preliminary locations of stormwater management facilities have been identified. Additional details on the post-construction stormwater management plan would be developed during the design stage of the project. Nevertheless, the plan would be developed in accordance with the most up-to-date federal and state regulations. If newer technologies or state of the art practices that are less intrusive on the environment but just as effective can be implemented in the project, then they would be considered further.</p> <p>VDOT made this Request available on its web site for review and comment in March 2014. VDOT also intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting and construction of the proposed section.</p>
USACE	<p>As you know, we are also required to consider impacts to all public water supply facilities. The FEIS notes that seven drinking water reservoirs have been identified within the project study area. We note that you have coordinated with officials at the Lee Hall/Newport News Reservoir, and have received preliminary comments. We</p>	<p>As described the FEIS and the Request for ROD, the required and appropriate erosion and sediment control practices would be followed to avoid and minimize water quality impacts to any surface water, including the reservoirs outside the immediate study area. The Skiffes Creek Reservoir is located approximately three miles west of the</p>

Agency/ Organization	Comment	Draft Response
	<p>understand that this is the only reservoir which is bisected by the project; however some of the others are located downstream and thus will receive drainage from the project. Therefore, we recommend that you explore further the potential impacts of the project on these facilities' operations and water quality as well, by coordinating with those facilities for preliminary comments, providing them information on the potential impacts both during and post-construction, and continuing to coordinate all aspects of design with all affected facilities. Their recommendations to minimize impacts on these resources and the operation of the facilities should be incorporated into the preliminary and final designs and construction of each phase of the project.</p>	<p>proposed section and the Harwoods Mill Reservoir is located approximately three miles northeast of the proposed section.</p> <p>As part of project coordination, FHWA and VDOT solicited comments from the Lee Hall Reservoir / Newport News Reservoir staff for the FEIS and the Request for ROD. As part of the coordination for the Request for ROD, the City of Newport News stated, "we believe the addition of stormwater management basins associated with the project will improve the ability to contain and react to vehicular spills or other emergencies that the current ditch/drainage system does not provide." VDOT is committed to working with the City throughout the design and construction process to further minimize impacts to the Lee Hall Reservoir/Newport News Reservoir.</p>
<p>USACE</p>	<p>We reiterate our previous comments: The FEIS notes the project study area includes waters on Virginia's impaired water list. Anticipated water quality impacts and new TMDL requirements will need to be thoroughly addressed, as they will be considerations in obtaining a Section 401 permit from the Virginia Department of Environmental Quality (VDEQ). A Section 401 permit must be obtained before we can issue any Section 404 permit.</p>	<p>Comment noted regarding the Section 404 permitting process.</p>
<p>USACE</p>	<p>Compensatory mitigation will be required for vegetated wetland and stream impacts. Given the potentially significant amount of compensation that may be required, we recommend that you begin to locate and identify potential compensation options for wetlands and streams within the watersheds to be impacted. Compensatory mitigation will be required in accordance with the methodology in use at the time each phase is submitted. Currently, the Norfolk District utilizes a 2:1 ratio for forested wetlands, a 1.5:1 ratio for scrub/shrub wetlands, and a 1:1 ratio for emergent wetlands. The Unified Stream Methodology (USM) is used to assess streams to be impacted and determine compensation requirements.</p>	<p>Comment noted regarding the mitigation. The proposed section would impact approximately 2.6 acres of wetlands and 4,100 linear feet of stream.</p>

Agency/ Organization	Comment	Draft Response
USACE	<p>Indirect and cumulative effects analysis: We reiterate our comments on the DEIS. We concur with the timeframe specified for the analysis from the 1960s, when construction began on this corridor, to the design year of 2040. However, for purposes of our review under Section 404, we recommend that the development and road projects described in the Memorandum be translated into estimates of impact acreages of aquatic resources. The analysis should not only consider the past, present, and reasonably foreseeable effects of I-64 itself, but also of all development in the region. That analysis should include development that has occurred around each interchange, both since I-64 was constructed that which is projected to occur, whether or not it can be demonstrated that any particular development occurred or is expected to occur directly as a result of the I-64 corridor improvements. Geographic area used for the cumulative and indirect effects should be identified and should consider downstream waters as well. The original aquatic resource impacts of the existing I-64 facility itself should be estimated in this manner, as well as its secondary impacts, including the effects of any undersized culverts, stream channelization, or fragmentation of stream and wetland corridors. This may be done using your existing data, aerial photographs, USGS quadrangle sheets, National Wetland Inventory (NWI) maps, other GIS mapping, data from localities, our records, and other sources. These analyses also should be considered and included in any further NEPA documents for future phases.</p>	<p>Appendix L of the FEIS commits to providing updated, qualitative Indirect and Cumulative Effect analysis for each operationally independent section. The Request for ROD included an indirect and cumulative effect analysis consistent with the methodology used for the FEIS and focused on the proposed section. See Attachment 3. No significant indirect or cumulative effects were identified.</p> <p>The Indirect and Cumulative Effects analysis for the proposed section is sufficient to support an informed decision regarding 1) whether the proposed section results in additional significant impacts not considered in the Final EIS, and 2) selecting an alternative that calls for adding lanes in the median. As part of the Section 404 permitting process, information required by the U.S. Corps of Engineers to support their permit decision will be provided.</p>
EPA	<p>EPA requests that all future NEPA documents for I-64 operationally independent sections be provided for respective agency review through the NEPA process. It is possible that the operationally independent sections could be divided to the extent that taken out of context the sections do not reflect the original scope of the project purpose and need. This could lead to sections of the project being studied through Categorical Exclusion (CE), Environmental Assessment (EA) with the potential of being a Finding of No Significant Impact (FONSI), or updates to the FEIS. With the exception of the fully vetted updates to the FEIS, the public and government resource agencies may not be given the opportunity to</p>	<p>Given the limited amount of time that has passed since the completion of the comment period on the FEIS (January 27, 2014), it was not necessary to conduct additional agency scoping for this Request. VDOT made this Request available on its web site for review and comment in March 2014. VDOT also intends to hold a design public hearing for the proposed section in the Spring of 2014 to solicit comments from agencies and the public. Following the design public hearing, VDOT anticipates issuing a design-build contract to carry out the design, permitting, and construction of the proposed section.</p>

Agency/ Organization	Comment	Draft Response
	<p>comment on the sections of the roadway. This is of concern as there is the potential that decisions are made without the benefit of resource agency and public input and without a comprehensive level of analysis of direct, secondary, and/or cumulative impact.</p>	<p>In addition, any additional right of way needed would require meetings with individual property owners. During the construction phase, public involvement opportunities could include: community, special purpose and individual meetings, and the use of variable message signs to alert drivers of construction activities. Throughout the development and implementation of operationally independent sections, public information would be posted on VDOT's website.</p> <p>Implementation of future operationally independent sections may require more extensive agency and public involvement.</p>
<p>EPA</p>	<p>EPA expects effort to be made to select and design alternatives that incorporate resource avoidance and minimization to the maximum extent possible.</p>	<p>The FEIS states that the full build of the preferred alternative would be implemented in operationally independent sections. A decision on widening to the outside or inside of the existing corridor could be made on a section by section basis. This flexibility would allow FWHA and VDOT to make choices to avoid and/or minimize impacts to resources.</p> <p>The proposed section includes widening to the inside of the existing median. This decision was made, in part, to avoid unnecessary impacts to contiguous resources outside the existing right of way. In addition, the proposed section does not include the full-build option for the preferred alternative, further reducing potential impacts to surrounding resources. The final design and permitting activities would seek to further minimize and/or avoid resource impacts.</p>
<p>EPA</p>	<p>Many of the comments made by EPA on the DEIS were stated in the FEIS to be addressed in the future through the development of operationally independent sections. EPA reiterates the issues brought up in the Draft EIS comment letter of April 8, 2013 and incorporates them by reference.</p>	<p>Comment noted. Additional details on avoidance and minimization efforts, stormwater management, and mitigation would be outlined in the design and permitting stages of the proposed section of the project corridor. Additional details on this process are included in Appendix L of the FEIS.</p>

Agency/ Organization	Comment	Draft Response
EPA	EPA supports the updates to the FEIS for each operationally independent section as this will allow the document to be focused on a relatively smaller sections and fully vetted consideration of alternatives analysis, avoidance and minimization to aquatic resources, impacts to water quality, secondary and cumulative impacts, storm water control, and Environmental Justice issues.	EPA's support for the phased approach is noted.
EPA	EPA supports the development of the roadway either in the median or to the outside of the existing roadway based on which option would avoid and minimize impacts to aquatic resources and meet operational needs.	<p>The FEIS states that the full build of the preferred alternative would be implemented in operationally independent sections. A decision on widening to the outside or inside of the existing corridor could be made on a section by section basis. This flexibility will allow FHWA and VDOT to make choices to avoid and/or minimize impacts to resources.</p> <p>The proposed section includes widening to the inside of the existing median. This decision was made, in part, to avoid unnecessary impacts to the Lee Hall Reservoir, Newport News Park, and other resources.</p>
EPA	It should also be noted that since the operationally independent sections are truly independent than the establishment of the additional lanes either in the median or to the outside of the existing roadway should not dictate the location of the lanes for the next section of I-64 expansion.	The FEIS does not place any restrictions on the phasing for construction purposes for the operationally independent sections. As noted in the FEIS and defined in FHWA guidance Operational Independence and Non-concurrent Construction, an operationally independent section can be built and function as a viable transportation facility even if the rest of the work described in the FEIS is never built. The proposed section meets the definition of an operationally independent section and ties back into the existing roadway. Therefore, the proposed section does not dictate the location of the lanes for future operationally independent sections.



MCKINLEY PRICE, CHAIR, LINDA T. JOHNSON, VICE CHAIR
DWIGHT L. FARMER, EXECUTIVE DIRECTOR/SECRETARY

January 2, 2014

Mr. Scott Smizik
Project Manager
Virginia Department of Transportation
1401 E. Broad Street
Richmond, VA 23219

Re: I-64 Peninsula Study: FEIS Comments

Dear Mr. Smizik:

On behalf of the Hampton Roads Transportation Planning Organization (HRTPO), the designated Metropolitan Planning Organization for the Hampton Roads metropolitan planning area in southeastern Virginia, I wish to take this opportunity to submit our comments regarding the ***I-64 Peninsula Study Final Environmental Impact Statement***.

If I can be of further assistance, please do not hesitate to contact me at 757-420-8300 or dfarmer@hrpdcva.gov.

Sincerely,

Dwight L. Farmer
Executive Director/Secretary

MK/kg

Attachment

Copy: James Utterback

Interstate 64 Peninsula Study
Final EIS
December 2013

HRTPO STAFF COMMENTS

Comments on Interstate 64 Peninsula Study Final EIS, Dated December 2013
(Comments due by January 27, 2014)

HRTPO Staff Comments
January 2, 2014

1. Apparent inconsistency in requirements for issuance of a ROD:
 - a. **Page ES-5, under "Phased Approach for Implementation and Future NEPA Process"**

The FEIS states: "The Metropolitan Planning Regulations (23 CFR 450) and the Clean Air Act (CAA) Transportation Conformity Rule (40 CFR 93) require that a project located in a metropolitan planning area and/or in a CAA nonattainment or maintenance area by contained in a conforming, fiscally-constrained LRTP. FHWA may issue a Record of Decision (ROD) only if the project improvements are included in a conforming, fiscally-constrained LRTP."

- b. **Page ES-7, under "Unresolved Issues"; under "MPO/TPO Actions"**

The FEIS states: "Following publication of the Final EIS, it is anticipated that the Richmond Area MPO and the Hampton Roads TPO would update their respective LRTPs to identify operationally independent section(s) as funding becomes available. Once that occurs and the environmental analyses are updated as necessary, FHWA would issue a ROD for that section."

- c. **On page II-17, under "Future Decision-Making Process"**

The FEIS states: "The Metropolitan Planning Regulations (23 CFR 450) and the Clean Air Act (CAA) Transportation Conformity Rule (40 CFR 93) require that a project located in a metropolitan planning area and/or in a CAA nonattainment or maintenance area by contained in a conforming, fiscally-constrained LRTP. With the identification of reasonably available funding for an operationally independent section, the section can be added to the LRTP to meet the fiscal constrain requirements and can then be included in a regional transportation conformity analysis. Once the air conformity effort is complete, the TIP/STIP can be updated. At that point, FHWA can issue a Record of Decision (ROD) provided that the appropriate NEPA studies and documentation have been updated."

The section quoted in item 1c indicates that, in addition to inclusion in a conforming, fiscally constrained LRTP, the TIP/STIP would need to be updated to include the new project (operationally independent section) in order for FHWA to issue a ROD. The

sections quoted in item 1a and item 1b do not mention inclusion of the project in the TIP/STIP as a requirement for the issuance of a ROD.

Appendix L, page 1, under "Agency Coordination and Public Involvement throughout the Phased Implementation", includes language similar to that shown under item 1c, indicating that a project would need to be included in the LRTP and TIP/STIP before FHWA would issue a ROD.

The requirements for the issuance of a ROD should be consistent throughout the document.

2. Minor issue regarding conformity requirements for Hampton Roads:

There are several instances in the FEIS that mention the transportation conformity rule as it applies to revisions of the HRTPO LRTP and TIP. It should be noted that the transportation conformity rule does not currently apply to Hampton Roads (see below for further explanation).

The Final Rule by the EPA on the Implementation of the 2008 National Ambient Air Quality Standards for Ozone: Nonattainment Area Classifications Approach, Attainment Deadlines and Revocation of the 1997 Ozone Standards for Transportation Conformity Purposes, published in the Federal Register on May 21, 2012 and effective on July 20, 2012 includes the statement "this rule provides for the revocation of the 1997 ozone NAAQS for transportation conformity purposes to occur 1 year after the effective date of designations for the 2008 ozone NAAQS."

The Hampton Roads region is an attainment area for the 2008 standard and was a maintenance area for the 1997 standard. Therefore, given the statement regarding the 1997 standard as quoted above, the conformity requirement does not currently apply to Hampton Roads.

One way to resolve possible confusion on this issue is to add the words "if required", as was done in Appendix L, page 1, which includes the following:

"Once funding is identified through the construction phase for an operationally independent section that section can be added to the respective LRTP to meet the fiscal constraint requirements and can then be included in a regional transportation conformity analysis, if required."

3. Structures section:

On page I-6, the condition of structures is detailed in regards to sufficiency rating and vertical clearance. It is also important to note which structures are classified as structurally deficient and functionally obsolete as those classifications are better indicators of the condition of each structure than sufficiency ratings are.

It should also be noted that replacement or reconstruction funds are allocated to bridges with low sufficiency ratings only for those structures classified as structurally deficient or functionally obsolete.

4. Revisions made regarding HRTPO staff comments on DEIS:

Thank you a) for including the full name of the "Hampton Roads Regional Transit Vision Plan", and b) for noting that funding must be identified in order to include projects in MPO long range transportation plans.



COMMONWEALTH of VIRGINIA

Randall P. Burdette
Director

Department of Aviation
5702 Gulfstream Road
Richmond, Virginia 23250-2422
January 27, 2014

V/TDD • (804) 236-3624
FAX • (804) 236-3635

Mr. Scott Smizik
VDOT
1401 E. Broad Street
Richmond, VA 23219

Re: I-64 Peninsula Study FEIS

Dear Mr. Smizek:

Thank you for requesting our comments on the Project concerning the I-64 Peninsula Study FEIS.

As presented, the Department believes that the plan, if implemented, should provide a means for improved landside access to the Richmond International Airport (RIC) and the Newport News/Williamsburg International Airport (PHF) by enhancing the travel times for Virginia Citizens.

The Department recognizes and supports the effort to advance the Level of Service (LOS) in this important Corridor of Statewide Significance (CoSS) as identified in the VTRANS2035 Update. We would also encourage close coordination with the Richmond Regional Planning District Commission and the Hampton Roads Transportation Planning Organization as well as the respective airport commissions in order to further refine the access opportunities for these airports such an investment may create.

The Department of Aviation appreciates the opportunity to comment on this project.

Sincerely,

A handwritten signature in black ink, appearing to read "R. N. Harrington".

R. N. (Rusty) Harrington
Manager, Planning and Environmental Section
Airport Services Division

tbm/



Rob Ferrell
Acting State Forester



COMMONWEALTH of VIRGINIA

DEPARTMENT OF FORESTRY
900 Natural Resources Drive, Suite 800
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January 27, 2014

TO: Scott Smizik, AICP, Location Studies Project Manager - VDOT
FROM: Greg Evans, DOF
SUBJECT: Final Environmental Impact Statement (FEIS) for the Interstate 64 Peninsula Study Review

I am writing in response to your December 3, 2013 email to Mr. Todd Groh, soliciting comments from the Department of Forestry (DOF) on the above subject project FEIS as well as the proposed phased approach for implementing the Preferred Alternative. The Department of Forestry did not participate in the earlier assessment processes pertaining to the project so this review represents its first analysis and evaluation pertaining to the Interstate 64 Peninsula Study Review. Our comments therefore, are based upon a review of the FEIS document and appendices including other agency comments, the Draft EIS and the Natural Resources Technical Memorandum. DOF did not undertake any field observations for this review.

Continued Consultation Under Phased Implementation Approach

DOF understands it was VDOT's goal with this FEIS, while developing the Alternatives, to identify solutions that would meet the purpose and need for the project while avoiding and minimizing impacts to the human and natural environments. At this stage in the study process conceptual designs only were completed for each of the Alternatives and as the project progresses, more detailed design will be completed in coordination and consultation with other state agencies. DOF appreciates being solicited for its comments on this FEIS and as a participating agency in VDOT's environmental review processes, requests that it continue as a participating agency for any further reviews and consultation as operationally independent sections move into the design phase in keeping with VDOT's planned phased approach for implementation under the NEPA process.

DOF endorses James City County's comment (Locality 11.3) that "Any development plan should include an active tree preservation program before, during, and after construction. The expansion should be built around the idea of corridor preservation and landscaping as the core design issue" DOF also supports VDOT's stated commitment in the FEIS to develop a

landscaping plan to examine various landscaping opportunities and treatments for each of the operationally independent sections of the project corridor as they advance into the detailed design phase and would like to continue to coordinate with VDOT on the plans as appropriate.

Alternative Preference

DOF can empathize with the many other comments referenced in the FEIS Executive Summary Section F made by citizens and organizations that it is important to preserve the aesthetics of the corridor by retaining the wooded median, particularly in the section of I-64 through the historic triangle area comprised of the Cities of Williamsburg and Yorktown and in Jamestown. However, the forestland functions and values of the land inside the lanes, will not normally be as important from a conservation perspective as forestland that is conserved outside the lanes and contiguous to other forest blocks. It is too isolated.

Forestland provides many other environmental benefits and services beyond aesthetics such as carbon sequestration, pollination, recreation, reducing nutrient loads to streams, and enhancing air quality. These regulating and cultural services are in addition to the traditional wood products Virginia forests provide. DOF is committed to increasing awareness of these vital services and finding solutions that keep working forests on Virginia's landscape sustainably providing ecosystem services. DOF also owns three state forests that appear to be potentially adjacent to or near the I-64 study corridor and Alternatives 1A/2A could impact forestry operations at those state forests. DOF therefore concurs with Comment 1.5 of the United States Army Corps of Engineers that Alternatives 1B/2B "may more effectively minimize fragmentation of aquatic resources and wildlife and riparian corridors, than the other alternatives" because those two alternatives propose construction of additional lanes within the median strip.

Upland Forest Protection

Due to the project's location, a large percentage of the potentially impacted forestland will consist of non-tidal wetland forests which will be mitigated under the current regulatory regime pertaining to wetlands. It is also noted however, that two of the most pervasive endangered or threatened species potentially impacted by this project prefer upland forests. Furthermore, numerous studies have shown that forests provide superior watershed benefits over nearly every other land use and the cleanest water comes from forested watersheds. One of DOF's goals therefore, is to increase the amount of forestland conserved, protected and established in Virginia's watersheds. These forested watersheds are critical sources of drinking water; habitat for important fisheries, terrestrial habitat for forest flora and fauna, and areas that are treasured for their recreational value. This is especially important when considering the Total Maximum Daily Load (TMDL) and Watershed Improvement Plan (WIP) that has been developed for the Chesapeake Bay.

In the summary of federal, state, and local government and representative public comments on the DEIS, the US EPA noted in comment 3.1 that "[t]he document is focused heavily on mitigation and little to no discussion on avoidance and minimization". DOF concurs with this observation and notes that Alternatives 1B/2B represent stronger avoidance and minimization opportunities for upland forest protection than do Alternatives 1A/2A. Reducing the rate of

upland forest conversion to non-forest land use options is a major priority to DOF in the design and planning for the Operationally Independent Sections going forward under VDOT's proposed phased approach for implementing the Preferred Alternative and DOF reiterates its request to be involved in those efforts.

Lastly, DOF notes that Section 6001 of SAFETEA-LU requires statewide long-range plans to discuss environmental mitigation opportunities and specifically references upland forests as a land use for which mitigation plans should be developed. FHWA policy guidance endorses an "*ecosystem approach*" as a framework through which VDOT/FHWA can meet the Section 6001 requirements. DOF recommends that on and off-site mitigation are planned and budgeted for as part of the Interstate 64 Peninsula Study Review project so funds may be available for upland forestland mitigation.

This concludes DOF's comments.

Greg Evans
Voluntary Mitigation Program Manager
Virginia Department of Forestry
900 Natural Resources Drive, Suite 800
Charlottesville, VA 22903
434-220-9020



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
NORFOLK DISTRICT CORPS OF ENGINEERS
FORT NORFOLK 803 FRONT STREET
NORFOLK, VIRGINIA 23510-1096

February 3, 2014

Eastern Virginia Regulatory Section
NAO-2011-00426
VDOT Project Number 0064-M11-002,P101
(various waterways)

Mr. John Simkins
Federal Highway Administration
400 North 8th Street, Room 750
Richmond, Virginia 23219

Ms. Angel Deem
Project Studies Manager
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Dear Mr. Simkins and Ms. Deem:

Thank you for the opportunity to review the Final Environmental Impact Statement (FEIS) for the Interstate 64 (I-64) Peninsula Study, for a 75-mile corridor improvement from Interstate 95 (I-95) in the City of Richmond to Interstate 664 (I-664) in the City of Hampton, Virginia. The Norfolk District Corps of Engineers (Norfolk District) is a cooperating agency in the preparation of documents for this study.

We have reviewed the responses in the FEIS to our comments on the Draft EIS (DEIS) which we had submitted by letter dated January 15, 2013. The purpose of this letter is to provide our comments and recommendations on the FEIS.

- 1) Purpose and Need: We agree with your purpose and need statement, "to alleviate existing and accommodate future capacity and improve roadway deficiencies and safety in the corridor between Richmond and Hampton in Virginia."
 - a. We note that you have set a Level of Service (LOS) of "C" as the goal along the entire mainline corridor, based on "A Policy on Geometric Design of Highways and Streets," published by the American Association of State Highway transportation Officials (AASHTO). However, it is also stated in the Highway Capacity Manual (Transportation Research Board), that LOS "D" is often used and acceptable as a standard on urban highways as well, particularly for peak periods. We note that some of the Interchanges and intersections are already being designed to an LOS "D" or less under all Build Alternatives.

- b. We have reviewed the information in the FEIS Appendix I, "Summary of Potential Impacts to Waters of the United States Applying Level of Service (LOS) D to the Corridor," which indicated that designing for an LOS "D" rather than an LOS "C" would result in the following reductions in impacts: 0.71 acres less palustrine forested wetland impacts, 0.11 acres less tidal emergent wetland impacts, 4,073 fewer linear feet of perennial stream channel impacts, and 133 fewer linear feet of ephemeral stream channel impacts; and no difference in palustrine shrub/shrub or emergent wetland, intermittent or lacustrine channel, or other waters of the U.S. impacts. While these differences appear to be relatively insignificant given the scope of the entire 75-mile project corridor, no accompanying information was provided to explain how they were quantified. In other words, how would the corridor footprint be different in design for an LOS "D" versus an "LOS "C"? Please explain.
- 2) Alternatives Development and Phasing: The FEIS indicates that you have chosen Alternative 1, the non-tolled alternative that allows the flexibility for choosing combinations of either 1A and 1B, (i.e., the widening either to the outside or into the median of the existing alignment). It further indicates that the planning, design, and construction of the project will occur on a phase-by-phase basis, based in part on input from each local metropolitan planning organization (MPO). You have indicated that each phase will be designed to be independently-functioning, and thus will have independent utility, whether or not the other phases are constructed.
- a. Since this is a widening project, we concur that each widening and/or interchange phase constructed in this manner would likely have independent utility. However, we share the Environmental Protection Agency's (EPA's) concern that this approach could make indirect and cumulative impacts more difficult to track and evaluate throughout the life of the project as a whole. Therefore, we request that you advise us of all future decisions related to phasing as they are made. We also request to be notified of and to have access to all future NEPA documents for phases of this project that may require Corps authorization, including any Categorical Exclusion documents, Environmental Assessments, or supplements to this document. Decisions about planning and implementation also should be made available to the public at a single, readily accessible location.
- b. The Norfolk District does not have enough information at this point to make a determination of least environmentally damaging practicable alternative (LEDPA); therefore, we must do so for each phase of the project. We support Alternative 1, provided it is implemented in a manner that avoids and minimizes aquatic or other important resources impacts, phase by phase, as it may be practicable to widen to one side or to the other of the existing corridor in specific locations to avoid such resources. The planning of each phase also must fully consider alignments that allow for the avoidance and minimization of impacts in subsequent and adjoining phases.

- c. FHWA, as lead Federal agency, will need to include with its subsequent NEPA documents the results of any up-to-date consultation that is necessary for Section 7 of the Endangered Species Act, Section 106 of the National Historic Preservation Act as per the Programmatic Agreement stipulations, and/or Essential Fish Habitat (EFH), for each phase.
 - d. We continue to encourage transportation systems management and/or travel demand management (TSM/TDM) improvements be pursued independently or as part of any of the Build Alternatives. Attendent features of such alternatives, such as park and ride facilities, should be located outside of jurisdictional waters of the U.S.
 - e. We note that you have eliminated all of the tolled alternatives from consideration. However, if for any reason this changes and tolls will be required for any of the phases, we recommend that you conduct and include a toll-diversion analysis in future NEPA documents, as tolls can alter the effectiveness of a project at meeting its purpose and need.
- 3) Jurisdictional determinations (JDs): In accordance with our guidance to you, you have identified waters of the United States, including wetlands, that are subject to the Corps' jurisdiction to a level sufficient to compare alternatives, at this stage. Please note that prior to the submittal of a permit application, a full jurisdictional determination will be required to identify all waters of the U.S., including wetlands, utilizing the current methodology at that time. Currently, applicants are required to utilize the 1987 Corps Wetland Delineation Manual and the appropriate Regional Supplement (Atlantic and Gulf Coast Plain Region or Eastern Mountains and Piedmont Region). In addition, either Preliminary or Approved JD's are acceptable for purposes of a permit application, and the appropriate forms must be filled out for whichever is desired.
- 4) Potential Waters of the US and wetland impacts:
- a. We reiterate our comments on the DEIS concerning alternatives. Based on the information we have at this time, there does not appear to be a large difference in impacts overall between the previously-identified alternatives. We note that the total potential impacts to waters of the U.S. for the previously-identified alternatives are as follows: for Alternative 1A/2A (widening to the outside) they are 66.11 acres of wetlands and 112,237 linear feet of tributaries; for Alternative 1B/2B (widening to the median side), they are 64.95 acres and 113,544 linear feet of tributaries; and for Alternative 3 (managed lanes) they are 66.73 acres and 112,516 linear feet of tributaries. We also understand that these impact figures are based on the footprints of the proposed roadway expansion, and that they were given as a worst-case scenario. These figures will likely change to some degree with further refinement based on JDs for each phase, and depending on which sections will be widened to the median and which will widened to the outside, and which aquatic resources will be spanned.

- b. In most cases, it appears that widening to the median side (1B Alternative) may more effectively minimize impacts on the higher quality aquatic resources, cultural resources, and wildlife and riparian corridors, than widening to the outside. After reviewing the costs for each alternative, it is not clear why widening to the median side would not be less expensive, since seemingly there would be less land acquisition and less earthwork utilizing this alternative. We do recognize that many of the land acquisitions are needed for interchange expansions, which are the same for all alternatives. We also recognize the fact that the footprints for the urban ends of the project are the same because there is no median there into which to widen. However, please explain why the overall cost would not be less for widening to the median side.
 - c. With respect to the crossings of the tidal waterways, it appears that the I-64/I-664 interchange should utilize the northern alignment and the median as much as practicable, to avoid and minimize impacts on the 21.73 acres of tidal wetlands immediately to the south. Also, for the Queens Creek crossing, it appears that impacts should be minimized by widening into the median and to the south, if practicable.
 - d. Spanning is preferred for stream and wetland crossings, particularly where there are high-quality streams, large expansive wetland areas, organic soil bottomland wetlands, tidal waters and wetlands, threatened or endangered species habitat, cultural resources, or otherwise unique and valuable resource areas. Should new or replacement box or pipe culverts be installed, they must be countersunk below streambeds to allow for passage of aquatic species in accordance with the current requirements. In addition, if streams must be relocated, it is recommended that you incorporate natural channel design principles into the design.
 - e. Jurisdictional manmade ditches are typically not as valuable as natural streams and may not require as much or any compensation. Therefore, as each phase is planned and for future permit applications, you should differentiate the potential impacts to streams versus ditches, and consider these differences in avoidance and minimization decisions.
- 5) Stormwater Impacts: We reiterate our previous comments for consideration in each design phase of the project. The existing I-64 facility appears to include very few stormwater treatment facilities. While we recognize that construction of the facility predated such requirements, we are concerned about the cumulative water quality impacts of the existing and proposed roadway footprint. This is particularly true since some of the receiving waters are public water supplies, impaired waters, or both. After we had made these comments on the DEIS document, your response indicated that the stormwater management plans would be planned in accordance with the most up-to-date requirements, and that none of the project is designed yet. While we recognize that some project phases may not be designed for some time, we recommend that you address early in the development of each phase the long-term treatment of stormwater post-construction, including at least a preliminary estimate of the number, locations, and types

of stormwater facilities. All facilities should be located outside of jurisdictional waters of the U.S. In addition, we recommend that you incorporate the use of low impact development (LID) facilities, such as constructed wetlands or other designs, which may be more effective at removing sediment and other pollutants than traditional stormwater management facilities, while also potentially reducing direct impacts to aquatic resources.

- 6) Public Water Supply Impacts: As you know, we are also required to consider impacts to all public water supply facilities. The FEIS notes that seven drinking water reservoirs have been identified within the project study area. We note that you have coordinated with officials at the Lee Hall/Newport News Reservoir, and have received preliminary comments. We understand that this is the only reservoir which is bisected by the project; however some of the others are located downstream and thus will receive drainage from the project. Therefore, we recommend that you explore further the potential impacts of the project on these facilities' operations and water quality as well, by coordinating with those facilities for preliminary comments, providing them information on the potential impacts both during and post-construction, and continuing to coordinate all aspects of design with all affected facilities. Their recommendations to minimize impacts on these resources and the operation of the facilities should be incorporated into the preliminary and final designs and construction of each phase of the project.
- 7) Other water quality impacts: We reiterate our previous comments: The FEIS notes the project study area includes waters on Virginia's impaired water list. Anticipated water quality impacts and new TMDL requirements will need to be thoroughly addressed, as they will be considerations in obtaining a Section 401 permit from the Virginia Department of Environmental Quality (VDEQ). A Section 401 permit must be obtained before we can issue any Section 404 permit.
- 8) Mitigation: Compensatory mitigation will be required for vegetated wetland and stream impacts. Given the potentially significant amount of compensation that may be required, we recommend that you begin to locate and identify potential compensation options for wetlands and streams within the watersheds to be impacted. Compensatory mitigation will be required in accordance with the methodology in use at the time each phase is submitted. Currently, the Norfolk District utilizes a 2:1 ratio for forested wetlands, a 1.5:1 ratio for scrub/shrub wetlands, and a 1:1 ratio for emergent wetlands. The Unified Stream Methodology (USM) is used to assess streams to be impacted and determine compensation requirements.
- 9) Indirect and cumulative effects analysis: We reiterate our comments on the DEIS. We concur with the timeframe specified for the analysis from the 1960s, when construction began on this corridor, to the design year of 2040. However, for purposes of our review under Section 404, we recommend that the development and road projects described in the Memorandum be translated into estimates of impact acreages of aquatic resources. The analysis should not only consider the past, present, and reasonably foreseeable effects of I-64 itself, but also of all development in the region. That analysis should include development that has occurred around each interchange, both since I-64 was constructed that which is projected to occur, whether or not it can be demonstrated that

any particular development occurred or is expected to occur directly as a result of the I-64 corridor improvements. Geographic area used for the cumulative and indirect effects should be identified and should consider downstream waters as well. The original aquatic resource impacts of the existing I-64 facility itself should be estimated in this manner, as well as its secondary impacts, including the effects of any undersized culverts, stream channelization, or fragmentation of stream and wetland corridors. This may be done using your existing data, aerial photographs, USGS quadrangle sheets, National Wetland Inventory (NWI) maps, other GIS mapping, data from localities, our records, and other sources. These analyses also should be considered and included in any further NEPA documents for future phases.

In closing, we would like to request that in the future, you submit a cover letter and a disc containing the documents for our review in lieu of an email with a link, as we sometimes have difficulties accessing and/or downloading large amounts of information from websites.

Thank you for the opportunity to submit comments and recommendations to be considered in drafting the FEIS. If you have questions, please contact Ms. Kathy Perdue at (757) 201-7218, or Kathy.S.Perdue@usace.army.mil.

Copies of this letter have been provided to: the Environmental Protection Agency (EPA), US Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries), US Coast Guard, Virginia Department of Environmental Quality (VDEQ), Virginia Department of Historic Resources (VDHR), and McCormick/Taylor Consultants.

Sincerely,

A handwritten signature in blue ink that reads "Peter R. Kube". The signature is fluid and cursive, with a long horizontal flourish extending to the right.

Peter R. Kube
Chief, Eastern Virginia Regulatory Section



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION III
1650 Arch Street
Philadelphia, Pennsylvania 19103-2029**

January 27, 2014

Mr. John Simkins
Planning and Environment Team Leader
Federal Highway Administration
Virginia Division
P.O. Box 10249
Richmond, Virginia 23240

Mr. Scott Smizik
Project Manager
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219

Re: Final Environmental Impact Statement for Interstate 64 Peninsula Study From Interstate 95 in the City of Richmond to Interstate 664 in the City of Hampton, Virginia, December 2013, CEQ 20120349

Dear Mr. Simkins and Mr. Smizik,

In accordance with the National Environmental Policy Act (NEPA) of 1969, Section 309 of the Clean Air Act and the Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1509), the U.S. Environmental Agency (EPA) has reviewed the Final Environmental Impact Statement (FEIS) for the above mentioned study. The Virginia Department of Transportation (VDOT), in cooperation with Federal Highway Administration (FHWA), is evaluating options to improve the 75 mile long Interstate 64 (I-64) corridor from the Interstate 95 (I-95) (Exit 190) interchange in the City of Richmond to the Interstate 664 (I-664) (Exit 264) interchange in the City of Hampton. The study area is located within seven localities, including the City of Richmond, Henrico County, New Kent County, James City County, York County, the City of Newport News, and the City of Hampton. The I-64 corridor includes 25 interchanges and 109 major bridge structures on or over the interstate.

The 2012 Draft Environmental Information Study (DEIS) considered five basic alternatives which were generally grouped as three alternatives. Alternative 1A & 1B add general purpose lanes in the existing right-of-way (ROW) to the greatest extent practicable to either the outside of the existing lanes (1A) or to the inside (1B) of the existing lanes in the median. Alternative 2A & 2B are adding lanes in existing right of way to the greatest extent

practicable to either the outside of the existing lanes (2A) or to the inside (2B) of the existing lanes in the median, which are identical to 1A & 1B, and tolling all lanes. Alternative 3 is the addition of managed lanes located within the median of the existing lanes where space is sufficient and will expand the general use lanes when necessary. The three groupings of alternatives have similar potential aquatic resource impacts. EPA rated the environmental impacts associated with all of the action alternatives as Environmental Concerns ("EC") and the adequacy of the impact statement as "2" (Insufficient Information).

The FEIS identifies Alternative 1 (A & B) as the Preferred Alternative which allows the option to widen to the outside of the existing road corridor or within the median of the existing road corridor. As stated in the FEIS the decision on whether to widen to the outside of the inside of the roadway would be made on a section-by-section basis, and the development of these "operationally independent sections" would be closely coordinated with the Richmond Area Metropolitan Planning Organization, the Hampton Roads Transportation Planning Organization, and other state and federal regulatory agencies. The FEIS states that the operationally independent sections would each be issued a Record of Decision once funding is available for each section. The potential impacts for the Preferred Alternative could reach 64.95 acres of wetlands and 113,544 linear feet of stream channel depending on the configuration.

EPA requests that all future NEPA documents for I-64 operationally independent sections be provided for respective agency review through the NEPA process. It is possible that the operationally independent sections could be divided to the extent that taken out of context the sections do not reflect the original scope of the project purpose and need. This could lead to sections of the project being studied through Categorical Exclusion (CE), Environmental Assessment (EA) with the potential of being a Finding of No Significant Impact (FONSI), or updates to the FEIS. With the exception of the fully vetted updates to the FEIS, the public and government resource agencies may not be given the opportunity to comment on the sections of the roadway. This is of concern as there is the potential that decisions are made without the benefit of resource agency and public input and without a comprehensive level of analysis of direct, secondary, and/or cumulative impact. EPA expects effort to be made to select and design alternatives that incorporate resource avoidance and minimization to the maximum extent possible.

Many of the comments made by EPA on the DEIS were stated in the FEIS to be addressed in the future through the development of operationally independent sections. EPA reiterates the issues brought up in the Draft EIS comment letter of April 8, 2013 and incorporates them by reference. EPA supports the updates to the FEIS for each operationally independent section as this will allow the document to be focused on a relatively smaller sections and fully vetted consideration of alternatives analysis, avoidance and minimization to aquatic resources, impacts to water quality, secondary and cumulative impacts, storm water control, and Environmental Justice issues. EPA supports the development of the roadway either in the median or to the outside of the existing roadway based on which option would avoid and minimize impacts to aquatic resources and meet operational needs. It should also be noted that since the operationally independent sections are truly independent than the establishment of the

additional lanes either in the median or to the outside of the existing roadway should not dictate the location of the lanes for the next section of I-64 expansion.

Please consider the issues, questions and comments included in this letter. EPA would appreciate the opportunity to discuss the comments provided. Thank you for the opportunity to review and comment on the FEIS for I-64. If you have any questions or comments regarding this letter, please feel free to contact Mr. Mark Douglas at 215-814-2767 or douglas.mark@epa.gov.

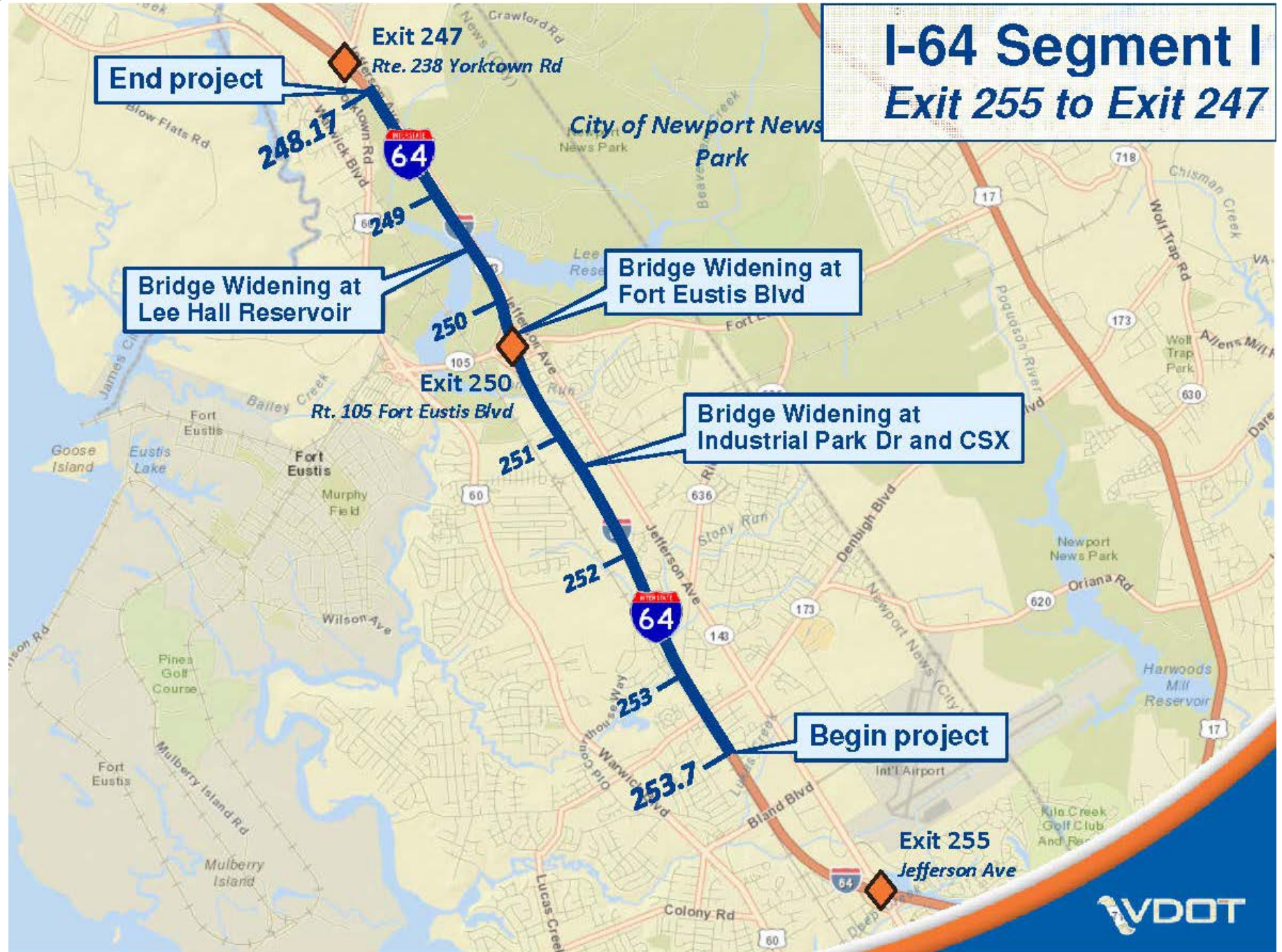
Sincerely,



Barbara Rudnick
NEPA Team Leader

Attachment 6: Figures

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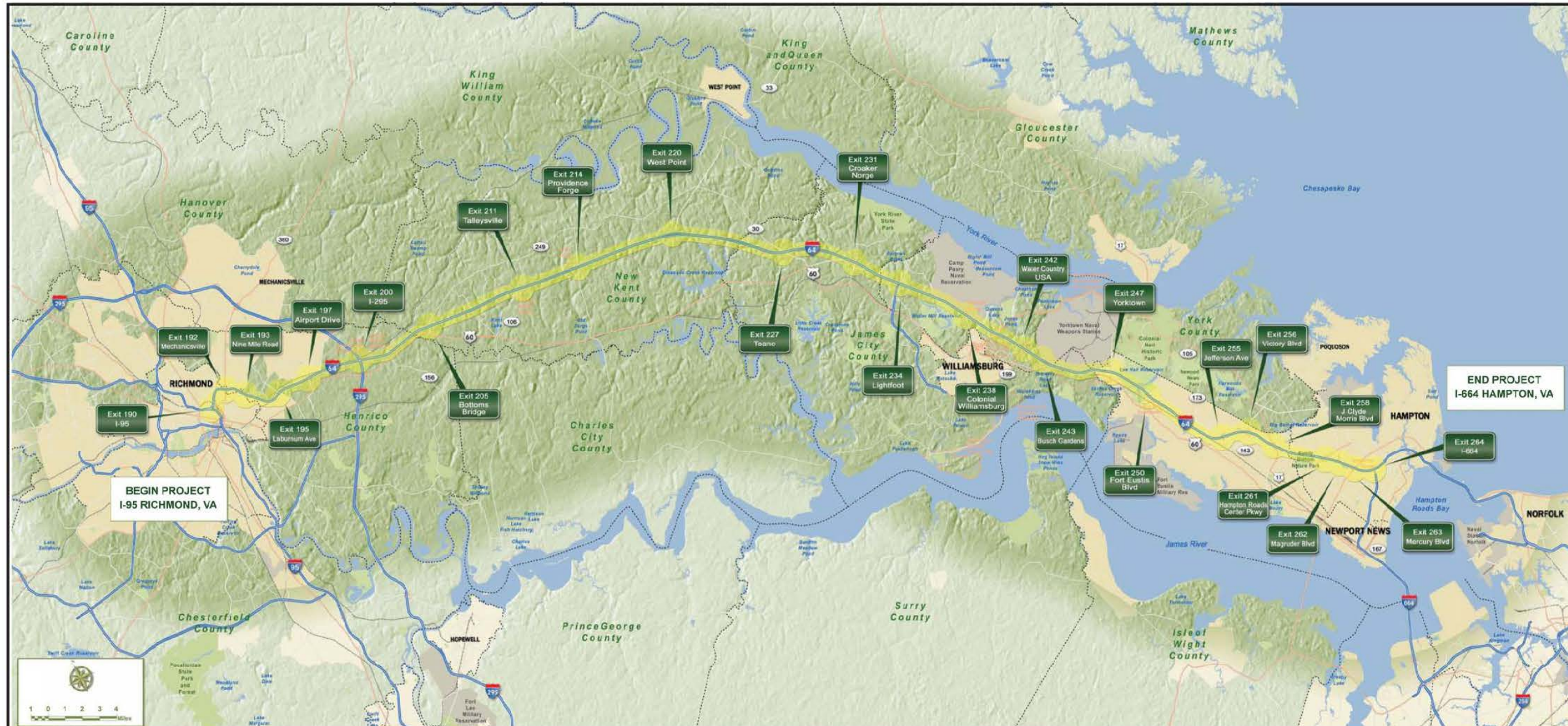


Figure I.1
Project Location



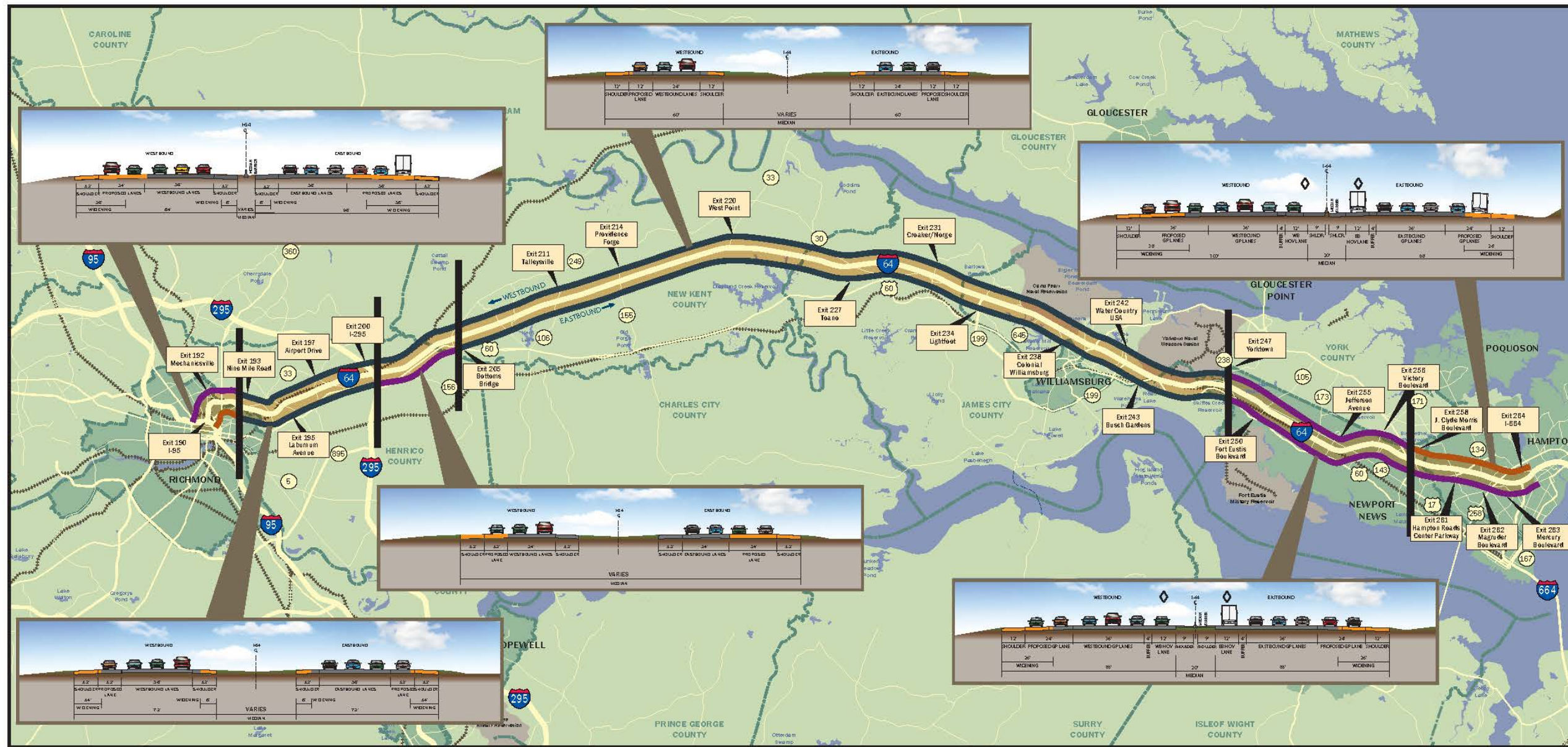
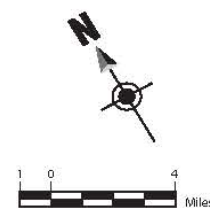


Figure II.3
 Proposed Number of Additional Lanes for
 Build Alternatives 1A and 2A



- LEGEND**
- = One Additional Lane
 - = Two Additional Lanes
 - = Three Additional Lanes

