FEDERAL HIGHWAY ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT

FOR

PROJECT:	Route 7 Corridor Improvement Project From: Reston Avenue To: Jarret Valley Drive
LOCATION:	Fairfax County, Virginia
STATE PROJECT NO.	0007-029-128 (ID 52328)

The Federal Highway Administration (FHWA) has determined that this project, as described in the attached Revised Environmental Assessment, will have no significant impact on the human environment. This Finding of No Significant Impact is based on the Environmental Assessment, the Revised Environmental Assessment, and the Virginia Department of Transportation's letter requesting a Finding of No Significant Impact. These documents have been independently evaluated by FHWA and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. They provide sufficient evidence and analysis for determining that an Environmental Impact Statement is not required. FHWA takes full responsibility for the accuracy, content, and scope of the attached Revised Environmental Assessment.

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.

<u>רו/ז/ו/וו</u>

John Dimkins

Federal Highway Administration

The Federal Highway Administration (FHWA) has reviewed the Virginia Department of Transportation's (VDOT) November 9, 2017 letter requesting a Finding of No Significant Impact, the Revised Environmental Assessment, comments from the 2016 public hearing, and other supporting documentation.¹ 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

FHWA approved the Environmental Assessment on October 6, 2016 for public and agency review and comment. In addition, VDOT held a public hearing on November 15, 2016 in order to solicit public input on the Environmental Assessment and the project itself. The Revised Environmental Assessment includes responses to substantive comments received on the Environmental Assessment, and was submitted by VDOT along with the aforementioned request for a Finding of No Significant Impact.

FHWA Decisions

There are two related but distinct decisions before FHWA with regard to the project. One decision is whether to agree with the Commonwealth of Virginia and select the Build Alternative as presented in the Revised. The other decision is whether the Build Alternative would cause significant environmental impacts. Each of these decisions is addressed below.

Alternative Selection

As described in detail in the Revised Environmental Assessment, a no-build alternative and a Build Alternative were considered in detail.

No-Build Alternative. The No-Build Alternative would retain the existing Route 7 roadway and associated intersections and interchanges in their present configuration, and allow for routine maintenance and safety upgrades. This alternative assumes no major improvements to the Route 7 corridor with the exception of previously committed projects, including projects currently programmed and funded in VDOT's Six-Year Improvement Program, the Metropolitan Washington Council of Governments for the National Capital Region Constrained Long Range Plan 2016, and Fairfax County DOT capital projects. The No-Build Alternative would not meet the purpose and need, and FHWA does not select this alternative.

Build Alternative. The Build Alternative would add an additional lane in each direction for a total of six lanes in each direction. In addition, turn lane lengths would also be improved to meet the full American Association of State Highway Transportation Officials (AASHTO) requirements for deceleration and storage, and unsignalized median crossovers not meeting signal warrants would either be closed or converted to median left turn lanes. Additional details regarding the scope of the Build Alternative are found in section 2.3.2 of the Revised

¹ The letter and the Revised Environmental Assessment are hereby incorporated by reference into this Finding of No Significant Impact.

Environmental Assessment. The Build Alternative would meet the purpose and need by providing additional traffic capacity and implementing access management.

FHWA selects the Build Alternative as described in the Revised Environmental Assessment.

Environmental Impacts and Evaluation of Significance

Several measures to minimize and mitigate the environmental impacts are included in the Revised Environmental Assessment. These minimization and mitigation measures are incorporated by reference into this Finding of No Significant Impact, and VDOT will ensure that these environmental commitments are implemented.

VDOT analyzed the project's environmental impacts and concluded that it would not cause significant environmental impacts. FHWA has independently evaluated the environmental impacts and the following sections summarize the impacts and include FHWA's significance determination.

Land Use

The land use in the study area is primarily low-density/suburban neighborhood residential, with large tracts of parkland and institutional uses with a few commercial areas. Within the vicinity of the study area there are several Fairfax County-designated development centers, including the Tysons Corner Urban Center, Reston and its associated Transit Station Areas, and the McLean Community Business Center. The proposed project is in conformance with the Fairfax County Comprehensive Plan and would support the future growth planned for the development centers. The project would require one residential building displacement, and approximately 20 acres of land would be converted to transportation use.

The acquisition of property and the relocation of residents will be conducted in accordance with all applicable Federal laws, regulations and requirements, including 23 CFR Part 710 as well as the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended and its implementing regulations at 49 CFR Part 24. All displaced persons will be treated fairly, consistently, and equitably so that they do not suffer disproportionate injuries as a result of projects that are designed for the benefit of the public as a whole. Relocation resources will be available to all residential and business relocatees without discrimination.

FHWA finds that the impacts to land use would not be significant.

Socioeconomic

Based on the 2011-2015 American Community Survey 5-Year Estimates, Environmental Justice populations have been identified within the project area. One residential building would be displaced by the project. VDOT's Stage I Relocation Assistance Report identified the property owner as belonging to a minority group. The displaced persons would receive benefits under the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. The project would require temporary and permanent acquisition from properties belonging to

both minorities and non-minorities. The addition of lanes, added facilities for bicyclists and pedestrians, and other improvements along Route 7 would provide additional travel choices and capacity, thereby providing benefits to all citizens, including minority populations.

FHWA finds that the Preferred Alternative would not have disproportionately high and adverse effects on minority and low income populations, and also finds that the socioeconomic impacts would not be significant.

Parks and Recreation Areas

As described in section 3.1 of the Revised Environmental Assessment, the project would impact three parks: Colvin Run Mill Park, Great Falls Nike Park, and Difficult Run Stream Valley Park. VDOT has worked extensively with the Fairfax County Park Authority, who is the official with jurisdiction for the parks, on minimization and mitigation efforts. In a letter dated October 10, 2017, the Fairfax County Park Authority concurred that the project will not adversely affect the activities, features, and attributes of the parks.

FHWA hereby makes a Section 4(f) finding of de minimis impact for Colvin Run Park, Great Falls Nike Park, and Difficult Run Stream Valley Park. FHWA also finds that the impacts to parks and recreation areas would not be significant.

Historic Properties

VDOT has coordinated the project's effects to historic properties with the Virginia Department of Historic Resources pursuant to Section 106 of the National Historic Preservation Act. The Virginia Department of Historic Resources concurred that the project would not have an effect on Colvin Run Miller's House and Alexandria/Leesburg Turnpike roadbed, and that the project would not have an adverse effect on Hunter Mill Road Historic District, Andrews Chapel School/Lyons House, Colvin Run Mill, and Colvin Run Historic District.

FHWA hereby makes a Section 4(f) finding of de minimis impact for the Hunter Mill Road Historic District, Andrews Chapel School/Lyons House, Colvin Run Mill, and Colvin Run Historic District. FHWA also finds that the impacts to historic properties would not be significant.

Air Quality

The project is located within a Moderate Ozone Nonattainment area, a Fine Particulate Matter $(PM_{2.5})$ Nonattainment area, and a volatile organic compounds (VOC) and oxides of nitrogen (NO_x) Emissions Control Area. The project is exempt from a carbon monoxide air quality analysis per the transportation conformity regulations; therefore, a project-level carbon monoxide air quality analysis is not required. With regard to PM_{2.5}, the project is not a project of air quality concern and a PM_{2.5} hot spot analysis is not required. In addition, the project is part of an air quality conforming long range transportation plan.

During construction, emissions from diesel-powered construction equipment, burning of debris, fugitive dust, and the use of cutback asphalt, would be temporary. This project would comply with all applicable local, state, and federal regulations, including 9 VAC 5-130 regarding open burning restrictions, 9 VAC 5-50, Article 1 regarding fugitive dust precautions, and 9 VAC 5-45, Article 7 regarding cutback asphalt restrictions. To control dust, measures would be taken to minimize exposed earth by stabilizing with grass, mulch, pavement, or other cover as early as possible. Other measures will be implemented per VDOT's current Road and Bridge Specifications to minimize air pollution.

The project would not violate that National Ambient Air Quality Standards. FHWA finds that the air quality impacts would not be significant.

Noise

A preliminary noise analysis was conducted for the project. Under the Design year 2040 Build conditions, a total of 205 receptors (173 residencies, 13 cemetery grid units, 15 proposed trail units, one soccer field (two units), two playgrounds (seven grid units), and one historic site) are predicted to experience noise impacts. Noise barriers were evaluated and preliminarily determined to be both feasible and reasonable. Further study is required during Final Design to refine the abatement options consistent with design refinements and will be documented in the Final Noise Analysis and Technical Report.

Construction activity may cause intermittent fluctuations in noise levels. During the construction phase of the project, all reasonable measures would be taken to minimize noise impacts from these activities. VDOT's Road and Bridge Specifications establish construction noise limits and the contractor would be required to conform to this specification to reduce any impacts of construction noise.

FHWA finds that the noise impacts would not be significant.

Waters of the United States

The VDOT conducted a wetland delineation and obtained a Preliminary Jurisdictional Determination from the U.S. Army Corps of Engineers on March 23, 2017. VDOT refined a number of design elements in order to avoid and minimize impacts to wetlands and streams. Design refinements included lane width reduction, median width reduction, use of retaining walls, horizontal and vertical roadway alignment shifts, multi-use path and safety buffer width reduction, minimization of the typical section of relocated stream channels, and stormwater management basin location. Overall, design refinements resulted in impact reductions of 4.41 acres of wetlands and 239 linear feet of stream.

The project would result in impacts to approximately 2.15 acres of wetlands and approximately 3,185 linear feet of stream. Primary impacts to streams and wetlands resulting from roadway construction would likely include discharges of fill material for culverted stream crossings, bridge approaches and abutments, stream relocations, stormwater management basin outfalls,

and roadway cut/fill slopes. Indirect effects would likely include stormwater discharge from the widened roadway and shading at bridge crossings.

The U.S. Army Corps of Engineers indicated that the current project design may be the preliminary least environmentally damaging practicable alternative under Section 404 of the Clean Water Act. Additional coordination with the U.S. Army Corps of Engineers will occur during the Section 404 permitting process, and appropriate compensatory mitigation for permanent impacts to streams and wetlands will be developed in coordination with state and federal agencies.

FHWA finds that the impacts to waters of the United States would not be significant.

Water Quality

The project would result in temporary impacts to water quality during roadway construction through increased sedimentation from land disturbing activities and potential occurrences of fuel spills or hydraulic spills from construction equipment. During construction, the contractor would be required to adhere to strict erosion and sediment control and stormwater measures and the associated required monitoring protocols. Both temporary and permanent stormwater best management practices would be designed as the project progresses and implemented to minimize the negative impacts of various pollutants that can be carried by runoff into the groundwater and receiving waters in accordance with VDOT's Drainage Manual to minimize impacts and comply with the Virginia Stormwater Management Program.

VDOT's practice is to maintain both water quality and quantity post-development equal to or better than pre-development, as described in their current guidance, Minimum Requirements for the Engineering, Plan Preparation and Implementation of Post Development Stormwater Management Plans. Title 9 of the Virginia Administrative Code (9VAC25-870-48) allows projects to be grandfathered for stormwater provided that:

- 1. there has been an obligation of locality, state, or federal funding, in whole or in part, prior to July 1, 2012, or the department has approved a stormwater management plan prior to July 1, 2012;
- 2. a state permit has not been issued prior to July 1, 2014; and
- 3. land disturbance did not commence prior to July 1, 2014.

This project was approved by the Virginia Department of Environmental Quality for grandfathering under the Part II C technical criteria because funds, in part, were obligated prior to July 1, 2012, no state permit was issued prior to July 1, 2014, and land disturbance did not commence prior to July 1, 2014. Additionally, the Universal Project Code (UPC) existed prior to July 1, 2012. Although this project is grandfathered for stormwater, the project would be compliant with the Chesapeake Bay Preservation Act because the project would be designed and

constructed in accordance with VDOT's annual erosion and sediment control and stormwater management standards and specifications. VDOT's annual standards and specifications are approved by the Virginia Department of Environmental Quality.

FHWA finds that the impacts to water quality would not be significant.

Floodplains

The project would impact approximately 17.5 acres of 100-year floodplain. Floodplain impacts would occur directly adjacent to Route 7, and are the result of fill required for the addition of a third lane. The proposed floodplain impacts are in an area where floodplains are already impacted by Route 7. During final design, a hydrologic and hydraulic analysis would be conducted to provide adequate design of the hydraulic openings of culverts and proper conveyance of floodwaters to minimize potential impacts to the floodplain and floodplain hazards. In the case of the Difficult Run crossing, the hydraulic opening would be expanded and, therefore, the proposed floodplain conditions would be better than existing conditions.

FHWA finds that the impacts to floodplains would not be significant.

Threatened and Endangered Species

Federally listed species have not been documented in the study area, but could occur based on predictive modeling. Database queries identified the northern long-eared bat as potentially being in the project area, and Fairfax County is considered to be in the historical range of the rusty patched bumblebee.² However, the majority of the area associated with the project has been disturbed by previous roadway improvements as well as residential and commercial development. Given the habitat requirements, historic observations, and distance to known observations, it is unlikely that the project would result in impacts to threatened and endangered species. Further coordination will be conducted with resource agencies during the Section 404 permitting process, and final Section 7 effect determinations would be made at that time. Conservation measures that may be implemented depending upon the outcome of agency coordination and presence/absence surveys include time-of-year restrictions for instream work (yellow lance and wood turtle), riparian wetlands and wooded habitat (wood turtle), or bridge work (northern long-eared bat).

All applicable provisions of the Endangered Species Act and consultation required thereunder will be completed prior to construction. Based on FHWA's and VDOT's previous experience consulting with the U.S. Fish and Wildlife Service (USFWS) under Section 7, even if the project is likely to adversely affect the northern long-eared bat or rusty patched bumblebee 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

 $^{^{2}}$ On April 5, 2017, the U.S. Fish and Wildlife Service proposed to list the yellow lance as threatened under the Endangered Species Act, but the U.S. Fish and Wildlife Service has not yet taken a listing action.

Biological Opinion would be incorporated into the project in order to minimize any potential impacts to threatened and endangered species.

Based on the above, the impacts to threatened and endangered species populations would not be significant. Notwithstanding, FHWA will not authorize the use of federal funds for construction until VDOT documents the results of the Section 7 consultation in a NEPA reevaluation for FHWA's consideration.³

Terrestrial Wildlife and Habitat

The wildlife in the study area primarily consists of species that are adapted to urban environments; however, some of the riparian corridors contain forested habitat that supports fauna more typically found in less disturbed floodplain forests. The study area includes two urban wildlife corridors associated with the riparian habitat along Difficult Run and Colvin Run in Colvin Run Mill Park, Difficult Run Stream Valley Park, and Wolf Trap Stream Valley Park. These corridors are intersected by roads, which fragment the corridor, but do not prevent the continued use of corridors. The project would not add significant impediments to their utilization by wildlife. A majority of the improvements associated with the project would occur along Route 7. Construction associated with the project would occur primarily within areas already heavily disturbed by development and previous transportation projects.

FHWA finds that the impacts to terrestrial wildlife and habitat would not be significant.

Aquatic Biology

The project would result in minimal impacts from the loss of stream channel, temporary construction impacts, and operation of the road. The impacts would be largely offset through implementation of best management practices and stabilization of Colvin Run, which is currently unstable and eroding.

Aquatic organisms and their associated habitats would incur some impacts as a result of roadway construction, stream relocation, maintenance, and vehicular passage. These impacts may result from the movement and compaction of soils, thus causing alterations to hydrology, water quality, and habitat. It is expected that construction activities would temporarily increase turbidity levels and sedimentation. Community diversity may be temporarily affected by clearing activities that would cause changes in acidity or alkalinity and temperature. Habitat within the footprint of any fill in aquatic systems would be permanently lost. However, the seasonal fluctuations and the

³ In situations where full compliance with other federal environmental laws has not occurred at the time of a Finding of No Significant Impact, the established reevaluation process helps to provide reasonable assurance that all federal requirements will be met prior to construction of a project. Subsequent to a Finding of No Significant Impact, the reevaluation process ensures that all federal requirements will be met prior to construction to support a request for authorization of federal funds for construction of the project, VDOT will need to demonstrate that there has been compliance with all applicable federal environmental laws and permitting requirements for such construction, including Section 7 of the Endangered Species Act.

itinerant nature of aquatic biology would likely allow for any impacts to be more temporary than permanent, and provide for re-population of affected stream reaches after construction is completed.

FHWA finds that the impacts to aquatic biology would not be significant.

Farmlands

The study area is not subject to the Farmland Protection Policy Act because the entire study area is located within a Census urbanized area. In addition, the project does not require coordination for impacts to agricultural or forestal districts because the impacts are below the minimum threshold established by \$15.2-4313 of the Code of Virginia.

FHWA finds that the impacts to farmlands would not be significant.

Hazardous Materials

VDOT conducted a Phase I Hazardous Materials Investigation and identified six properties for additional investigations. A Phase II Hazardous Materials Investigation of selected properties discovered petroleum-contaminated soil within proposed right-of-way adjacent to a former gas station. In addition, naturally occurring asbestos is documented along or near Route 7. VDOT will include special provisions for petroleum-contaminated soil and naturally occurring asbestos in the contract, and sites will be managed and handled in accordance with federal, state, and local procedures.

FHWA finds that the hazardous materials impacts would not be significant.

Construction Impacts

During construction, temporary environmental impacts usually can be controlled, minimized, or mitigated through careful attention to prudent construction practices and methods. Potential temporary construction impacts and preventive practices are summarized below.

<u>Water Quality</u>. During construction, non-point source pollutants could possibly enter groundwater or surface water from stormwater runoff. To minimize these impacts, appropriate erosion and sediment control practices will be implemented in accordance with VDOT's Road and Bridge Specifications. These specifications also prohibit contractors from discharging any contaminant that may affect water quality. In the event of accidental spills, the contractor is required to immediately notify all appropriate local, state, and federal agencies and to take immediate action to contain and remove the contaminant.

<u>Air Quality</u>. Air quality impacts from construction, consisting of emissions from diesel-powered construction equipment, burning of debris, fugitive dust, and the use of cutback asphalt, would be temporary. This project would comply with all applicable local, state, and federal regulations, including the Virginia Environmental Regulation 9 VAC 5-130 regarding open burning restrictions, 9 VAC 5-50, Article 1 regarding fugitive dust precautions, and 9 VAC 5-45, Article

7 regarding cutback asphalt restrictions. To control dust, measures would be taken to minimize exposed earth by stabilizing with grass, mulch, pavement, or other cover as early as possible. Other measures will be implemented per VDOT's current Road and Bridge Specifications to minimize air pollution.

<u>Noise</u>. Construction activity may cause intermittent fluctuations in noise levels. During the construction phase of the project, all reasonable measures would be taken to minimize noise impacts from these activities. VDOT's Road and Bridge Specifications establish construction noise limits and the contractor would be required to conform to this specification to reduce any impacts of construction noise.

<u>Solid Waste and Hazardous Materials</u>. All solid waste material resulting from clearing and grubbing, demolition, or other construction operations would be removed from the project and disposed of in an appropriate manner. If contaminated soils are encountered during construction, VDOT would develop and implement appropriate procedures for their proper management and coordinate the removal, disposal, and/or treatment of the soil, as necessary. If contaminated groundwater is encountered during construction, VDOT would implement appropriate specifications for proper management and treatment of the water, as necessary.

<u>Late Discoveries</u>. During construction, should the discovery of archaeological, paleontological, or rare mineralogical items occur, work would be suspended immediately. VDOT's Road and Bridge Specifications establish the protocol that would be followed should a late discovery occur.

FHWA finds that the construction impacts would not be significant.

Indirect Effects

Potential indirect effects to waters, wetlands, and water quality could result from increased stormwater runoff due to increases in impervious surfaces. Implementation of strict erosion and sediment control and stormwater measures during construction would minimize permanent and temporary impacts to waters of the United States, and thereby minimize indirect effects as well. Potential indirect effects to floodplains could occur if fill is placed into floodplains, thus changing the flood flow elevations. However, the proposed replacement of the existing Difficult Run Bridge would increase the hydraulic opening and would, therefore, improve floodplain connectivity and would potentially lower upstream flood flow elevations. All construction activities would be designed to ensure that culverts and bridges are adequately sized and do not impede floodwater passage.

Indirect effects to wildlife and threatened and endangered species could be related to increased noise, human activity, dust associated with construction, potential for animal-vehicle collisions, potential for oil spills, potential for introduction of invasive species, changes in vegetative composition due to changes in light and hydrologic regimes, and loss of habitat. New stormwater facilities and stormwater regulations would reduce or neutralize impacts to aquatic habitat. Since the project is on an existing roadway alignment, habitat and wildlife corridor fragmentation is not expected to be an indirect effect. Existing culvert and bridge crossings

would allow for the continued passage of wildlife beneath Route 7. The proposed replacement of the existing Difficult Run Bridge would allow for continued wildlife movement, aiding aquatic and terrestrial organism passage beneath the road. During construction, the contractor would adhere to VDOT's Road and Bridge Specifications, Chapter 40 of Title 3.2 of the Code of Virginia, 2 VAC 5-390-20, and other applicable regulations to prevent the introduction and establishment of invasive species.

The project could have an adverse short-term indirect effect on historic resources by altering access and increasing congestion during construction. However, once the construction is complete, the project would have a long-term beneficial indirect effect on the historic resources by improving visitors' ability to access the properties through reduced congestion as well as an alternate transportation mode.

The indirect and cumulative effects study area and surrounding locality are built-out with mature infrastructure. Since the project would not significantly contribute to conditions conducive to induced growth including transportation on new alignment, land use progression, or largely new infrastructure or economic advances that are not already planned in the indirect and cumulative effects study area, no substantial induced growth would be expected as a result of the project.

During construction, indirect effects to neighborhood cohesion, community facilities, environmental justice populations, and bicycle paths and recreational resources are expected to be minor. Construction could cause temporary noise impacts, and increased travel times within the area, and increased emergency vehicle response times. However, the project would have long-term beneficial effects such as reduced travel time and increased travel reliability. The project also would provide better bicycle and pedestrian passage between communities, residents, neighborhoods and businesses, as well as safer interactions between motor vehicles and bicycles and pedestrians.

FHWA finds that the indirect effects would not be significant.

Cumulative Effects

Many of the past actions that have contributed to the baseline for this analysis occurred as part of the residential and mixed used development. This development transformed a rural landscape into a suburban and urban environment, resulting in a loss of wildlife habitat and species; impacts to wetlands, streams, and floodplains; and increased levels of air and water pollution. Much of the development does not have any associated stormwater management facilities, since many of the areas were developed before stormwater management requirements were in place. The original development also formed the basis for the substantial level of population growth the region experienced. In association with this growth came an increase in employment and investment in the indirect and cumulative effects study area. The indirect and cumulative effects study area underwent a period of rapid urban development from the 1970s to the 1990s. Large residential neighborhoods, such as the Lake Anne and Lake Fairfax Park developments, were constructed in the vicinity of Route 7 during this time period. Outside of the Route 7 residential development, many mixed use retail/office/residential centers were established, such as Reston, Tysons, Vienna, Oakton, and Fair Lakes. Residences, schools, golf courses, and other

community facilities associated with these centers were established surrounding these centers. While the developments typically avoided stream corridors, many developments were constructed on the forested area adjacent to the streams, reducing the acreage of natural ecosystems associated with the streams. The remaining natural areas are now largely restricted to the major stream corridors, which have received higher levels of protection since the 1980s.

The project would widen an existing roadway and update bicycle and pedestrian facilities in a highly developed area that has been previously disturbed, limiting the effects of converting other land uses and limiting effects to neighborhoods, community facilities, and environmental justice populations. Although this area has experienced land use conversions and increases in population in the past, these improvements would have a moderate beneficial cumulative impact by improving capacity of the roadway, possibly relieving congestion, and providing an alternate mode of transportation for residents to access other neighborhoods and community facilities. The project could have short-term minor adverse effects while the roadway and shared use path are under construction. However, the short-term beneficial effect of more jobs and associated expenditures resulting from the project is expected to benefit the local communities.

The project's impacts to waters of the United States, 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; however, the effects should be minimized by implementation of best management practices and compensatory mitigation. Construction of the project Alternative would potentially contribute to minor, localized increases in pollutants and nutrients causing impairment to waterways. Since construction of the project would upgrade and replace current stormwater management systems, implementation of the project could improve roadway runoff water quality from the current conditions.

Damage or loss of historic resources was far more prevalent from actions that occurred prior to the National Historic Preservation Act of 1966. That law, combined with the establishment of historic resource protection objectives established at the local planning level such as the Fairfax's Architectural Review Board and the History Commission, have reduced the rates of impacts to historic resources. While the project would affect two historic resources and two historic districts, the cumulative effects are not anticipated to be substantial with the protections provided by the Section 106 process for federal actions and by the plan review process by Fairfax's Architectural Review Board and the History Commission for other projects.

In summary, past and present actions have affected the current state of socioeconomic, natural, and historic resources within the associated indirect and cumulative effects study area, and future actions would continue to affect these resources irrespective of this project. However, since the region is already highly developed, cumulative effects of the project are expected to be minimal. Additionally, current regulatory requirements and planning practices are helping to avoid or minimize the contribution of present and future actions to adverse cumulative effects for socioeconomic, natural, and historic resources.

FHWA finds that the cumulative effects would not be significant.

Council on Environmental Quality's Regulations

The Council on Environmental Quality's regulations implementing the National Environmental Policy Act require consideration of a project's context and intensity in determining whether the project would have a significant impact (40 C.F.R. 1508.27).

Context

The regulations state, "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 on the project area.

Intensity

The regulations identify 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 C.F.R. 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 effects, including reduced congestion and improved access management. In addition, pedestrian and bicycle features will enhance opportunities for nonmotorized travel along Route 7. Mitigation measures such as noise barriers would be provided where they are reasonable and feasible. Stormwater management features would be provided within some sections of Route 7 that were constructed at a time when less stringent stormwater controls were required.
- 2. The degree to which the project affects public health or safety.

Public Health

Air Quality. The project is located within a Moderate Ozone Nonattainment area, a Fine Particulate Matter ($PM_{2.5}$) Nonattainment area, and a volatile organic compounds (VOC) and oxides of nitrogen (NO_x) Emissions Control Area. The project is exempt from a carbon monoxide air quality analysis per the transportation conformity regulations; therefore, a project-level carbon monoxide air quality analysis is not required. With regard to $PM_{2.5}$, the project is not a project of air quality concern and a $PM_{2.5}$ hot spot analysis is not required. In addition, the project is part of an air quality conforming long range transportation plan.

During construction, emissions from diesel-powered construction equipment, burning of debris, fugitive dust, and the use of cutback asphalt, would be temporary. This project would comply with all applicable local, state, and federal regulations, including 9 VAC 5-130 regarding open burning restrictions, 9 VAC 5-50, Article 1 regarding fugitive dust precautions, and 9 VAC 5-45, Article 7 regarding cutback asphalt restrictions. To control

dust, measures would be taken to minimize exposed earth by stabilizing with grass, mulch, pavement, or other cover as early as possible. Other measures will be implemented per VDOT's current Road and Bridge Specifications to minimize air pollution.

Safety

The construction of the project is not anticipated to adversely affect safety. On the contrary, reducing congestion and improving access management should improve overall safety along the corridor. In addition, the pedestrian and bicycle facilities should improve the safety of those traveling via those modes.

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 area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas. The Virginia State Historic Preservation Officer concurred that the project would not adversely affect historic properties. The Fairfax County Park Authority concurred that the project will not adversely affect the activities, features, and attributes of the affected parks. No prime farmlands, wild and scenic rivers, or ecologically critical areas would be impacted. With regard to wetlands, as stated above, VDOT refined a number of design elements in order to avoid and minimize impacts to wetlands. These design refinements resulted in impact reductions of 4.41 acres of wetlands. The project would result in impacts to approximately 2.15 acres of wetlands. All applicable permits will be acquired prior to the start of construction in wetland areas and all appropriate mitigation, to be determined in coordination with the permitting agencies, will be implemented for unavoidable impacts.

FHWA finds that the project would not have significant impacts on historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.

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 the environmental resource agencies. No environmental resource agency has expressed opposition to the construction of the project, and the U.S. Environmental Protection Agency did not find that the project would be unsatisfactory from the standpoint of public health or welfare or environmental quality.

FHWA finds that the degree to which the effects on the environment are highly controversial does not require the preparation of 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. Roadways such as Route 7 have been widened around the country as well as within the Commonwealth of Virginia. The potential environmental impact areas from roadways are described in FHWA's National Environmental Policy Act guidance documents, and the potential 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 Route 7 will 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 environmental thereby requiring the preparation of an Environmental Impact Statement. This project is a 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 independent utility and does not force additional transportation improvements to be made to the transportation system. The Environmental Assessment, Revised Environmental Assessment, and Indirect and Cumulative Effects Technical Memorandum contain detailed discussions of cumulative impacts. As stated previously, FHWA finds that the cumulative impacts would not be 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 have no adverse effect on districts, sites, highway 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. Federally listed species have not been documented in the study area, but could occur based on predictive modeling. Database queries identified the northern long-eared bat as potentially being in the project area, and Fairfax County is considered to be in the historical range of the rusty patched bumblebee. However, the majority of the area associated with the project has been disturbed by previous roadway improvements as well

as residential and commercial development. Given the habitat requirements, historic observations, and distance to known observations, it is unlikely that the project would result in impacts to threatened and endangered species. Further coordination will be conducted with resource agencies during the Section 404 permitting process, and final Section 7 effect determinations would be made at that time.

All applicable provisions of the Endangered Species Act and consultation required thereunder will be completed prior to construction. Based on FHWA's and VDOT's previous experience consulting with the U.S. Fish and Wildlife Service (USFWS) under Section 7, even if the project is likely to adversely affect the northern long-eared bat or rusty patched bumblebee 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.

Based on the above, the impacts to threatened and endangered species populations would not be significant. Notwithstanding, FHWA will not authorize the use of federal funds for construction until VDOT documents the results of the Section 7 consultation in a NEPA reevaluation for FHWA's consideration.

10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment. The project does not knowingly threaten a violation of any Federal, State, or local law for the protection of the environment. The construction of the project will comply with all applicable Federal, State, or local laws, and all applicable permits will be acquired prior to construction.

FHWA Finding

Based on the foregoing information as well as the Environmental Assessment, Revised Environmental Assessment, and VDOT's letter requesting a Finding of No Significant Impact, 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.