

**FEDERAL HIGHWAY ADMINISTRATION
HAMPTON ROADS CROSSING STUDY
INTERSTATE 64
FROM INTERSTATE 664 (EXIT 264) TO INTERSTATE 564 (EXIT 276)**

RECORD OF DECISION

This document is the Federal Highway Administration's (FHWA) Record of Decision (ROD) for roadway improvements to Interstate 64 from Interstate 664 in the City of Hampton to Interstate 564 in the City of Norfolk.

DECISION

FHWA has selected Alternative A, with design commitments where noted, to address the purpose and need identified in the Hampton Roads Crossing Study (HRCS). Alternative A will widen Interstate 64 to a consistent six-lane facility between Interstates 664 and 564 and add a bridge-tunnel parallel to the existing Interstate 64 Hampton Roads Bridge Tunnel (HRBT). This ROD replaces the ROD issued by FHWA on June 4, 2001 for Candidate Build Alternative 9.

ALTERNATIVES CONSIDERED

The HRCS SEIS reconsidered the three candidate build alternatives from the 2001 FEIS (CBAs 1, 2, and 9) and renamed them Alternatives A, B, and C, respectively with Alternative C (see Figure 2-11, Final Supplemental Environmental Impact Statement (SEIS)) representing the alternative selected in the 2001 ROD. Improvements associated with VA Route 164 were added to Alternative B (see Figure 2-7, Final SEIS), and a fourth build alternative, Alternative D (see Figure 2-14, Final SEIS), was considered in the HRCS that included all of the improvements associated with Alternatives B and C except for the dedicated transit lanes included in Alternative C. Alternatives A, B, and D were further refined for the HRCS by reducing the number of lanes and modifying some of the operational characteristics originally proposed in the 2001 FEIS along the Interstate 64, 564, and 664 (on the Peninsula) corridors.

Nine alternatives considered but not retained for further analysis in the 2001 HRCS FEIS were reconsidered for the HRCS Draft SEIS. These nine alternatives, which would improve or expand a variety of existing transportation corridors in the region, were not retained for detailed analysis in the HRCS SEIS for the reasons summarized in Table 2-1 of the Final SEIS.

The three alternatives retained for detailed analysis in the 2012 HRBT DEIS were also reviewed. These three alternatives, which would widen Interstate 64 to eight or ten lanes between Interstates 664 and 564, were not carried forward for detailed analysis in the HRCS Draft SEIS due to environmental impacts and lack of public or political support. Citing these reasons, FHWA rescinded the Notice of Intent to prepare an EIS for the HRBT in August of 2015. Additionally, a number of alternatives that were not retained for detailed analysis in the 2012 HRBT DEIS were reviewed for the HRCS Draft SEIS: 1) Transportation System

Management/Travel Demand Management; 2) Rehabilitation/Reconstruction of the existing HRBT; 3) Replacement of the HRBT; 4) Build-6 Alternative; 5) Build-12 Alternative; 6) High Bridge Crossing; 7) Light or Heavy Rail Transit; 8) Bust Transit; and 9) Ferry Service. Except for the Build-6 Alternative, none of these alternatives were carried forward for consideration in the HRCS Draft SEIS for the reasons summarized in Table 2-1 of the Final SEIS. Light rail transit was not carried forward based on input and forecasted ridership projections from the Virginia Department of Rail and Public Transportation. Bus transit was not carried forward as a stand-alone alternative in the HRCS Draft SEIS but was carried forward as a component of the build alternatives.

Environmentally Preferred Alternative: Amongst all alternatives carried forward for consideration in the SEIS, the no-build alternative would have the least impact on the biological, physical, and human environment. However, there are impacts to the human environment that will persist under the no-build alternative such as the transportation problems experienced by the travelling public that the build alternatives are intended to address. Existing noise impacts as well as higher levels of vehicle emissions resulting from congested conditions and experienced by those in proximity to the study area corridors would also continue under the no-build alternative.

Amongst the build alternatives, the selected alternative, Alternative A, has the least impact on the biological, physical, and human environment. Alternative A also best protects, preserves, and enhances historic, cultural and natural resources with the commitments that have been made to confine improvements to the existing right-of-way in several locations. In a letter dated December 2, 2016, the US Army Corps of Engineers found no reason to disagree that Alternative A may be considered the least environmentally damaging practicable alternative (LEDPA) for purposes of their Clean Water Act responsibilities.

SELECTED ALTERNATIVE

Within the project limits, Interstate 64 is currently six lanes between Interstate 664 and the Settlers Landing Road Interchange (Exit 267) where an eastbound lane drops. Eastbound Interstate 64 continues with two lanes across the HRBT to Interstate 564. In the westbound direction, Interstate 64 is two lanes from Interstate 564 across the HRBT to the South Mallory Street Interchange (Exit 268) where a third westbound lane begins.

The selected alternative, Alternative A (see Figure 2-4, Final SEIS) will add a third lane in the eastbound direction (also known as the inner loop) beginning just west of the Settlers Landing Road Interchange. Over the water, a new three-lane bridge tunnel is proposed to be constructed (see Figure 2-6, Final SEIS) just west of the existing HRBT, which will serve eastbound traffic. This three-lane bridge structure will continue to Willoughby Spit, tie into the existing eastbound two-lane cross-section of Interstate 64 where a third lane will be added down to Interstate 564.

In the westbound direction (also known as the outer loop), a third lane will be added to Interstate 64 from Interstate 564 up to the four-lane cross-section of the existing HRBT on Willoughby Spit. As proposed, the existing two-lane westbound lane of the HRBT will be restriped for one lane and the existing two eastbound lanes of the HRBT will be converted to westbound lanes,

providing a total of three lanes for westbound traffic (see Figure 2-6, Final SEIS). In the City of Hampton, this three-lane cross section will tie into the existing three-lane cross-section of Interstate 64 at the South Mallory Street Interchange.

While this configuration and the operational changes were presented in the Final SEIS as the proposed means of achieving a consistent six lane facility between Interstates 664 and 564, this could change when VDOT issues a Request for Proposals and contractors potentially offer alternate means of achieving a six-lane facility.

Managed Lanes: A decision has not yet been made whether the capacity to be added with the selected alternative will be a general-purpose lane or a managed lane such as a High Occupancy Vehicle (HOV) or High Occupancy Toll (HOT) lane. Should a managed lane concept be advanced, the Virginia Commonwealth Transportation Board will need to be briefed and afforded the opportunity to endorse it. Likewise, FHWA will determine if additional studies are warranted.

Transit: Improving transit access was one of the components of the purpose and need. With the exception of Alternative C, which had dedicated transit lanes, this component of the purpose and need could be addressed by the other build alternatives if the capacity to be added was operated as a managed lane. If the additional capacity was operated as a managed lane, then transit vehicles could benefit from their use.

Tolls: A decision has not been made whether tolling will be incorporated into the project. While a decision has not been made, it is expected that tolling would only be used if the capacity being added were utilized as a HOT lane. In 2016, the General Assembly passed HB1069 which requires General Assembly approval before tolls can be placed on existing facilities; accordingly, it is unlikely that the existing general purpose lanes would be tolled at this location.

Inventory Corridor: In the Final SEIS, an Inventory Corridor was established along the length of the existing HRBT and approaches, extending from the eastern edge of the existing bridge-tunnels to 30 feet beyond the western edge of the bridge-tunnel proposed under Alternative A. The Inventory Corridor represents the area in which the bridge-tunnel will be located and constructed over water as illustrated on Figures 4 through 6 in Appendix B, Final SEIS. While Alternative A has been laid out in a specific location within this corridor for purposes of assessing impacts, the final alignment of the bridge-tunnel within this Inventory Corridor will be determined during final design. The Inventory Corridor will allow greater flexibility when considering options to avoid permanent impacts to Hampton University property. Should the final location of the bridge-tunnel within the Inventory Corridor result in a change to the impacts in the Final SEIS, they will be addressed by FHWA.

Rationale for the Selected Alternative: Compared to the other build alternatives, Alternative A, the selected alternative, is not as effective as Alternatives C and D at addressing the individual components of the purpose and need. Alternative B would only provide marginal benefit for relieving congestion on the Interstate 64 HRBT compared to Alternative A and at double the cost. Nonetheless, Alternative A was selected because it:

- acceptably addresses the purpose and need to be considered a reasonable alternative under NEPA;
- had the least environmental impacts;
- had the lowest estimated cost and would allow other regionally funded transportation priorities to advance;
- was unanimously endorsed by all the localities comprising the Hampton Roads Transportation Planning Organization (TPO) and Hampton Roads Transportation Accountability Commission (TAC), which includes the Cities of Chesapeake, Franklin, Hampton, Newport News, Norfolk, Poquoson, Portsmouth, Suffolk, Virginia Beach, and Williamsburg, and the Counties of Gloucester, Isle of Wight, James City, Southampton, and York;
- was concurred in by the federal cooperating agencies as the recommended Preferred Alternative;
- had the least aquatic resource impacts, which allowed the US Army Corps of Engineers to state that it appears to be the LEDPA; and
- had the second highest number of Public Hearing comments submitted in support of it (Alternative D received the highest number of comments in support, but it could not be the LEDPA per input from the US Army Corps of Engineers).

PUBLIC AND AGENCY INVOLVEMENT

Extensive coordination with the public as well as local, state, regional, and federal agencies occurred throughout the development of the HRCS SEIS. At the initiation of the study, a Coordination Plan was developed in accordance with FHWA's SAFETEA-LU *Environmental Review Process Final Guidance*. The plan documented the coordination that would occur with the public and agencies during the development of the study to ensure there were adequate opportunities for participation in the development of the Purpose and Need, identification of the range of alternatives, and identification of environmental issues needed to be addressed.

Public: The public was afforded a couple of formal opportunities to provide input into the HRCS. A series of Citizen Information Meetings were held on July 21 and 22, 2015 in Norfolk and Hampton, respectively to solicit, in part, scoping comments. A second series of Citizen Information Meetings were held on December 9 and 10, 2015 in Norfolk and Hampton, respectively to solicit comments on the draft Purpose and Need and range of alternatives to be carried forward. Finally, Location Public Hearings were held on September 6 and 7, 2016 after the release of the HRCS Draft SEIS. A summary of comments received on the Draft SEIS and responses to those comments are included in Appendix H of the Final SEIS. The public could also keep abreast of the project by signing up for project updates or they could provide input or submit questions by email through the project website.

Agencies: A total of six federal agencies and five localities accepted invitations to serve as cooperating agencies in the development of the HRCS. They included the US Army Corps of Engineers, US Coast Guard, US Environmental Protection Agency, National Oceanic and Atmospheric Administration-National Marine Fisheries Service, US Naval Station Norfolk, Federal Transit Administration and the Cities of Hampton, Newport News, Norfolk, Portsmouth, and Virginia Beach. The US Fish and Wildlife Service did not participate as a cooperating

agency. The federal cooperating agencies were afforded the opportunity and provided input into the methodology for assessing impacts to some of the environmental resources (aquatic resources, in particular) and were provided the opportunity to concur on the Purpose and Need, range of alternatives, and identification of the recommended Preferred Alternative. Cooperating agencies were also afforded the opportunity to review the draft technical reports, pre-Draft SEIS, and pre-Final SEIS and comment on them. There were monthly cooperating agency meetings beginning in August 2015 and continuing through the publication of the Draft SEIS in July 2016. A couple of additional cooperating agency meetings were held thereafter to keep the cooperating agencies updated on the development of the Final SEIS.

There were approximately a dozen and a half participating agencies involved in the development of the SEIS that are identified in the Coordination Plan in Appendix C of the Final SEIS. Six of the cooperating agency meetings mentioned above were held as joint cooperating-participating agency meetings.

MEASURES TO AVOID, MINIMIZE AND MITIGATE ENVIRONMENTAL HARM

VDOT has made the following design commitments to address impacts to specific resources from the selected alternative, and they are incorporated into this ROD:

- There will be no permanent impact or acquisition of Hampton University property. For illustrative purposes, the Final SEIS identified design options for achieving this commitment; however, a final decision on how this commitment will be achieved will be made during final design.
- There will be no permanent impact or acquisition of the Willoughby Boat Ramp property located adjacent to the westbound lane of Interstate 64 on the Willoughby Spit.
- There will be no permanent impact or acquisition of Navy property, which abuts the eastbound lane of Interstate 64 in the City of Norfolk.
- Right-of-way impacts will be minimized within the Phoebus-Mill Creek Terrace Neighborhood Historic District and relocations avoided.

The following section highlights a number of practicable means to avoid, minimize, and mitigate harm to the environment that have been adopted. This is not an exhaustive list, and additional coordination with state and federal resource and regulatory agencies will be necessary to further develop and refine these mitigation measures during subsequent phases of project development.

Property Acquisition (Section 3.5 of the Final SEIS)

The Final SEIS identified 73 properties that could be affected by the preferred alternative. Of these, nine residential structures and two VDOT-owned structures could be relocated by the project. These impacts are conservative and could be further reduced upon the development of detailed project design. All relocations and real property acquisition would be conducted 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 property owners without discrimination.

Cultural Resources (Section 3.9 of the Final SEIS)

A Section 106 Programmatic Agreement (PA) was executed that stipulates design commitments to be implemented by VDOT to ensure that the effects of the project on a number of historic properties will not be adverse: Pasture Point Historic District, Hampton Institute Historic District and Hampton Institute National Historic Landmark (including the Emancipation Oak), Hampton National Cemetery, Phoebus-Mill Creek Terrace Neighborhood Historic District, and the Norfolk Base Historic District. Those commitments are spelled out in detail in the PA (Appendix I, Final SEIS) and incorporated into this ROD by reference. The PA also requires that once the final design plans for adding capacity to the HRBT are developed to an appropriate level, VDOT shall apply the criteria of adverse effect to determine if the effect is consistent with the assessments already concurred in by the SHPO for the following resources: Phoebus-Mill Creek Terrace Neighborhood Historic District, Fort Monroe, Chamberlain Hotel, Old Point Comfort Lighthouse, Fort Wool, Battle of Hampton Roads, Battle of Sewell's Point, the Captain John Smith National Historic Trail, and the Washington-Rochambeau Revolutionary Route National Historic Trail.

Noise (Section 3.7 of the Final SEIS)

A preliminary noise analysis was prepared in support of the SEIS that evaluated noise impacts along the entire project corridor and identified potential locations where noise barriers were found to be both feasible and reasonable to construct based on the preliminary design of the project. A more detailed noise analysis and review will be completed during final design of the project and final decisions made at that time on specific barriers. If a noise barrier is determined to be both feasible and reasonable during final design, those benefitted by the barrier will be given an opportunity to decide whether the barrier will be constructed.

Wetlands (Section 3.8.1.3 of the Final SEIS)

Between seven and eight acres of wetland impacts have been identified at this stage of project development with just a little over five acres being tidal wetland impacts. Specific mitigation measures for wetland will be identified during the permitting phase of the project. These measures would include consideration of additional avoidance and minimization efforts to the greatest extent practicable. Some measures which may be considered are: the use and appropriate placement of erosion and sediment control measures and best management practices; the use of upgraded erosion and sediment controls in environmentally sensitive areas; bridging or spanning of streams and wetlands; alignment shifts around specific systems; the use of cofferdams; steepening of slopes and the use of retaining walls on steeper slopes; properly countersunk culverts; stream relocation to improve skew angle and shorten culverts if new culverts are necessary; and ensuring groundwater recharge or wetland hydrology maintenance through the location of outfalls and infiltration trenches. In addition, the compensatory mitigation requirements for wetlands would be determined during the permitting phase. The Final SEIS makes commitments to the types of information that would be included in future permit applications. These commitments have been supported by the comments made by USACE on June 5, 2017 in response to the Final SEIS.

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. The approved assessment methodology to determine the required stream compensation would be completed as part of the compensatory

mitigation plan. At the time of the issuance of this ROD, the approved assessment methodology is the Unified Stream Methodology.

Water Quality (Section 3.8.1.4 of the Final SEIS)

The project would include stormwater management plans designed specifically to address the on-site conditions. During construction, all appropriate erosion and sediment control measures would be employed in accordance with the VDOT's Road and Bridge Specifications and state and local regulations. Following construction, stormwater would be treated through improved stormwater management facilities. The potential for impacts would be minimized through strict adherence to the appropriate erosion and sediment control practices, which include best management practices such as silt fence, straw bales, check dams, sediment basins and other methods to capture potential sediment from exposed soils. In addition, the amount of clearing of existing vegetation would be minimized to the greatest extent possible and areas of exposed soils would be stabilized as soon as possible to prevent additional erosion. Stormwater management strategies located

Hazardous Waste Sites (Section 3.10. of the Final SEIS)

The Final SEIS identifies 179 sites proximal to the selected alternative (i.e. within ¼ mile) with 27 sites located within the potential limits of disturbance. Prior to acquisition of right-of-way and commencement of construction, thorough site investigations would be conducted to determine whether any of the sites are contaminated and, if so, the nature and extent of that contamination would be determined. Sites that include potential contamination would be assessed on a site-by-site basis to determine the measures necessary to address the contamination. Undocumented hazardous materials that are encountered during construction shall be managed, handled and disposed of in accordance with federal, state and local regulations.

Measures During Construction

Air Quality

The temporary air quality impacts from construction consist primarily of emissions produced by heavy equipment and vehicle travel to and from the site. Earthmoving and ground-disturbing operations would also generate airborne dust. Construction emissions are short-term or temporary in nature. In order to mitigate these emissions, construction activities would be conducted in accordance with VDOT's Road and Bridge Specifications.

Noise

The following provisions are in place to minimize potential construction-related noise impacts:

- VDOT may monitor construction-related noise. If construction noise levels exceed 80 decibels at adjacent receptors during noise sensitive activities, the Contractor will be required to take corrective action before proceeding. The Contractor will be responsible for costs associated with the abatement of construction noise and the delay of activities attributable to noncompliance with these requirements.
- VDOT may prohibit or restrict certain work activities that produce objectionable noise so they do not occur between 10:00 p.m. and 6:00 a.m. If other hours are established by local ordinance, the local ordinance shall govern.

- Equipment shall not be altered so as to produce noise levels that are greater than those produced by the original equipment.
- When feasible, the Contractor shall establish haul routes that direct heavy construction vehicles away from developed areas and ensure that noise from hauling operations is kept to a minimum.

These requirements will not be applicable if the noise produced by sources other than the Contractor's operation at the point of reception is greater than the noise from the Contractor's operation at the same point.

Waters of the United States and Water Quality

Strict adherence to erosion and sediment control measures and plans will be required for all construction activities. Erosion and sediment control plans will address potential issues resulting from ground disturbance, including erosion control, sediment control, stormwater management, dust control, and work in water. Best management practices which may be employed include silt fence, straw bales, check dams, sediment basins and other methods to capture potential sediment from exposed soils.

During construction, there is a potential for nonpoint source pollutants to enter surface waters. To minimize this potential, best management practices for equipment, and materials storage will be followed. Erosion and sediment control measures would also assist in minimizing any potential impacts to waters of the United States and water quality. In the event of accidental spills, the Contractor will be required to immediately notify all appropriate local, state, and federal agencies and to take immediate action to contain and remove the contaminant. A Stormwater Pollution Prevention Plan will be prepared and a Virginia Stormwater Management Program Permit will be acquired from the Virginia Department of Conservation and Recreation. A Clean Water Act Section 404 permit will be required for impacts to waters of the United States. All permit conditions will be followed during construction. The project is likely to be implemented via a design-build contract, and the design-builder may be required to obtain the project permits.

MONITORING AND ENFORCEMENT PROGRAM

A formal monitoring program is not proposed at this time. Rather, FHWA and VDOT would ensure that environmental commitments are accomplished through VDOT's standardized NEPA re-evaluations prepared at the right-of-way and contracting phase, reviewing the Environmental Certification and Commitments Checklist completed prior to construction, and by complying with the applicable provisions of 23 CFR 771.109(b). In addition, permit conditions and coordination with permitting agencies during design development, right-of-way acquisition, and construction will ensure compliance with applicable environmental laws and regulations.

COMPLIANCE WITH OTHER LAWS AND REQUIREMENTS

Section 4(f): There will not be any direct or constructive use of public parks, recreation areas, historic sites or any other properties protected under Section 4(f) by the selected alternative. The project will have a *de minimis* use of two battlefields in the study area. The following Section 4(f) resources were evaluated for impacts in the SEIS for Alternative A:

- Hampton Institute Historic District including Hampton Institute National Historic Landmark – The Section 4(f) impacts identified in the Draft SEIS have been eliminated with the commitments made in the Final SEIS and Section 106 Programmatic Agreement and included in this ROD.
- Phoebus-Mill Creek Terrace Neighborhood Historic District – The Final SEIS determined that the project will require an estimated 0.7 acre strip of right-of-way from the historic district, and this impact could be achieved if a retaining wall were used at this location. A final decision on the means and methods that will be used to minimize this impact will be made during the design phase. The right-of-way acquisition will not impact any contributing elements to the historic district, therefore, Section 4(f) does not apply.
- Willoughby Boat Ramp - The Section 4(f) impacts identified in the Draft SEIS have been eliminated with the commitments made in the Final SEIS and included in this ROD.
- Norfolk Naval Base Historic District - The Section 4(f) impacts identified in the Draft SEIS have been eliminated with the commitments made in the Final SEIS and included in this ROD.
- Battle of Hampton Roads – The project will use up to 164 acres of the potentially eligible 35,000 acres of the Battle of Hampton Roads marine battlefield. With this ROD, FHWA finds that the Section 4(f) use of the Battle of Hampton Roads battlefield represents a *de minimis* impact. The State Historic Preservation Officer (i.e. Virginia Department of Historic Resources) concurred with a no adverse effect determination, and the Advisory Council on Historic Preservation declined to participate in the project. The State Historic Preservation Officer was notified of FHWA’s intent to pursue a *de minimis* finding based on their concurrence, and the views of consulting parties were considered and addressed.
- Battle of Sewell’s Point – The project will use up to 137 acres of the potentially eligible 10,000 acres of the Battle of Sewell’s Point marine battlefield. With this ROD, FHWA finds that the Section 4(f) use of the Battle of Sewell’s Point battlefield represents a *de minimis* impact. The State Historic Preservation Officer (SHPO; i.e. Virginia Department of Historic Resources) concurred with a no adverse effect determination, and the Advisory Council on Historic Preservation declined to participate in the project. The State Historic Preservation Officer was notified of FHWA’s intent to pursue a *de minimis* finding based on their concurrence, and the views of consulting parties were considered and addressed.

Section 106: The project will not adversely affect historic properties. As discussed above in the section on MEASURES TO AVOID, MINIMIZE AND MITIGATE ENVIRONMENTAL HARM, a Section 106 Programmatic Agreement (PA) has been executed that stipulates design commitments to be implemented by VDOT to ensure that the effects of the project on a number of historic properties will not be adverse. The PA also requires that once the final design plans for adding capacity to the HRBT are developed to an appropriate level, VDOT shall apply the criteria of adverse effect to determine if the effect is consistent with the assessments already concurred in by the SHPO for the different historic resources. Seventeen individuals, organizations, and localities served as consulting parties to the Section 106 process.

As allowed in the Section 106 regulations, the remaining work to complete the identification and evaluation of archeological sites eligible for the National Register of Historic Places and potentially affected by the project has been deferred until the design and engineering of the selected alternative has been further refined. Based on the archeological assessment that was conducted, VDOT concluded and the SHPO concurred that any archeological historic properties that may be affected by the project would be important chiefly for the information they contain, which can be retrieved through data recovery and would, therefore, have minimal value for preservation in place. Accordingly, Stipulation II of the PA lays out the process that VDOT will follow, in consultation with the SHPO and other parties, to complete efforts to identify terrestrial and underwater archeological sites within the limits of disturbance of the selected alternative, assess effects, and identify and implement appropriate treatment for any sites that would be adversely affected.

Endangered Species Act (ESA): The selected alternative has the potential to affect the federally endangered Atlantic sturgeon as well as four listed species of sea turtles. In their September 19, 2016 comments on the Draft SEIS, the National Oceanic and Atmospheric Administration, National Marine Fisheries Service (NOAA Fisheries Service) acknowledged that the information and level of detail needed to assess the potential for project impacts to aquatic resources, including listed species, is not normally available during the NEPA process and isn't developed until after a ROD is issued. This includes specific information on the means, methods, materials, timing and duration of various construction elements. Experience from other projects in the Hampton Roads region has shown that concerns over effects on these listed aquatic species can be adequately addressed with best management practices and time-of-year restrictions employed during construction. On the Gilmerton Bridge project, for example, ESA requirements were addressed for the Atlantic sturgeon after it was listed late in the construction of the project. On the Parallel Thimble Shoal Tunnel Project, which involves the construction of a parallel tunnel in the mouth of the Chesapeake Bay, consultation for listed aquatic species was initiated after NEPA was completed and the construction contract was awarded when the means, methods, and materials of construction were known. The HRCS Final SEIS identified the time-of-year restriction in place for the Atlantic sturgeon and sea turtles, and the Natural Resources Technical Report indicated that the alternatives were not likely to adversely affect sea turtles based on coordination that has taken place. In their letter, the NOAA Fisheries Service also encouraged VDOT and FHWA to assess the effects of the proposed alternatives on ESA-listed species before selecting a Preferred Alternative. For the reasons cited above (i.e. the lack of information and level of detail needed to assess effects), effects were only considered generally. Regardless, the selected alternative, Alternative A, has the least amount of terrestrial threatened and endangered species habitat acreage within the project's limits of disturbance (1 acre) and proposed critical habitat acreage for the Atlantic sturgeon within the projects limits of disturbance (158 acres). In contrast, the other build alternatives have 112 to 164 acres of terrestrial threatened and endangered species habitat within their respective limits of disturbance and 214 to 636 acres of critical habitat for the Atlantic sturgeon within their respective limits of disturbance. Therefore, based on acreage, the alternative with the lowest potential for impacts to ESA-listed species was selected as the Preferred Alternative. Finally, the NOAA Fisheries Service indicated, "When specific project plans are being developed, FHWA should submit their determination of effects, along with justification for the determination of effects, and a request of concurrence to NOAA

Fisheries Service...” FHWA and VDOT will ensure that this determination and supporting information is submitted as soon as practicable.

At the November 16, 2016 cooperating agency meeting, the NOAA Fisheries Service concurred in the selection of Alternative A as the Preferred Alternative with the understanding that their concurrence is based on the planning level information provided in the Draft SEIS. They also reserved the right to provide substantive recommendations within their authority under the Magnuson-Stevens Fishery Conservation and Management Act, Fish and Wildlife Coordination Act, and Endangered Species Act as the means, methods and materials for construction of various project elements are determined.

Impacts to listed bat species (Northern Long-eared Bat, Brown Bat, and Tri-colored Bat) were also considered in the Final SEIS. For the selected alternative, there were no acres of bat habit identified within the limits of disturbance. While summer roosting habitat has been confirmed for bat species within the selected alternative, forested habitat is fragmented and proposed construction activities would not affect the quality of the habitat. Further, no confirmed maternity roosts or hibernacula are located within a two-mile radius of the study area corridor for the selected alternative, further limiting potential effects on the species. FHWA and VDOT will coordinate with the US Fish and Wildlife Service once information on the means, methods, materials, timing and duration of various construction elements to revisit the potential for impacts on listed bat species. If necessary, project information will be submitted to the US Fish and Wildlife Service to determine whether the project scope adheres to the scope and criteria of the range-wide Biological Assessment for the Northern Long-eared bat and the Intra-Service Programmatic Biological Opinion on the Final Rule for the Northern Long-eared Bat.

Information on the effects of the selected alternative on endangered and threatened species is incomplete, and FHWA is not able to fully comply with the requirements of the ESA at this time due to the lack of specific information on the means, methods, materials, timing and duration of various construction elements. CEQ’s regulations at 40 CFR 1502.22 address incomplete or unavailable information when an agency is evaluating significant adverse effects on the environment. FHWA’s regulations at 23 CFR 771.113(a) require compliance with other related environmental laws and regulations to the maximum extent possible during the NEPA process. When information is incomplete or unavailable, FHWA is required to disclose and document the steps that will be taken to develop the information, the coordination and consultation with other agencies that will take place, and the timing of those actions. As it relates to the HRCS:

- Design activities to develop specific information on the means, methods, materials, timing and duration of various construction elements will commence after the ROD is issued and a contractor procured by VDOT.
- New data base searches will be conducted to ensure that the listed species in the vicinity of the project is complete.
- The US Fish and Wildlife Service and NOAA Fisheries Service will be consulted with as needed regarding listed species and critical habitat.
- Habitat assessments will be conducted for new species while habitat assessments for existing species will be updated, as needed.
- FHWA and VDOT will assess the effects of the project on listed species and associated critical habitat, where established.

- FHWA and VDOT will consult with the US Fish and Wildlife Service and NOAA Fisheries Service, as needed, and request their concurrence on the effect determination(s).
- If the project is determined to likely adversely affect a listed species, a biological assessment will be prepared and formal consultation initiated with the appropriate federal agency.
- During formal consultation, the relevant federal agency will issue a biological opinion that contains reasonable and prudent measures to minimize potential impacts to listed species. All reasonable and prudent measures will be incorporated into the project.
- The formal consultation process will be completed prior to the completion of the US Army Corps of Engineers permit process because any mitigation required to fulfill ESA requirements will be included by the Corps as conditions in their permit.

Based on experience with other projects in the vicinity of the selected alternative such as the Parallel Thimble Shoal Tunnel Project, best management practices available during construction, and required time of year restrictions, FHWA does not expect that the project will likely adversely affect any listed species. Regardless, until a determination on effect is made and any necessary consultation completed, FHWA will ensure that there will not be any irreversible or irretrievable commitment of resources on the project that has the effect of foreclosing the formulation or implementation of any reasonable alternative measures that would avoid adverse effects to endangered and threatened species. Additionally, VDOT has internal controls in place to ensure that ESA requirements are addressed prior to construction, including the environmental certification and the permitting processes.

To inform the consultation that will be needed (informal or formal) and better understand the existing conditions contractors may encounter, VDOT is currently:

- securing the services of Virginia Commonwealth University to track the movement of the sturgeon over a year-long period;
- in the process of scheduling a shore-to-shore benthic survey; and
- conducting geotechnical boring and soil sampling of aquatic bottom material where the new bridge and tunnel infrastructure could be located.

Migratory Bird Treaty Act: The southern island of the existing HRBT contains a robust population of migratory birds including the State threatened Gull-billed Tern. VDOT has been working with the Virginia Department of Game and Inland Fisheries for several years to survey the Gull-billed Tern population. VDOT has also coordinated with the US Fish and Wildlife Service and hired researchers from Virginia Tech to develop short and long term recommendations for addressing the bird population and minimizing impacts during construction.

Executive Order 12898: Nearly all of the census blocks that the study area corridors pass through meet the study's definition for an Environmental Justice (EJ) minority and/or low income population. There are an estimated nine residential relocations associated with the selected alternative which, along with Alternative B, have the least number of relocations among the alternatives considered and the least number of relocations in Census block groups that meet the definition for an EJ population. Eight of the relocations for the selected alternative are

located at the end of Willoughby Spit where the new Interstate 64 tunnel and bridge structure would be constructed west of the existing facility. In this location, Bayville Street will need to be relocated to accommodate the widening. This will necessitate the relocation of a linear group of eight homes immediately adjacent to the Willoughby Harbor Marina. Although the Census block group (400-3) in this location meets the study's definition of an EJ population, the non-minority population is approximately 74%. There are no known minority communities in the immediate area of the relocations, and the relocations are expected to be borne by the non-minority population. A ninth relocation will occur in the Commodore Park neighborhood in Census block group 800-1, which is located just south of the West Bay Avenue interchange (Exit 274) and west of Interstate 64. The non-minority population of this Census block group is 69%. Based on the foregoing, the project is not expected to have adverse impacts on EJ populations let alone disproportionately high and adverse impacts. As discussed above in the section on MEASURES TO AVOID, MINIMIZE AND MITIGATE ENVIRONMENTAL HARM, the relocation impact numbers are conservative and could be further reduced upon the development of detailed design plans. There are two additional relocations associated with the selected alternative in the City of Hampton where the existing Interstate 64 westbound lanes come on land. Efforts to accommodate six lanes in this location while fulfilling the commitment to not acquire property from Hampton University will impact the VDOT building and property just to the east of Interstate 64.

To date, it has not been determined whether the new capacity to be added with the selected alternative will be tolled. HOT lanes are one of the options being considered, which would allow lower occupancy vehicles to gain access to the lanes by paying a toll when excess capacity is available. If HOT lanes are implemented, it is expected that the existing general purpose lanes would remain free for travelers using the facility at this location; thus, there would be no disproportionate impact from tolls on EJ populations.

Executive Order 11990: Wetland impacts have been considered in accordance with the requirements of Executive Order 11990, and the proposed project includes all practicable measures to minimize harm that can be considered at this stage of project development. FHWA and VDOT have worked closely with the US Army Corps of Engineers and US Environmental Protection Agency in the development of the SEIS, which included the identification of wetlands, the assessment of impacts, and initial discussions on mitigation; both agencies have concurred in the selection of Alternative A as the Preferred Alternative. The US Army Corps of Engineers has further determined that Alternative A appears to be the preliminary LEDPA. Finally, the decision by FHWA to limit the scope of improvements on Interstate 64 to six lanes to minimize environmental impacts as well as commitments by VDOT to avoid impacts to historic and recreational resources in the corridor has helped to further reduce potential impacts to wetlands. FHWA and VDOT will continue to work closely with the US Army Corps of Engineers and US Environmental Protection Agency to further identify opportunities to reduce impacts to wetlands as the project progresses to subsequent phases of project development.

FHWA Planning and Fiscal Constraint Requirements: The Hampton Roads TAC has committed a little over \$4 billion for the currently estimated \$3.3 billion project, and the Hampton Roads TPO has programmed the funds in their fiscally constrained Long Range Transportation Plan. Similarly, \$25 million has been set aside for the next phase of project development and

programmed in the Hampton Roads TPO's Transportation Improvement Program and Virginia's State Transportation Improvement Program.


COMMENTS ON THE FINAL SEIS

Comments were received from the US Army Corps of Engineers and US Environmental Protection Agency on the Final SEIS. The US Army Corps of Engineers comments are similar to those they made at a State and Federal agency coordination meeting in late-May. The comments deal mainly with commitments included in Chapter 2 of the Final SEIS and identify a number of issues that need to be considered as the project moves forward and specific mitigation for aquatic resource impacts is developed. The US Environmental Protection Agency expressed appreciation for the consideration given to their comments on the Draft SEIS and offered a few recommendations on aquatic resource protection. The comments of both agencies do not raise any issues that need to be addressed prior to the issuance of the ROD. Instead, they are part of the continuing discussion and coordination that FHWA and VDOT has had with the two agencies throughout the course of the study. Those discussions and coordination with the agencies will continue as design plans are developed and the project advances.

A comment was also received from the US Coast Guard correcting one of their comments on the Draft SEIS. Their correction has been noted and no further response is needed.

CONCLUSION

FHWA has been involved in the HRCS from the outset and worked closely with VDOT, the co-lead agency, to develop the SEIS and supporting technical reports and address issues as they arose. FHWA participated in the cooperating agency meetings and the joint cooperating/participating agency meetings and attended the Citizen Information Meetings and Public Hearings. Based on a full and thorough review of the SEIS, its referenced studies and attachments, FHWA's active participation in the study process, attendance at project meetings, the support noted above of the Hampton Roads TAC and Hampton Roads TPO for Alternative A, and the concurrence of the cooperating agencies in identifying the Preferred Alternative, FHWA hereby selects Alternative A, with the identified design commitments, to address the documented purpose and need for the HRCS.



Jessie Yung
Division Administrator
FHWA Virginia Division

6-12-17
Date