

**FEDERAL HIGHWAY ADMINISTRATION**  
**FINDING OF NO SIGNIFICANT IMPACT**

**FOR**

**ROUTE:** Richmond Highway (Route 1) Corridor Improvements  
**LOCATION:** Fairfax County, Virginia  
**STATE PROJECT:** 0001-029-205 (UPC 107187)  
**FEDERAL PROJECT:** STP-5A01(686)

The Federal Highway Administration has determined that this project will have no significant impact on the environment. This Finding of No Significant Impact is based on the Environmental Assessment, Revised Environmental Assessment, and the Virginia Department of Transportation's September 16, 2020 letter requesting a Finding of No Significant Impact. These documents have been independently evaluated by the Federal Highway Administration and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project. They provide sufficient evidence and analysis for determining that an Environmental Impact Statement is not required.

A Federal agency may publish a notice in the Federal Register, pursuant to 23 USC 139(1), indicating that one or more Federal agencies have taken final action on permits, licenses, or approvals for a transportation project. If such notice is published, claims seeking judicial review of those Federal agency actions will be barred unless such claims are filed within 150 days after the date of publication of the notice, or within such shorter time period as is specified in the Federal laws pursuant to which judicial review of the Federal agency action is allowed. If no notice is published, then the periods of time that otherwise are provided by the Federal laws governing such claims will apply.

October 19, 2020

---

Date

*John Simkins*

---

*for:* FHWA Division Administrator

**Rationale for the Finding of No Significant Impact**  
Richmond Highway (Route 1) Corridor Improvements  
State Project Number: 0001-029-205 (UPC 107187)

---

We have reviewed the Virginia Department of Transportation's September 16, 2020 letter requesting a Finding of No Significant Impact (FONSI), which includes the public participation summary and response to comments, the public hearing transcript, the Fairfax County Board of Supervisors Resolution, and information regarding the project's inclusion the transportation planning documents.

The Revised Environment Assessment (EA) and the letter requesting a FONSI are attached to the FONSI and are hereby incorporated by reference into this rationale supporting the FONSI. In accordance with 40 CFR 1508.13, this Finding of No Significant Impact briefly presents the reasons why the project will not have a significant impact on the human environment.

**Background**

U.S. Route 1 known also as the "Richmond Highway," is the principal north-south route for local traffic in eastern Fairfax County and also serves as a major commuter route and an alternate north-south route to nearby Interstate 95 (I-95). Lands along the study area are largely developed as commercial, residential, and office properties. Lands that are not developed are largely publicly owned parks.

The proposed improvements would widen Richmond Highway from a four-lane undivided roadway to a divided six-lane facility with bicycle and pedestrian accommodations, and a median wide enough to accommodate future Bus Rapid Transit (BRT). Improvements are proposed for an approximately 2.9-mile section of Richmond Highway between Route 235 (Mount Vernon Memorial Highway – South) and 0.07 miles north of Route 235 (Mount Vernon Highway – North) at Napper Road. The environmental study area extends further south to tie into the recently completed Richmond Highway Widening project through Fort Belvoir, and north along the Richmond Highway to Sherwood Lane.

In October 2018, the EA was approved for public availability, followed by a 30-day comment period, during which input and feedback from interested stakeholders were provided via letters, email, an online comment forum, or verbal testimony. The stakeholders included individuals, special interest groups, government and regulatory agencies, non-profit organizations, community organizations, and commercial entities. Based on the public comments received, the EA was revised to improve or modify the analysis, where necessary, as well as make factual or technical corrections. The Revised EA was made available for public review at a joint National Environmental Policy Act (NEPA) Public Hearing/Design Public Information Meeting at Mount Vernon High School in Alexandria, and on the project's website in October 2018. The Fairfax County Board of Supervisors endorsed the design for the project, as generally presented at the design public hearing, at their business meeting on July 30, 2019.

Since making the EA available for public review in October of 2018 and after the design public hearing held on March 26, 2019, the design of the Build Alternative was refined to add two

pedestrian underpasses located at Little Hunting Creek and Dogue Creek. These proposed underpasses were within the previously evaluated footprint. In addition, a temporary bridge at Little Hunting Creek is now proposed as a permanent structure for maintenance of traffic during the project's construction as well as accommodation of Fairfax County's future planned BRT facility in the median.

These design modifications were evaluated in the Revised EA. A 15-day public notice was published in locally available newspapers indicating that the Revised EA was available for review and comment on the project's website and at the VDOT Northern Virginia District Office. This review period closed on August 31, 2020. VDOT received no comments.

The project is found in the Air Quality Conformity and Financially Constrained Long-Range Plan elements of the Visualize 2045 plan approved by the National Capital Region's Transportation Planning Board. The project meets the fiscal constraint requirements, as planned obligation for the subsequent phase of right-of-way acquisition is included in the Transportation Improvement Program and the Statewide Transportation Improvement Program.

### **Environmental Impacts**

The environmental impacts for the Build Alternative were described in the Revised EA. The Revised EA was made available for public review, and no comments were received. The following sections summarize the Build Alternative's environmental impacts.

#### **Land Use**

The study area is primarily commercial followed by residential; recreation and open space; institutional, government, and utilities. No agricultural or industrial land use is within the study area. The study area is within the Mount Vernon Planning District. Fairfax County's 2017 Comprehensive Plan recommends future land development through infill, redevelopment, and revitalization in areas targeted for growth. The Plan was amended in 2017 with the Embark Richmond Highway initiative (Plan Amendment 2015-IV-MV1). This plan makes land use recommendations based on six Community Business Centers (CBC) within the Mount Vernon Planning District. Three of these CBCs are within the study area: Hybla Valley/Gum Springs, South County Center, and Woodlawn. The amended plan (2017-10 and 2017 P-02) recommends widening Richmond Highway to accommodate a median-running BRT system guideway, improving access management, designing the roadway as a complete street with six travel lanes, and creating continuous bicycle and pedestrian facilities on both sides of the roadway.

The Build Alternative is consistent with local land use. It would County transportation goals while widening an existing alignment and minimizing impacts to adjacent commercial and residential areas. Temporary right-of-way required for construction would be short-term and returned to the previous land use upon completion of the project.

FHWA finds that the land use impacts are not significant.

## Socioeconomic

The areas adjacent to Richmond Highway are primarily commercial, interspersed with higher density housing in the form of apartment buildings and townhomes, and fewer single-family residences. Twenty-four community facilities are within the study area. Of these, four are schools, one is a post office, four are parks, eight are religious institutions, five are community centers and/or non-profits, and two are government buildings. These facilities provide services to communities and neighborhoods in and around the study area. Bike routes as designated by Fairfax County exist within the study area on local streets and along Richmond Highway. Per the *Fairfax County Bicycle Master Plan (2014)*, bike lanes, shared-lanes, and cycle tracks are recommended throughout the study area.

A total of 182 individual parcels are within the LOD of the Build Alternative: 39 are residential, 133 are commercial, and 10 are community facilities. The Build Alternative would potentially displace 17 housing units on six residential parcels, 46 businesses on 32 parcels, and two religious community facilities on two parcels.

The Build Alternative would improve access to community facilities by reducing congestion, improving safety, and providing space for future BRT in the median, as called for in the Virginia Department of Rail and Public Transportation study and the Fairfax County Board of Supervisors resolution. Short-term impacts to community facilities could include temporary road closures, changes to travel patterns, temporary reductions in parking, and traffic detours during construction. Currently, of the 24 community facilities identified within the study area, two facilities may be displaced, namely, First AME Church and Spirit of Faith Ministries.

The Build Alternative would benefit pedestrians and bicyclists by providing enhanced facilities to both sides of Richmond Highway as well as pedestrian underpasses at the Dogue Creek and Little Hunting Creek bridges. These improvements would increase transportation safety by separating pedestrian and bicycle traffic from the roadway travel lanes. In addition, the Build Alternative would provide more connections to the limited pedestrian and bicycle networks and planned future facilities in the study area and within Fairfax County.

Right-of-way may be necessary from seven additional community facility parcels, with a majority of the impacts being slivers of land along the edge of the parcel and would not preclude access to, or the primary use of, these facilities. Religious institutions' service times and funeral processions could be impacted during construction; however, these impacts would be temporary in nature and would cease upon completion of construction.

Property acquisition and potential displacements would be conducted in accordance with all applicable federal laws, regulations and requirements, including but not limited to 23 CFR 710 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 and its implementing regulations at 49 CFR 24. Displaced residents and the owners of property acquired for the project would be compensated in accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970.

*Environmental Justice (EJ)*. Based on 2010 Census data, approximately 30,934 residents live in the Census block groups within the study area. Approximately 93% of the labor force in the study area is employed. Median household income within the study Census block groups is \$67,193. Minority populations are identified in 14 of the 15 study area Census block groups. No study Census block groups have a median household income below the U.S. Health and Human Services poverty threshold, and therefore none are considered low income populations. A federally-assisted affordable housing complex (Spring Garden Apartments) in the northern portion of study area is considered a low-income population.

Based on the EJ population diversity in the project location, a more robust outreach was used to ensure that Spanish, and Korean speaking residents and business owners were kept informed about the project. Interpreters were provided at the four Public Information Meetings and the Design Public Hearing, providing translation of all meeting materials in English, Spanish and Korean.

Sixteen housing units on five residential parcels could be displaced in Census block groups containing minority populations, while one housing unit would be displaced in a non-EJ Census block group. The non-minority resident population within these minority population block groups ranges from 15.9 to 84.1%. No displacements at the Spring Garden Apartments complex would occur.

The reduced congestion, improved mobility, and enhanced pedestrian and bicycle facilities under the Build Alternative would benefit the citizens who reside along or use the Richmond Highway corridor, including minority and low-income populations. Under the Build Alternative conceptual design, improvements are proposed to either side of the roadway that, at the planning level, would not disproportionately impact either side.

At Dogue Creek, the Census block group 4218.00 BG1 to the west of the bridge is a minority population, whereas Census block group 4161.00 BG1 to the east is neither a minority nor low-income population. The Little Hunting Creek Bridge is surrounded by Census block groups that are minority populations. Residents at the Harmony Place Trailer Park expressed concerns and the New Gum Springs Civic Association, representing residents living near the Little Hunting Creek Bridge, does not support providing pedestrian underpasses proposed at Dogue Creek and Little Hunting Creek. Concerns expressed regarding both underpasses include increased crime, personal safety issues, increased litter, vandalism, maintenance issues, enabling camping, unsanitary conditions, and flooding. Fairfax County has committed to 24-hour security, lighting, and increased police patrols, along with ongoing maintenance of the underpasses, thereby mitigating the potential safety effects. The pedestrian underpasses would not result in any residential or other relocations.

FHWA finds that the Build Alternative would not have disproportionately high and adverse effects on minority and low income populations. FHWA also finds that the socioeconomic effects are not significant.

## Cultural Resources

Potential effects to archaeological and architectural historic properties that are listed in, eligible for, or potentially eligible for the National Register of Historic Places (NRHP) were analyzed within the area of potential effects (APE) in accordance with Section 106 of the National Historic Preservation Act of 1966 as amended (54 USC 306108) and its implementing regulations at 36 CFR 800.

Within the APE, a literature search for previously identified archaeological surveys and sites was conducted using Virginia Department of Historic Resources (VDHR) archival sources. Three previously identified archaeological sites were investigated, of which two have been destroyed by development, and the remaining site found was not eligible for the National Register of Historic Places. The Build Alternative would not affect any archaeological historic properties

Background research and VDHR site records searches were conducted to identify previously recorded architectural resources within the APE. Of the 155 architectural resources in the APE, four are either eligible for, potentially eligible for, or listed on the NRHP including Woodlawn Plantation designated as a National Historic Landmark. No other assemblage of buildings that merits further study or could comprise a historic district is within the project APE. No American Battlefield Protection Program Potentially National Register eligible lands are in the APE.

The Build Alternative is within the viewshed of Woodlawn Plantation (029-0056), Woodlawn Cultural Landscape Historic District (029-5181), and the Sharpe Stable Complex (029-5181-0005). Although the Build Alternative would have an indirect effect to these historic properties, the effect would not be adverse.

The only historic property within the Build Alternative's direct LOD is the Original Mount Vernon High School (OMVHS). The Build Alternative would impact the circular drive and parking area along the OMVHS frontage to Richmond Highway. VDHR concurred that the Build Alternative would have no adverse effect to the OMVHS, based in part on completing an oral history of the school and interpretive signing at the site.

FHWA finds that the cultural resources impacts are not significant.

## Section 4(f) Resources

A total of seven Section 4(f) resources are within the study area. For the three public parks within the study area, no Section 4(f) use would occur. Noise impacts from the Build Alternative would not be substantially different than existing conditions near the three parks as compared to the modeled 2045 No-Build scenario. Modeled noise at the three parks is well below the FHWA noise abatement criteria. For three historic properties within the study area (Woodlawn Plantation, Woodlawn Cultural Landscape Historic District, and Sharpe Stable Complex), there would no property acquisition but there would be a change in the views from portions of these historic properties. However, this change would not diminish any aspects of integrity.

The Build Alternative would acquire the acquisition of approximately 0.57 acres of right-of-way along the frontage of the OMVHS facing Richmond Highway, within the circular drive and

parking area of the property. With the above commitments in place (completing an oral history of the school and including interpretive signing at the site), VDHR concurred that the project would not adversely affect the OMVHS. The public was given an opportunity to review and comment on the proposed de minimis finding. VDOT and the County did not receive any comments on the proposed de minimis finding.

FHWA hereby makes a Section 4(f) finding of de minimis impact for the Original Mount Vernon High School. FHWA also finds that the impacts to Section 4(f) resources are not significant.

### Air Quality

Fairfax County is designated as a nonattainment area for ozone and an attainment area for all other National Ambient Air Quality Standards (NAAQS). As the study area is in a nonattainment area for ozone, federal conformity requirements (specifically 40 CFR § 93.114 and 40 CFR § 93.115) for regional conformity apply.

The project is included in the NC RTPB (federally-designated metropolitan planning organization for metropolitan Washington) Visualize 2045 CLRP4 (ID 1942) (NC RTPB, 2016a), and the Fiscal Year (FY) 2019 – 2024 TIP5 (ID 6443) (NC RTPB, 2016b). The project was included in the Visualize 2045 Air Quality Conformity Analysis as Project ID VP1U and Con ID 322 (NC RTPB, 2016c).

*Carbon Monoxide.* As the project is in a region that is in attainment of the NAAQS for Carbon Monoxide (CO), U.S. Environmental Protection Agency (USEPA) project-level (“hot-spot”) transportation conformity requirements do not apply. The potential for CO impacts from the project in terms of potential violations of the NAAQS was assessed and no potential impacts were identified. Each of the 11 study area intersections were considered for project-specific modeling. All of them were determined to not require project-specific modeling but could be instead screened out using a weight-of-evidence approach and/or the “worst-case” modeling that forms the basis for the VDOT-FHWA Programmatic Agreement for Project-Level Air Quality Analyses for Carbon Monoxide. As such, the project would not cause or contribute to a violation of the CO NAAQS within the study area.

*Mobile Source Air Toxics.* A qualitative analysis was conducted for MSATs as the Build Alternative is considered a minor-widening project where the design year traffic is projected to be less than the 140,000 to 150,000 annual average daily traffic (AADT) threshold noted in the Updated Interim Guidance on MSAT Analysis in NEPA. Therefore, this project is best characterized as one with “Low Potential MSAT Effects”. There may be localized areas where ambient concentrations of MSATs could be higher under the Build Alternative than the No-Build Alternative. The localized increases in MSAT concentrations would likely be most pronounced along the expanded roadway sections along Richmond Highway; however, emissions will likely be lower than present levels in the design year (2045). MSAT emissions in the study area are likely to be lower in the future in nearly all cases.

FHWA finds that the air quality impacts are not significant.

## Noise

A preliminary noise evaluation was performed, and a more detailed review will be completed during final design. Numerous noise sensitive land uses exist on both northbound and southbound sides of Richmond Highway in the study area.

Residential noise impacts are predicted to occur under the Build Alternative. Noise barrier analyses are warranted for all common noise environments (CNEs) with noise impacts, with the exception of four impacted CNEs (7, 10, 24 and 25) due to excessive access constraints. Potential noise barriers were determined to be feasible and reasonable at CNEs 3, 13, 19, 32, and 34. These noise barriers would benefit 57 of the impacted receptors, as well as 59 receptors that are not impacted.

Noise barriers that were not considered preliminarily feasible and reasonable may meet the established criteria and be recommended for construction during final design. All noise barriers would be further evaluated during final design to determine any engineering constraints associated with constructing the noise barrier.

FHWA finds that the noise impacts are not significant.

## Wetlands and Waters of the United States

*Wetlands.* A total of approximately 1.2 acres of wetlands are within the study area. All delineated wetlands are within the Dogue Creek, Nork Fork Dogue Creek and Little Hunting Creek Environmental Quality Corridors (EQC) designated by Fairfax County. Under the Build Alternative, a total of 0.2 acre of long-term wetland impacts would occur from converting wetlands into upland. A palustrine emergent wetland associated with North Fork Dogue Creek would incur 0.1 acre of impact, and a palustrine forested wetland near the crossing of Dogue Creek would incur 0.1 acre of impact.

Potential short-term direct impacts of construction to wetlands could include construction of temporary accesses for equipment, temporary removal of wetland vegetation and disturbed wetland bottom, and mitigation for both long- and short-term impacts to wetlands would be developed in consultation with regulatory agencies, including Fairfax County, during permitting.

*Streams and Water Quality.* A total of 2,968.5 linear feet of streams have been identified in the study area and are in Fairfax County EQCs. Three perennial streams are within the study area: Little Hunting Creek, North Fork Dogue Creek and Dogue Creek. Two of these streams (1,808.3 linear feet), Little Hunting Creek and Dogue Creek are designated as “impaired waters” under Section 303(d) of the Clean Water Act.

The Build Alternative would impact up to 963.1 linear feet of perennial streams that are within ECQs. The exact minimization and compensatory mitigation measures for direct stream impacts would be developed during the final design and permitting phase in consultation with federal, state and local regulatory agencies, including Fairfax County.

The Build Alternative would disturb up to 79.6 acres of land. Construction of the Build Alternative would be evaluated using the Virginia Runoff Reduction Method (VRRM), a stormwater

compliance framework focused on water quality treatment, but also on reducing the overall runoff volume. The proposed new stormwater management facilities would help to mitigate the potential effects to water quality by addressing stormwater quality and quantity, and possibly improving water quality over existing conditions.

*Aquifers and Water Supply.* No public water resources are within the study area. Roadway cuts are not anticipated to encounter the groundwater table.

FHWA finds that the wetlands and waters of the United States impacts are not significant.

### Floodplains

Approximately 26.7 acres of FEMA designated 100-year floodplains are within the study area associated with Dogue Creek, North Fork Dogue Creek, and Little Hunting Creek. The Build Alternative would encroach upon approximately 8.9 acres of regulated floodplains. The encroachments would result from perpendicular crossings, rather than longitudinal crossings, which would result in less floodplain fill and maximize floodwater conveyance and storage. Efforts to minimize floodplain encroachment would be considered during the final design and permitting phase to avoid or minimize impacts on natural and beneficial floodplain values.

The Build Alternative would not pose a flooding risk and it would incorporate water crossings consistent with procedures for the location and hydraulic design of highway encroachments on floodplains contained in 23 CFR 650 Subpart A. In addition, the potential for property loss and hazard to life is not expected.

The Build Alternative is consistent with local land use plans and is not projected to either encourage or accelerate growth or changes in land use within floodplains. Therefore, the Build Alternative would not encourage, induce, allow, serve, support, or otherwise facilitate incompatible base floodplain development. No substantially adverse impact to natural and beneficial floodplain values would occur.

FHWA finds that the floodplain impacts are not significant.

### Wildlife and Habitat

Expanses of terrestrial habitat in the study area are rare and fragmented as residential, commercial, industrial, government, and military areas are common, resulting in low quality edge habitat. Natural areas that remain are within stream corridors and Fairfax County parks. No wildlife refuges or wildlife management areas are located within the study area. Wildlife species include those most adapted to dense urban and suburban development while species in the stream corridors are more varied. Incrementally increasing the width of the roadway would not substantially worsen existing conditions.

FHWA finds that the wildlife and habitat impacts are not significant.

## Threatened and Endangered Species

The U.S. Fish and Wildlife Service (USFWS) IPaC database was searched for species within the study area boundaries. In addition, the Virginia Department of Game and Inland Fisheries VAFWIS data search was conducted within a 2-mile radius of the center of the study area. The Atlantic Sturgeon (*Acipenser oxyrinchus*) and Northern Long-eared Bat (*Myotis septentrionalis*) are the two federally listed species that are known to occur, or have the potential to occur, in the vicinity of the study area.

Due to the potential presence of listed species in the study area, coordination with regulatory agencies would be required during the permitting process. At that time, the agencies may require surveys be completed to confirm the presence, or absence of, listed species in the study area. If required, these surveys must be conducted by an approved surveyor, and often are only acceptable if completed during certain periods of the year. If presence of a listed species is confirmed, the agencies may recommend a time of year restriction for activities within occupied habitat. Use of time of year restrictions would offset potential direct impacts, would mitigate indirect effects outside of the area of direct impact, and may result in a “not likely to adversely affect” determination under Section 7 of the Endangered Species Act. If such a determination cannot be made, then formal Section 7 consultation would occur.

All applicable provisions of the Endangered Species Act and consultation required thereunder will be completed prior to construction. Based on FHWA's previous experience consulting with USFWS for the Atlantic Sturgeon and Northern Long-eared Bat, even if the project is likely to adversely affect the species and formal consultation is required, a "jeopardy" biological opinion for either of the species is highly unlikely. In addition, the formal consultation process requires the USFWS to issue a Biological Opinion that contains mandatory reasonable and prudent measures that the USFWS considers necessary or appropriate to minimize the impact. All reasonable and prudent measures in a Biological Opinion will be incorporated into the project in order to minimize any potential impacts to threatened and endangered species.

FHWA finds that the threatened and endangered species impacts would not be significant.

## Hazardous Materials

Hazardous wastes are regulated by the USEPA and defined in 40 CFR 261. Materials are considered hazardous if they are specifically listed by regulation, exhibit hazardous characteristics, or are universal (e.g., batteries, pesticides, mercury containing equipment) or mixed wastes.

The Hazardous Materials Assessment investigation area covers parcels within a radius of approximately one mile surrounding Richmond Highway through the study area. Information was obtained from regulatory database searches (including a database search conducted by Environmental Data Resources, Inc.), site reconnaissance, available published information, and local and state government officials. The study area has primarily commercial land use with some residential properties. Land use adjacent to Richmond Highway in the study area includes former and/or existing petroleum retail facilities and dry cleaners with the potential for soil or groundwater contamination.

Federal and state environmental databases identified 644 property parcels within the 1-mile search radius. Of those properties, 61 sites were given a priority ranking associated with the potential risk for mobilizing hazardous or contaminated substances before, during, and after project construction. Contaminants from 19 properties with high to moderate contaminant risks could migrate into the Build Alternative limits of disturbance (LOD) during excavation or significant subsurface construction.

Undocumented hazardous materials that are encountered during construction will be managed, handled, and disposed of in accordance with federal, state, and local regulations.

FHWA finds that the hazardous materials impacts are not significant.

### Indirect Effects

The most common indirect effects associated with highway projects are related to induced growth and development, that is, development and the impacts of such development that would not otherwise occur if the project were not constructed. The Build Alternative does not contain features that are most conducive to induced growth (i.e., a new alignment and new interchanges), and the project is consistent with local comprehensive planning and land use goals.

Potential indirect long- and short-term effects to waters, wetlands, and water quality could result from increased stormwater runoff due to increases in impervious surfaces and/or temporary effects from instream work and earth disturbance during construction. Implementation of strict erosion and sediment control and stormwater measures during construction would minimize permanent and temporary impacts to waters, wetlands and water quality, and thereby minimize indirect effects as well. Potential indirect effects to floodplains could occur if fill is placed into floodplains, changing the flood flow elevations. All construction activities would be designed to ensure that culverts, bridges and pedestrian underpasses at Dogue Creek and Little Hunting Creek are adequately sized and do not impede floodwater passage. The Build Alternative is not expected to increase flood elevations, the probability of flooding, or the potential for property loss and hazard to life.

The Build Alternative would and indirectly affect the viewshed of Woodlawn Plantation, Woodlawn Cultural Landscape Historic District, and Sharpe Stable Complex. However, the indirect effects would not be adverse.

Improvements to Richmond Highway are anticipated to improve travel time and reliability in the indirect and cumulative effects study areas which would indirectly benefit businesses and commuters. The increased travel reliability for delivery of and access to goods and services could result in gained economic productivity. The Build Alternative should have long-term beneficial effects such as reduced travel time, increased travel reliability, a reduced rate of bicycle and pedestrian and motor vehicle crashes, an increase in bicycle and pedestrian network usage, and a shift in community transportation mode choice from motor vehicle to bicycle and pedestrian passage between communities, residents, neighborhoods, and businesses.

FHWA finds that the indirect effects are not significant.

## Cumulative Effects

The natural, physical, and cultural resources within the study area have been manipulated and impacted by past and present actions. Many of the past actions that have contributed to the baseline for the cumulative effects analysis occurred as part of residential, commercial, and industrial development.

The potential for future development is largely limited to redevelopment or infill development due to lack of vacant land within the ICE study area. Past and present actions have had both beneficial and adverse socioeconomic effects, and it is expected that reasonably foreseeable future actions would as well. Some past and present development actions have resulted in large-scale residential, community facility, and business relocations that adversely affected community cohesion. Transportation facilities have divided and isolated communities, reducing access to neighbors and services. Past actions have resulted in the loss and fragmentation of much of the terrestrial wildlife habitat in the ICE study area.

The Build Alternative's impacts to waters, wetlands, and water quality; floodplains; wildlife habitat; and threatened and endangered species would contribute to the cumulative effects that have occurred in the past to natural resources within the study area, although the effects should be minimized by implementation of best management practices and compensatory mitigation. Construction and postconstruction of the Build Alternative would potentially contribute to minor, localized increases in pollutants and nutrients causing impairment to waterways. Since construction of the Build Alternative would upgrade and replace current stormwater management systems, implementation of the Build Alternative should improve roadway runoff water quality from current conditions.

Present and reasonably foreseeable future actions would incorporate protections to wetlands, floodplains, water quality, and threatened and endangered species afforded by federal, state, and local regulations. These protections could limit future adverse impacts to natural resources. Additionally, local comprehensive planning includes natural resource management plans that aim to preserve remaining high valued wildlife habitat and water quality by directing growth to specific areas and densities, with the goal of sustaining natural resources for the future.

The Build Alternative would decrease congestion, increase safety, and provide enhanced bicycle and pedestrian facilities. The Build Alternative would have some beneficial cumulative effects, with beneficial impacts on local communities, community facilities, bike paths, and recreational areas. The short-term impact of more jobs and associated expenditures during construction of the Build Alternative could also benefit the local communities and businesses. Once complete, the project is not anticipated to create induced growth or infill development beyond what was anticipated without the project.

FHWA finds that the cumulative effects are not significant.

## Council on Environmental Quality's Regulations

The Council on Environmental Quality's previous regulations implementing NEPA required consideration of a project's context and intensity in determining whether the project would have a significant impact (40 C.F.R. 1508.27).<sup>1</sup>

### Context

The regulations stated, "Context means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality. Significance varies with the setting of the proposed action. For instance, in the case of a site-specific action, significance would usually depend upon the effects in the locale rather than in the world as a whole. Both short- and long-term effects are relevant." Since the construction of the project is a site-specific action, significance depends upon the effects in the project area.

### Intensity

The regulations identified factors that should be considered in determining whether the intensity of a project's impacts is such that they result in a significant impact on the environment (40 CFR 1508.27(b)(1-10)). FHWA has considered these factors as described below.

1. *Impacts that may be both beneficial and adverse.*

Construction of the project would have beneficial impacts. The Build Alternative would decrease congestion, increase safety, and provide enhanced bicycle and pedestrian facilities.

2. *The degree to which the project affects public health or safety.*

### Public Health

*Air Quality.* It is not anticipated that the project would adversely affect public health with respect to air quality. The national ambient air quality standards were established by USEPA with public health in mind. The air quality analysis demonstrated that there would be no exceedances of the NAAQS that apply to the project area and, therefore, the project would not adversely affect public health as it relates to particulate matter, ozone, and carbon monoxide. The project was included in the regional air quality conformity analysis, and is also characterized as one with "Low Potential MSAT Effects,

*Drinking Water.* No public water resources are within the study area. Roadway cuts are not anticipated to encounter the groundwater table.

### Safety

The construction of the project is not anticipated to adversely affect safety. On the contrary, Richmond Highway should become inherently safer than the existing roadway

---

<sup>1</sup> Updated regulations became effective on September 14, 2020. The environmental review process for this project was conducted under the regulations that were applicable at the time.

under the Build Alternative. The project would decrease congestion and provide enhanced bicycle and pedestrian facilities.

FHWA finds that the degree to which the project would affect public health or safety does not represent a significant impact.

3. *Unique characteristics of the geographical areas such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas.*

The project would not adversely affect historic or cultural resources, park lands, prime farmlands, wild and scenic rivers, or ecologically critical areas. The project would impact 0.1 acre of wetlands associated with North Fork Dogue Creek and 0.1 acre of wetlands near the crossing of Dogue Creek. FHWA finds that impacts to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers and ecologically critical areas are not significant.

4. *The degree to which the effects on the environment are expected to be highly controversial.*

The term “controversial” refers to cases where substantial dispute exists as to the size, nature, or effect of the action rather than to the existence of opposition to a use, the effect of which is relatively undisputed. There has been no substantial dispute regarding the size, nature, or effect of the project from any of the commenters. FHWA finds that the degree to which the effects on the environment are highly controversial does not require an Environmental Impact Statement.

5. *The degree to which the effects on the quality of human environment are highly uncertain or involve unique or unknown risks.*

There are no known effects on the quality of the human environment that can be considered highly uncertain or involve unique or unknown risks. Projects such as this one have been constructed around the country as well as within the Commonwealth of Virginia. The potential environmental impact areas from roadways are described in FHWA’s NEPA guidance documents. The impacts from the construction of this project have been identified using standard and accepted methods and approaches for assessing environmental impacts. FHWA finds that the degree to which the effects on the quality of the human environment are highly uncertain or involve unique or unknown risks does not require the preparation of an Environmental Impact Statement.

6. *The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.*

This action will not set a precedent for future roadway projects with significant effects or represent a decision in principle about a future project. The impacts associated with the construction of the project are not unique, and any future changes that are proposed to the

roadways would be considered on their own merits and in accordance with environmental regulations. FHWA's regulations at 23 CFR 771.115(a) list the types of actions that normally have a significant effect on the environment, thereby requiring the preparation of an Environmental Impact Statement. This project is not the type of action that is on that list.

7. *Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.*

The project has logical termini and independent utility and does not force additional transportation improvements to be made. The Revised EA contains a discussion of cumulative effects. As stated previously, FHWA finds that the cumulative effects are not significant.

8. *The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss of significant scientific, cultural, or historic resources.*

The construction of the project would not have an adverse effect on districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places.

9. *The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act.*

As stated above, due to the potential presence of listed species in the study area, coordination with regulatory agencies would be required during the permitting process. If presence of a listed species is confirmed, the agencies may recommend a time of year restriction for activities within occupied habitat. Use of time of year restrictions would offset potential direct impacts, would mitigate indirect effects outside of the area of direct impact, and may result in a "not likely to adversely affect" determination under Section 7 of the Endangered Species Act. If such a determination cannot be made, then formal Section 7 consultation would occur.

All applicable provisions of the Endangered Species Act and consultation required thereunder will be completed prior to construction. Based on FHWA's previous experience consulting with USFWS for the Atlantic Sturgeon and Northern Long-eared Bat, even if the project is likely to adversely affect the species and formal consultation is required, a "jeopardy" biological opinion for either of the species is highly unlikely. In addition, the formal consultation process requires the USFWS to issue a Biological Opinion that contains mandatory reasonable and prudent measures that the USFWS considers necessary or appropriate to minimize the impact. All reasonable and prudent measures in a Biological Opinion will be incorporated into the project in order to minimize any potential impacts to threatened and endangered species.

FHWA finds that the threatened and endangered species impacts would not be significant.

10. *Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.*

The proposed action does not knowingly threaten a violation of any Federal, State, or local law for the protection of the environment. All applicable permits will be acquired prior to construction.

**FHWA Finding**

Based on the foregoing information as well as the Revised EA, public hearing comments, and other project documentation, FHWA finds that the project will not have a significant environmental impact. Therefore, an Environmental Impact Statement is not warranted, and this Finding of No Significant Impact is being issued accordingly. The Finding of No Significant Impact will be reevaluated pursuant to 23 CFR 771.129(c) prior to FHWA granting any major approvals, and the reevaluation will take into account the conditions at that time.