

INTERSTATE 395 EXPRESS LANES

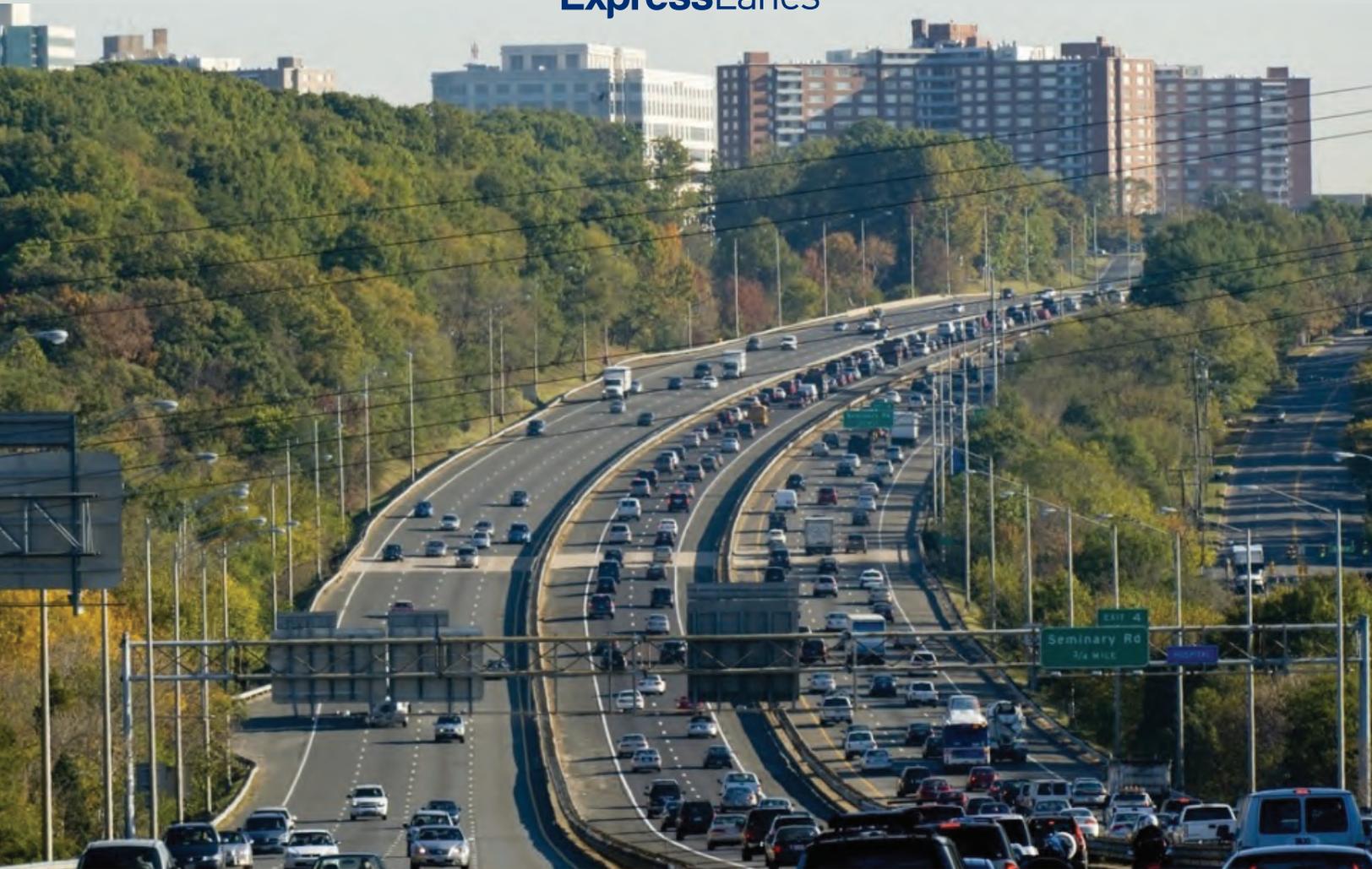
NORTHERN EXTENSION

ENVIRONMENTAL ASSESSMENT

SEPTEMBER 2016



ExpressLanes



September 14, 2016 Errata to Interstate 395 Express Lanes Northern Extension Environmental Assessment

Technical corrections to the *Interstate 395 Express Lanes Northern Extension Environmental Assessment* include:

Page	Location	Change
41	Table 3-1 Cultural Resources	"Historic Resource Properties (acres) – Build Alternative – 2.41*"
43	Table 3-1 Section 4(f)	"Section 4(f) Use (acres of use to historic properties) – Build Alternative – 2.41*"
43	Table 3-1 Footnote	"Currently, 5.91 acres of potential impact is estimated for the construction of noise barriers, with 2.41 acres outside of the VDOT right of way and within historic districts (3.50 acres of potential impact are within VDOT right of way). The 2.41 acres of impact would be considered a Section 4(f) use. "
54	Section 3.7.2 Build Alternative 2 nd paragraph, line 1	"Based upon preliminary design, the proposed project could impact up to approximately 5.91 acres of historic resource property for the construction of noise barriers."
54	Section 3.7.2 Build Alternative 2 nd paragraph, line 4	"Approximately 2.41 acres would be outside of the VDOT right of way and would be located within historic districts (3.5 acres of potential impact are within VDOT right of way)."
73	Section 3.17 Section 4(f) Build Alternative 2 nd paragraph, line 1	"Currently, 5.91 acres of potential impact is estimated for the construction of noise barriers, with 2.41 acres outside of the VDOT right of way and within historic districts (3.50 acres of potential impact are within VDOT right of way)."
73	Section 3.17 Section 4(f) Build Alternative 2 nd paragraph, line 4	"The 2.41 acres of impact would be considered a Section 4(f) use."

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
and
VIRGINIA DEPARTMENT OF TRANSPORTATION

ENVIRONMENTAL ASSESSMENT

Interstate 395 Express Lanes Northern Extension

City of Alexandria, and Arlington and Fairfax Counties

Project Number: 0395-969-205, P101; UPC: 108313

Federal Project Number: NHPP-395-4(189)

Submitted Pursuant to 42 U.S.C. 4332(2)(C)

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John Simkins

For: Division Administrator

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List of Acronyms

AASHTO	American Association of State Highway and Transportation Officials
APE	Area of Potential Effect
BEA	Bureau of Economic Analysis
BMP	Best Management Practice
BRT	Bus Rapid Transit
C-CAP	Coastal Change Analysis Program
CAA	Clean Air Act
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CLRP	Constrained Long-Range Plan
CO	Carbon Monoxide
CWA	Clean Water Act
dBA	Decibel
DC SHPO	District of Columbia State Historic Preservation Office
DDOT	District of Columbia Department of Transportation
DEIS	Draft Environmental Impact Statement
DoD	Department of Defense
DRPT	Department of Rail and Public Transportation
EA	Environmental Assessment
EDR	Environmental Data Resources, Inc.
EFLHD	Eastern Federal Lands Highway Division
EJ	Environmental Justice
EPA	Environmental Protection Agency
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FRA	Federal Railroad Administration
FY	Fiscal Year
GEMS	Geospatial and Educational Mapping System
GIS	Geographic Information Systems

GP	General Purpose
HHS	Health and Human Services
HOT	High Occupancy Toll
HOV	High Occupancy Vehicle
I-395	Interstate 395
ICE	Indirect and Cumulative Effects
IMR	Interchange Modification Report
L _{eq}	Equivalent Sound Level
LMI	Labor Market Information
MSATs	Mobile Source Air Toxics
MWCOG	Metropolitan Washington Council of Governments
NAAQS	National Ambient Air Quality Standards
NAC	Noise Abatement Criteria
NB	Northbound
NCHRP	National Cooperative Highway Research Program
NCRTPB	National Capital Region Transportation Planning Board
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NHS	National Highway System
NOAA	National Oceanic and Atmospheric Administration
NOX	Oxides of Nitrogen
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWF	National Wildlife Federation
PIM	Public Information Meeting
PM	Particulate Matter
PPTA	Public-Private Transportation Act
PTC	Pentagon Transit Center
RECs	Recognized Environmental Concerns
SB	Southbound
SIP	State Implementation Plan
SOV	Single-Occupancy Vehicles

STAG	Stakeholder Technical Advisory Group
STRAHNET	Strategic Highway Network
SWM	Stormwater Management
SYIP	Six-Year Improvement Program
TDM	Transportation Demand Management
TIP	Transportation Improvement Program
TRB	Transportation Research Board
TWG	Technical Working Group
USACE	United States Army Corps of Engineers
USFS	United States Forest Service
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VAFWIS	Virginia Fish and Wildlife Information Service
VDACS	Virginia Department of Agricultural and Consumer Services
VDCR	Virginia Department of Conservation and Recreation
VDEQ	Virginia Department of Environmental Quality
VDGIF	Virginia Department of Game and Inland Fisheries
VDH	Virginia Department of Health
VDHR	Virginia Department of Historic Resources
VDMME	Virginia Department of Mines, Minerals and Energy
VDOT	Virginia Department of Transportation
VEGIS	Virginia Environmental Geographic Information Systems
VMRC	Virginia Marines Resources Commission
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
VOF	Virginia Outdoors Foundation
WHS	Washington Headquarters Service

CHAPTER 1.0 PURPOSE AND NEED

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration (FHWA), has initiated a study for the Interstate 395 (I-395) Express Lanes Project (Northern High Occupancy Toll [HOT] Lanes) to extend the I-95 Express Lanes in the City of Alexandria, and Arlington and Fairfax Counties, Virginia. Pursuant to the National Environmental Policy Act of 1969, as amended (NEPA), and in accordance with FHWA regulations¹, this Environmental Assessment (EA) has been prepared to analyze and document the potential social, economic, and environmental effects associated with the proposed transportation improvements.

1.1 DESCRIPTION OF THE STUDY AREA

The study area encompasses approximately eight miles of the I-395 corridor from Turkeycock Run in Fairfax County to the vicinity of Eads Street near the Pentagon in Arlington County, as shown in **Figure 1-1**. Transition areas extending slightly beyond these termini are included in order to connect the proposed improvements with the existing facility on either end. Additional signage, maintenance of traffic, and noise barrier activities are anticipated to occur beyond the study area. Crossroads and interchange areas also are included in the study area, as well as lands adjacent to the corridor^{2,3}. The following interchanges along I-395 are included in the study area, moving south to north:

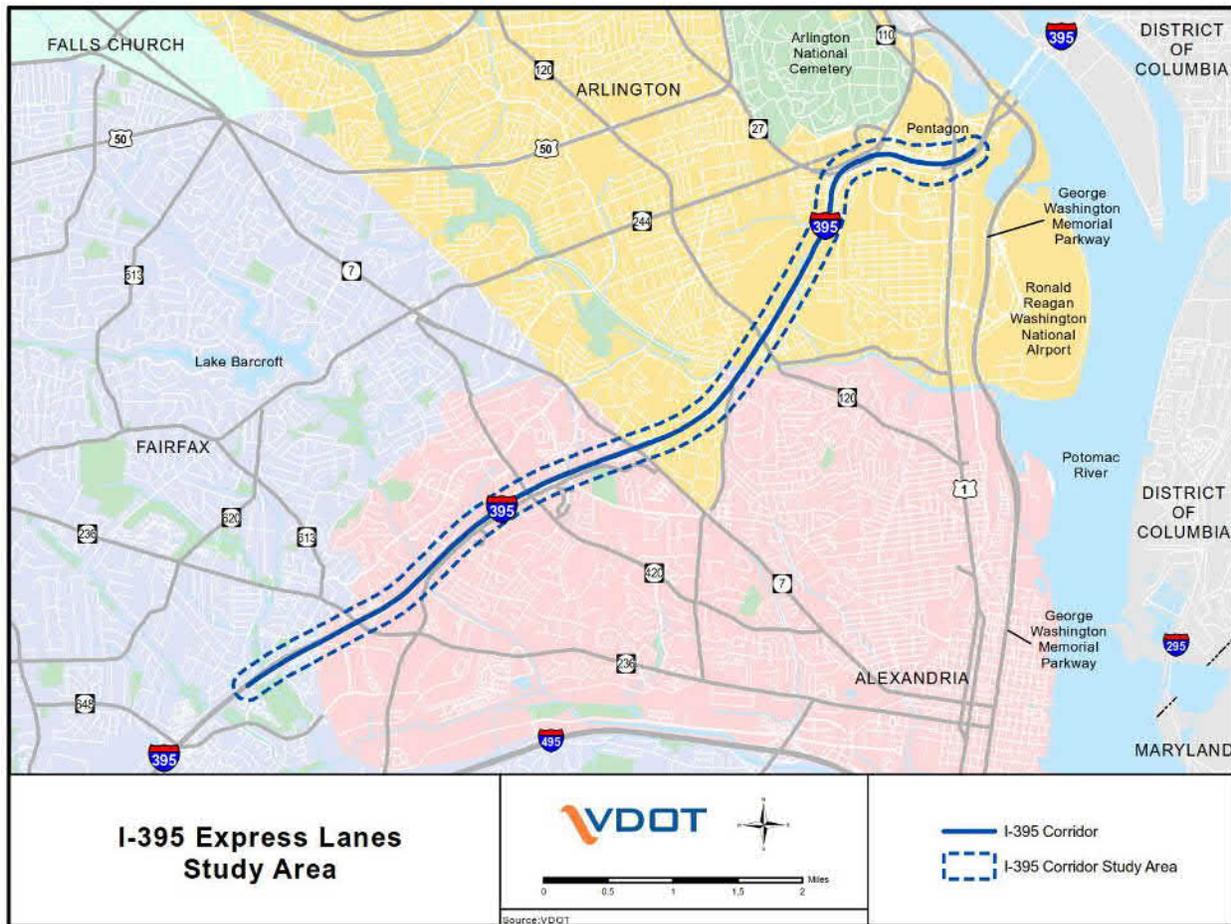
- Turkeycock Run;
- Duke Street/Little River Turnpike (Route 236);
- Seminary Road (Route 420);
- King Street (Route 7);
- Shirlington Road;
- Glebe Road (Route 120);
- Washington Boulevard (Route 27); and
- Eads Street near the Pentagon.

¹ NEPA and FHWA's regulations for Environmental Impact and Related Procedures can be found at 42 USC § 4332(c), as amended, and 23 CFR § 771, respectively.

² The study area is approximately 600 feet to either side of the existing corridor for a distance of eight miles. The study area was established to identify the full extent of environmental resources and their relevance to the project. Specific potential environmental consequences resulting from the expansion and conversion of the two existing reversible High Occupancy Vehicle (HOV) lanes on I-395 to three managed HOT lanes are documented in **Chapter 3.0, Environmental Consequences**.

³ The traffic analysis study area encompasses approximately ten miles of existing I-395 from south of the Edsall Road Interchange to the 12th Street Expressway in Washington, D.C. which is located just north of the entry and exit points of the existing HOV facility along I-395. The study area along the roadways with access to and from I-395 generally includes one major signalized intersection on either side of the interstate and all general purpose and HOV ramps serving I-395. See the *Traffic and Transportation Technical Report* (VDOT, 2016j) for additional details.

Figure 1-1: Study Area



1.2 INTERSTATE 395 CORRIDOR BACKGROUND AND STUDY HISTORY

The I-395 corridor begins at the I-95 / I-495 Capital Beltway Interchange and ends at New York Avenue NW (Route 50) intersection in northwest Washington, D.C., an approximate distance of 14 miles. I-395 is part of the National Highway System (NHS)⁴ and the Strategic Highway Network (STRAHNET)⁵.

The existing I-395 facility within the study limits generally includes four northbound and four southbound general purpose lanes and two reversible High Occupancy Vehicle (HOV) lanes between the northbound and southbound general purpose lanes. The HOV lanes operate in the northbound direction between 2:30 AM and 11:00 AM with HOV 3+ restrictions in effect from 6:00 AM to 9:00 AM. The HOV lanes operate in the southbound direction from 1:00 PM to 12:00 AM with HOV 3+ restrictions in effect from 3:30 PM to 6:00 PM.

⁴ NHS consists of major roadways important to the nation's economy, defense, and mobility. The NHS includes the interstate highway system as well as other roads connecting to major ports, airports, public transportation facilities, or other intermodal transportation services.

⁵ STRAHNET is a system of highways important to the United States' strategic defense policy providing defense access, continuity and emergency capabilities for defense purposes.

In 1995, the Public-Private Transportation Act (PPTA) was signed into law and was amended and re-enacted in 2005. PPTA allows for private entities to solicit VDOT to develop and/or operate and maintain transportation facilities that VDOT determines demonstrate a need. In November 2005, the conceptual proposal submitted by Fluor and Transurban was selected by the PPTA Advisory Panel. As proposed at that time, the project improvements would expand the HOV system in the I-95 / I-395 corridor and apply the HOT concept. As a result of this action, VDOT, in cooperation with FHWA, initiated an environmental analysis on the following proposal:

- Convert the existing two-lane HOV facility to three HOT lanes along I-395 from Eads Street to just south of Route 234 Interchange near Dumfries;
- Construct two new HOT lanes in the median from the existing terminus south of Route 234 to just north of Route 610 (Garrisonville Road);
- Add new entry/exit points between the general purpose lanes and the HOT lanes and modify existing entry/exit points; and
- Build new structures associated with the Lorton Bus-rail transfer station, flyovers, and replace existing structures at Telegraph Road over I-95 and the Franconia-Springfield pedestrian bridge.

In January 2009, FHWA issued a Categorical Exclusion (CE) for the project. In February 2011, VDOT reduced the project scope by eliminating approximately six miles of HOT lanes on I-395 including modifications to the existing interchanges, instead, focusing traffic improvements on the I-95 corridor. VDOT then announced plans for a new I-95 HOT Lanes Project and prepared an EA and then a Revised EA to assess HOT lanes on I-95 from Garrisonville Road in Stafford County to I-395 at Edsall Road in Fairfax County and link those lanes directly to the new I-495 HOT Lanes already under construction. In December 2011, upon review of the Revised EA and supporting documentation, FHWA issued a Finding of No Significant Impact (FONSI).

In 2012, VDOT and 95 Express Lanes, LLC (95 Express) entered into a Comprehensive Agreement for the development of the I-95 Express Lanes. The I-95 Express Lanes Project was completed in December 2014. The Comprehensive Agreement allows for the future development of the extension of the I-95 Express Lanes along the I-395 corridor similar to the limits originally proposed in 2005. In 2015, VDOT signed a Development Framework Agreement (see **Appendix C: Framework Agreement**) with 95 Express to extend the I-395 Express Lanes as a Concessionaire's Enhancement under the Comprehensive Agreement. The Development Framework Agreement outlines the responsibilities of both VDOT and the Concessionaire. The Agreement notes that improvements would be built largely within VDOT's existing right of way, VDOT and 95 Express would work together to finalize the scope, finance plan and agreement, and 95 Express would fund an annual transit payment.

Specific VDOT Comprehensive Agreement responsibilities include:

- Planning/environmental approvals⁶
 - Project inclusion in Metropolitan Washington Council of Governments (MWCOG) Transportation Planning Board's Financially Constrained Long-Range Plan and Transportation Improvement Plan
 - Public outreach

⁶ The EA and supporting technical documentation currently being prepared is taking an objective and independent look at the potential impacts of the proposed improvements to the human and natural environments within the identified study area.

- EA and supporting technical studies
- Preliminary noise barrier work
- Preparation and approval of an Interchange Modification Report (IMR)
- Federal, state and local agency coordination
- Transit / Transportation Demand Management (TDM) study (conducted by the Department of Rail and Public Transportation [DRPT]).

Specific 95 Express Comprehensive Agreement responsibilities include:

- Preliminary engineering and design
- Cost estimating
- Finance plan
- Design-build procurement
- Community outreach
- Construction and operation of the I-395 Express Lanes.

1.2.1 Previous Studies and Related Projects

As an essential roadway facility serving the Washington Metropolitan region, the I-395 corridor has been the subject of a number of transportation studies over the past several years. These studies include:

Background Studies

- **moveDC:** Completed in 2014, moveDC is the Multimodal-Long Range Transportation Plan for Washington, D.C. The plan evaluated the current and future needs of, and provided recommendations for all modes of transportation: walking, bicycling, transit, rail, and vehicles within Washington, D.C. A key recommendation of the Plan is to manage capacity on major commuting routes by implementing HOV and / or HOT lanes within Washington, D.C. Specifically, the Plan identified I-395 on the 14th Street Bridge along with I-395 / I-695 between the 11th and 14th Street bridges for these improvements.
- **I-95 / I-395 Transit / TDM Study Final Report:** Completed in 2008, this study assessed effective ways to improve and invest in transportation improvements within the I-95 / I-395 corridor. This study considered potential funding availability from the I-95 / I-395 HOV / Bus / HOT Lanes project for transit and TDM initiatives.
- **I-95 / I-395 Bus Rapid Transit (BRT):** Completed in 2010, this study followed the 2008 I-95 / I-395 Transit / TDM Study. The I-95 / I-395 BRT study provided more detail on potential BRT infrastructure that would be needed to support a BRT system. The I-95 / I-395 HOT lanes were considered in the I-95 / I-395 BRT study as the HOT lanes could impact the BRT system by providing a potential funding source and by providing consistent and reliable travel times.
- **14th Street Bridge Corridor Draft Environmental Impact Statement (Draft EIS):** Eastern Federal Lands Highway Division (EFLHD) of FHWA conducted a Draft EIS to reduce congestion, enhance safety and improve traffic operations in the 14th Street Bridge Corridor which is located at the northern terminus of the I-395 Express Lanes Project and extends from Eads Street in Arlington County to east of the Southeast Freeway in Washington, D.C. The study identified several highway, transit, bicycle/pedestrian, and management alternatives to be retained for further study in the Final EIS. The Draft EIS was completed in January 2012. To date, the Final EIS has not been initiated.

Recently Completed Projects

- **I-95 HOT Lanes Project:** Involved construction of HOT lanes on I-95 from Garrisonville Road in Stafford County to I-395 at Edsall Road in Fairfax County. An EA and FONSI was approved by FHWA in 2011 and the HOT lanes were opened to traffic in December 2014.
- **I-395 Auxiliary Lane Project:** Involved the construction of one additional northbound auxiliary lane on I-395 connecting the northbound on-ramp at Duke Street to the northbound off-ramp at Seminary Road. A CE was completed in 2012. The project was completed in February 2015.
- **I-395 HOV / Transit Ramp at Seminary Road Project:** Involved the construction of a south-facing ramp between the I-395 HOV lanes and the third level of the Seminary Road Interchange that provides access for HOV and transit vehicles along I-395 to the south of the interchange. The HOV ramp is reversible and permits northbound traffic to exit to Seminary Road in the morning hours and permits traffic from Seminary Road to access the southbound I-395 HOV lanes in the afternoon and evening hours. An EA was approved in 2011 and a FONSI was issued by FHWA in 2012. The ramp was opened to traffic in January 2016.

Ongoing Projects / Studies

- **Boundary Channel Drive Interchange Project:** Includes interchange modifications to improve operations and reduce weaving along southbound I-395 including constructing two roundabouts, providing connections to Long Bridge Drive and US Route 1, and multi-modal improvements. The Boundary Channel Drive improvements were identified as an alternative as part of the 14th Street Bridge Corridor Draft EIS.
- **I-395 4th Lane South Widening:** Involves the construction of a fourth lane along southbound I-395 to provide one additional through lane from north of Duke Street to south of Edsall Road. Work would include interchange modifications at both Edsall Road and Duke Street to accommodate the additional through lane and to reduce weaving issues along southbound I-395. At the Duke Street / Little River Turnpike Interchange, the loop ramp serving southbound I-395 to eastbound Duke Street traffic would be removed and replaced with a traffic signal. At the Edsall Road Interchange, the loop ramp serving westbound Edsall Road to southbound I-395 traffic would be removed and replaced with a traffic signal. VDOT is preparing a CE to comply with NEPA. The CE is scheduled to be completed in the Fall of 2016. The project is currently in design and VDOT plans for the project to be constructed concurrently with the I-395 Express Lanes Northern Extension project.
- **Pentagon Reservation Master Plan Update:** The Pentagon Reservation Master Plan Update was completed in April 2015 and provides a long-term vision for the Pentagon Reservation to improve security, enhance the quality of life for employees, and address accommodations for visitors to the Pentagon. The Plan includes specific projects to be implemented over a twenty-year timeframe including substantial improvements to the South Parking Lot in the vicinity of the Eads Street Interchange. The exact timing of the implementation of the proposed South Parking Lot Improvements is not known at this time and is dependent on federal approvals and funding availability.
- **I-95 / I-395 Transit / TDM Plan (Plan):** DRPT initiated the development of the Plan in April 2016. VDOT and DRPT are preparing a Plan to identify and prioritize mobility improvements along the I-95 / I-395 Corridor. The I-95 / I-395 Transit / TDM Plan would be used to establish a

blueprint for a set of comprehensive transit and TDM investments to be implemented in the corridor. DRPT is evaluating a number of transportation improvements that would take advantage of the Express Lanes and increase mobility in the corridor while providing alternatives to driving alone. These potential investments, to be funded by the annual transit payment from the I-395 Express Lanes Northern Extension Project, include various modes of public transportation, park & ride facilities, TDM programs and other technologies. The Plan is scheduled to be completed in December 2016.

- **Arlington National Cemetery Southern Expansion Project and Associated Roadway Realignment:** The project includes modifications to the Washington Boulevard at Columbia Pike (East) Interchange and the realignment of Columbia Pike from S. Joyce Street to the west to increase the contiguous acreage of Arlington National Cemetery. The interchange modifications include the removal of the northwest and southwest loop ramps and converting the interchange to a partial diamond configuration. Southbound Washington Boulevard would access Columbia Pike at a new signalized intersection and access from Columbia Pike to southbound Washington Boulevard would also be provided at the new signal. Arlington National Cemetery, the lead agency for the project, has been working with Arlington County and VDOT to pursue the roadway modifications and land exchange agreement. The U.S. Army Corps of Engineers is preparing an EA for the project.

1.3 NEEDS FOR THE PROJECT

Based on the background information discussed above, information gathered during public and agency meetings, and the analysis of recent data collected for this study, the following transportation needs have been identified for the study area.

- Reduce congestion;
- Provide additional travel choices;
- Improve travel reliability; and
- Improve roadway safety.

Each of these key needs is described in detail below.

1.3.1 Reduce Congestion

The I-395 corridor suffers from recurring congestion during peak commuter periods that extends for several hours during the morning and evening peak periods. The predominant travel direction in the AM peak period is northbound on I-395 toward Washington D.C. and southbound toward Stafford County during the PM peak period. The *Traffic and Transportation Technical Report* (VDOT, 2016j) further documents traffic conditions for existing (2015) and future 2040 No Build conditions in more detail including a summary of the forecasting and traffic analysis methodology.

Traffic Volumes

Existing (2015) and 2040 No Build peak hour traffic volumes for northbound and southbound I-395 for both the general purpose and HOV/HOT lanes are summarized in **Figures 1-2 and 1-3**, respectively.

Northbound I-395 – AM Peak Hour: Under existing conditions, northbound AM peak hour traffic volumes in the I-395 general purpose lanes gradually increase from 4,200 to 8,300 between Edsall Road and Glebe Road. The traffic volumes reduce to 5,500 over the Hayes Street Bridge due to the large amount of vehicles exiting the corridor and traveling to Washington Boulevard, Army Navy Drive, and other destinations in the Pentagon vicinity. General purpose traffic volumes increase to 7,600 over the Potomac River due to the traffic entering the corridor at George Washington Memorial Parkway. In the HOV/HOT lanes, traffic volumes decrease from 3,900 vehicles north of Edsall Road to 2,900 vehicles north of Turkeycock Run due to vehicles traveling from the HOT lanes to the general purpose lanes during the HOV-restricted period. Similar to the general purpose lanes, traffic volumes in the HOV lanes decrease to 2,400 over the Hayes Street Bridge due to the traffic exiting the corridor to Washington Boulevard. At the Potomac River, the HOV volumes increase to 3,500 vehicles due to the traffic entering the HOV lanes from Eads Street and north of Eads Street (from the general purpose lanes) and traveling into Washington D.C.

Southbound I-395 – PM Peak Hour: In the southbound general purpose lanes, PM peak hour traffic volumes of 5,900 leaving Washington D.C. decrease at the Hayes Street Bridge due to the traffic exiting the corridor at Route 1 and George Washington Memorial Parkway. PM peak hour volumes then gradually increase from 3,700 over the Hayes Street Bridge to 6,700 at Shirlington Road due to the traffic entering the corridor at Washington Boulevard and Glebe Road. The general purpose lane volumes then stay relatively constant between Shirlington Road and Edsall Road averaging approximately 5,900 vehicles. Traffic volumes in the southbound HOV lanes leaving Washington D.C. are approximately 3,700 vehicles and decrease to 1,800 vehicles north of Route 1 due to traffic traveling from the HOV lanes to the general purpose lanes during the HOV-restricted period. Traffic volumes in the HOV lanes then gradually increase to 3,100 north of Shirlington Road due to traffic entering the corridor from Eads Street and Washington Boulevard. Traffic then remains relatively constant until south of Turkeycock Run where the HOT lanes begin and the volumes increase from 2,700 to 3,100 due to single occupancy vehicles being permitted to travel in the HOT lanes.

To provide consistency with the regional planning efforts, the MWCOG Travel Demand Forecasting Model, Version 2.3 Build 57a was used as the basis for the development of traffic forecasts. The forecasting methodology was consistent with FHWA's Interim Guidance on the Application of Travel and Land Use Forecasting in NEPA publication (USDOT FHWA, 2010). As shown in **Figures 1-2 and 1-3**, peak hour traffic volumes are forecasted to increase in the future which will lead to more severe and a longer duration of congestion during both the AM and PM peak periods as discussed below.

Figure 1-2: Existing (2015) and 2040 No Build AM Peak Hour – Northbound I-395

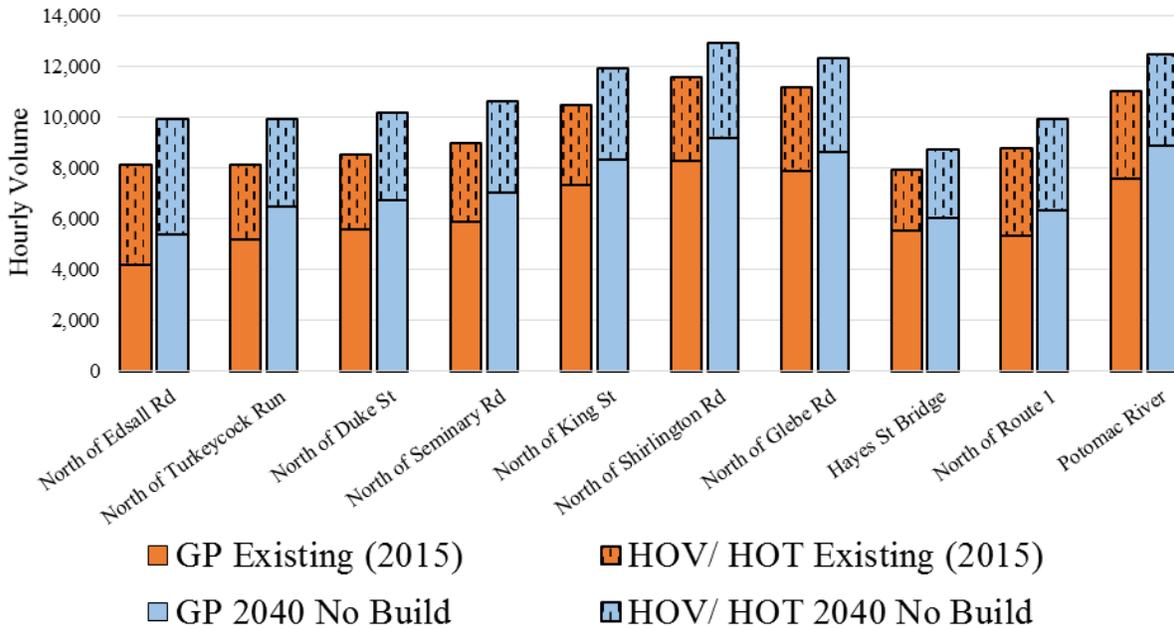
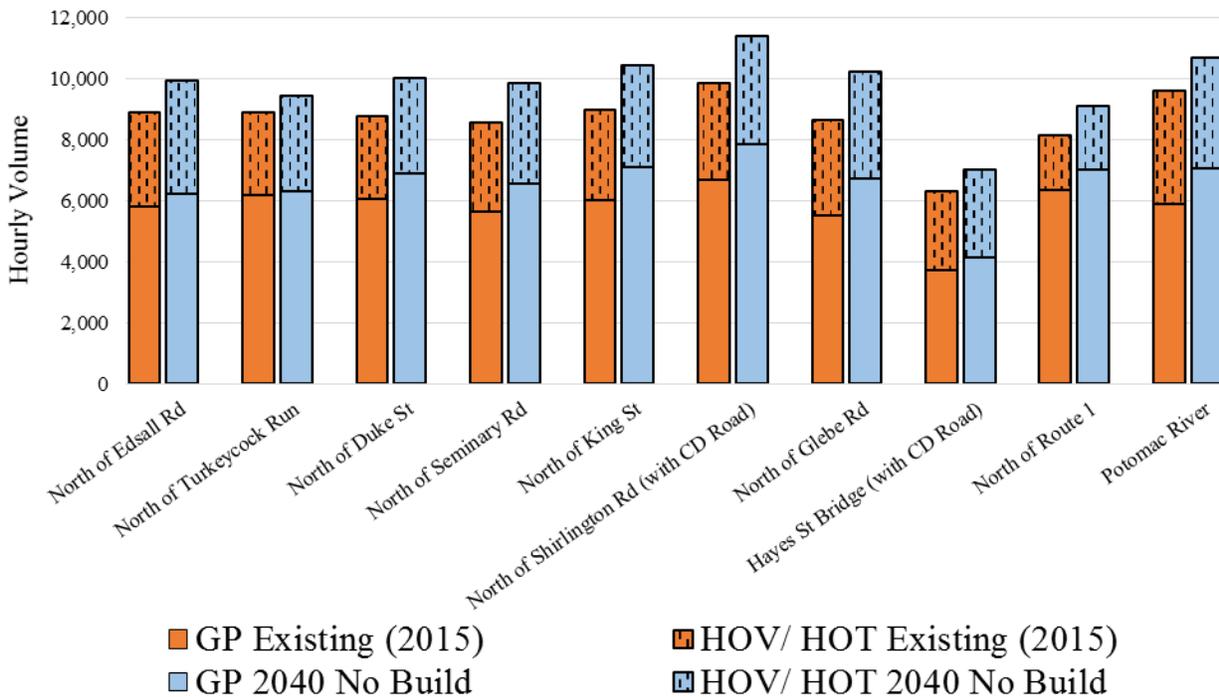


Figure 1-3: Existing (2015) and 2040 No Build PM Peak Hour – Southbound I-395



Travel Times and Speeds

As described in the *Traffic and Transportation Technical Report* (VDOT, 2016j), a VISSIM mesoscopic model was prepared for both existing (2015) and 2040 No Build conditions to assess traffic operations along I-395 from south of Edsall Road to the 12th Street Expressway in Washington, D.C. in both the general purpose and HOV/HOT lanes. Due to over-capacity conditions along I-395 that are experienced for several hours during the morning and evening peak periods, the AM peak period was evaluated for four hours from 6:00 AM to 10:00 AM and the PM peak period was evaluated for four hours from 3:00 PM to 7:00 PM. A comparison of travel times along I-395 for existing and 2040 No Build conditions is summarized in **Figures 1-4 and 1-5** for the peak travel direction (northbound in the AM peak period and southbound in the PM peak period) for each of the four analysis hours. **Figures 1-6 and 1-7** summarize the travel speeds by segment along I-395 for existing conditions and No Build conditions for the northbound I-395 and southbound I-395 travel directions, respectively.

AM Peak Period – Northbound General Purpose Lanes: Existing travel times along the northbound I-395 general purpose lanes for the four hours during the AM peak period range from 19 to 31 minutes with average travel speeds ranging from 20 to 34 MPH, respectively, reflecting high levels of congestion during the four-hour peak period. The 7 AM to 8 AM hour has the longest travel time (31 minutes) among the four AM peak hours due to higher congestion levels and lower speeds during this hour between Edsall Road and King Street.

Under 2040 No Build conditions, travel times along the northbound I-395 general purpose lanes increase by 10 to 19 minutes compared to existing conditions in the AM peak period. A large portion of the travel time increase occurs south of the Turkeycock Run Interchange as a result of the congestion and queuing along northbound I-395 extending farther to the south during peak hours.

AM Peak Period – Northbound HOV/HOT Lanes: Existing travel times along the northbound I-395 HOV/HOT lanes range from 10 to 12 minutes with average travel speeds of 51 to 58 MPH. Travel times in the northbound HOV/HOT lanes are two to three times shorter than travel times in the northbound general purpose lanes. Travel speeds in the HOV/HOT lanes generally operate under free-flow conditions south of the Eads Street Interchange area; however, outside of the designated HOV periods northbound motorists in the HOV lanes experience congestion and lower travel speeds due to downstream congestion approaching Washington, D.C., that occasionally extends farther to the south due to the use of the HOV lanes by single occupant vehicles.

Under 2040 No Build conditions, travel times from 6 AM to 7 AM remain approximately the same in the northbound HOV/HOT lanes when comparing existing to No Build conditions. From 7 AM to 10 AM, travel times increase by 1.5 to 5 minutes. Travel times increase south of Turkeycock Run as northbound motorists in the HOT lanes attempt to exit to the general purpose lanes at Turkeycock Run and encounter greater congestion in the general purpose lanes compared to existing conditions. Travel times also increase between Eads Street and 14th Street in Washington, D.C. as a result of higher traffic volumes and congestion levels in this section where the HOV lanes are open to travel by all motorists.

PM Peak Period – Southbound General Purpose Lanes: Existing travel times along the southbound I-395 general purpose lanes range from 27 to 42 minutes with average travel speeds of 14 to 22 MPH. Travel times from 4 PM to 6 PM hour are the greatest with an average of 40 minutes.

Under 2040 No Build conditions, travel times along the southbound I-395 general purpose lanes increase by 10 to 19 minutes compared to existing conditions with the largest increases of 18 to 19 minutes occurring between 5 PM and 7 PM. Travel times increase incrementally throughout the study limits, with the largest travel time increases occurring north of Shirlington Road. As a result of the I-395 4th Lane South Widening project which is included in the No Build Alternative (see **Section 2.3.1**), travel speeds increase approaching and south of the Duke Street Interchange.

PM Peak Period – Southbound HOV/HOT Lanes: Existing travel times along the southbound I-395 HOV/HOT lanes are approximately 10 minutes with average travel speeds of 57 MPH. Travel times in the southbound HOV/HOT lanes are three to four times shorter than travel times in the southbound general purpose lanes.

Under 2040 No Build conditions, travel times from 3 PM to 7 PM remain approximately the same in the southbound HOV/HOT lanes when comparing existing to No Build conditions.

Figure 1-4: Northbound Overall Travel Time Summary - AM Peak Period

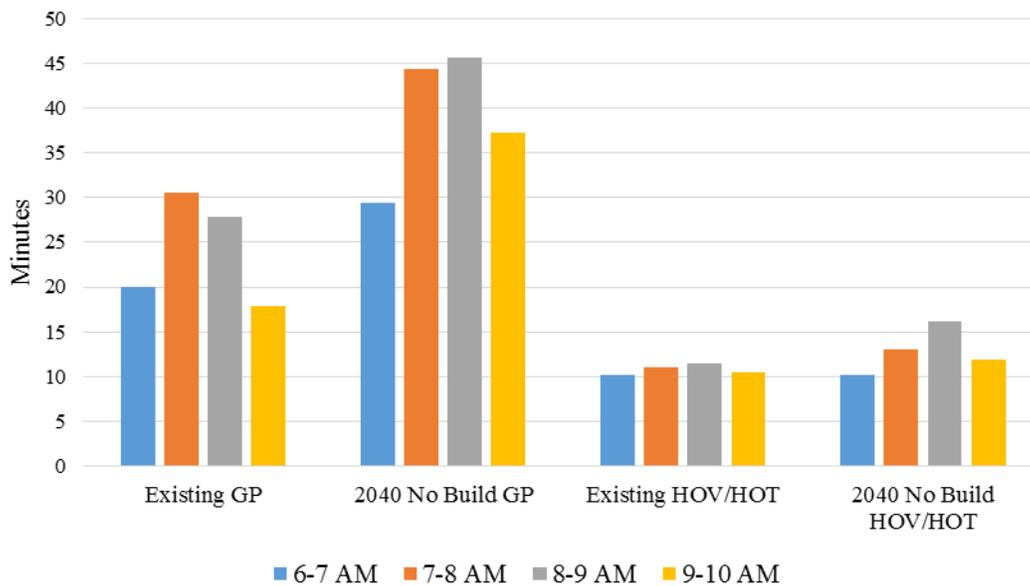


Figure 1-5: Southbound Overall Travel Time Summary - PM Peak Period

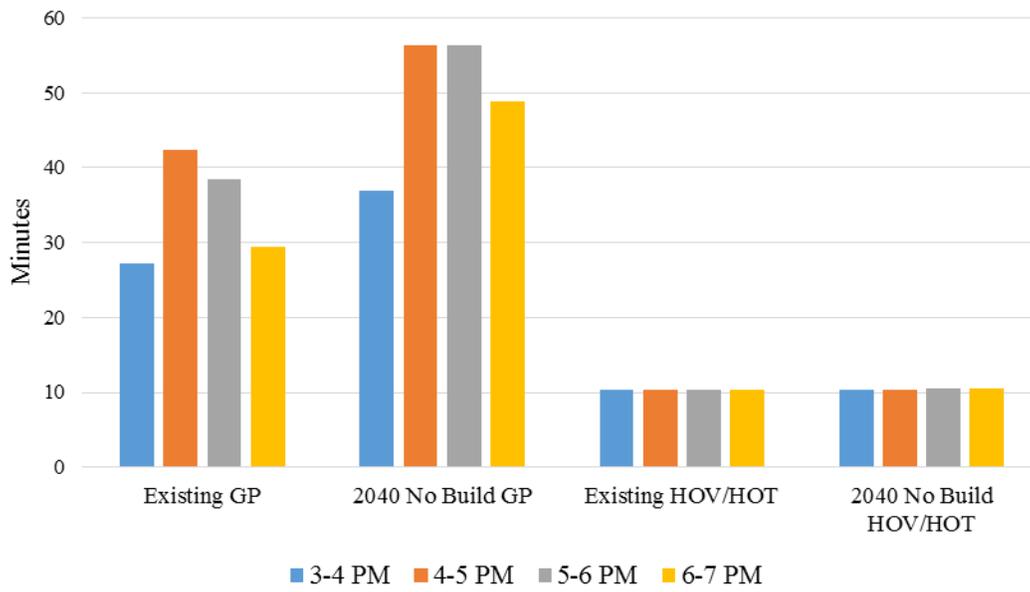


Figure 1-6: AM Peak Period Travel Speeds – Northbound I-395

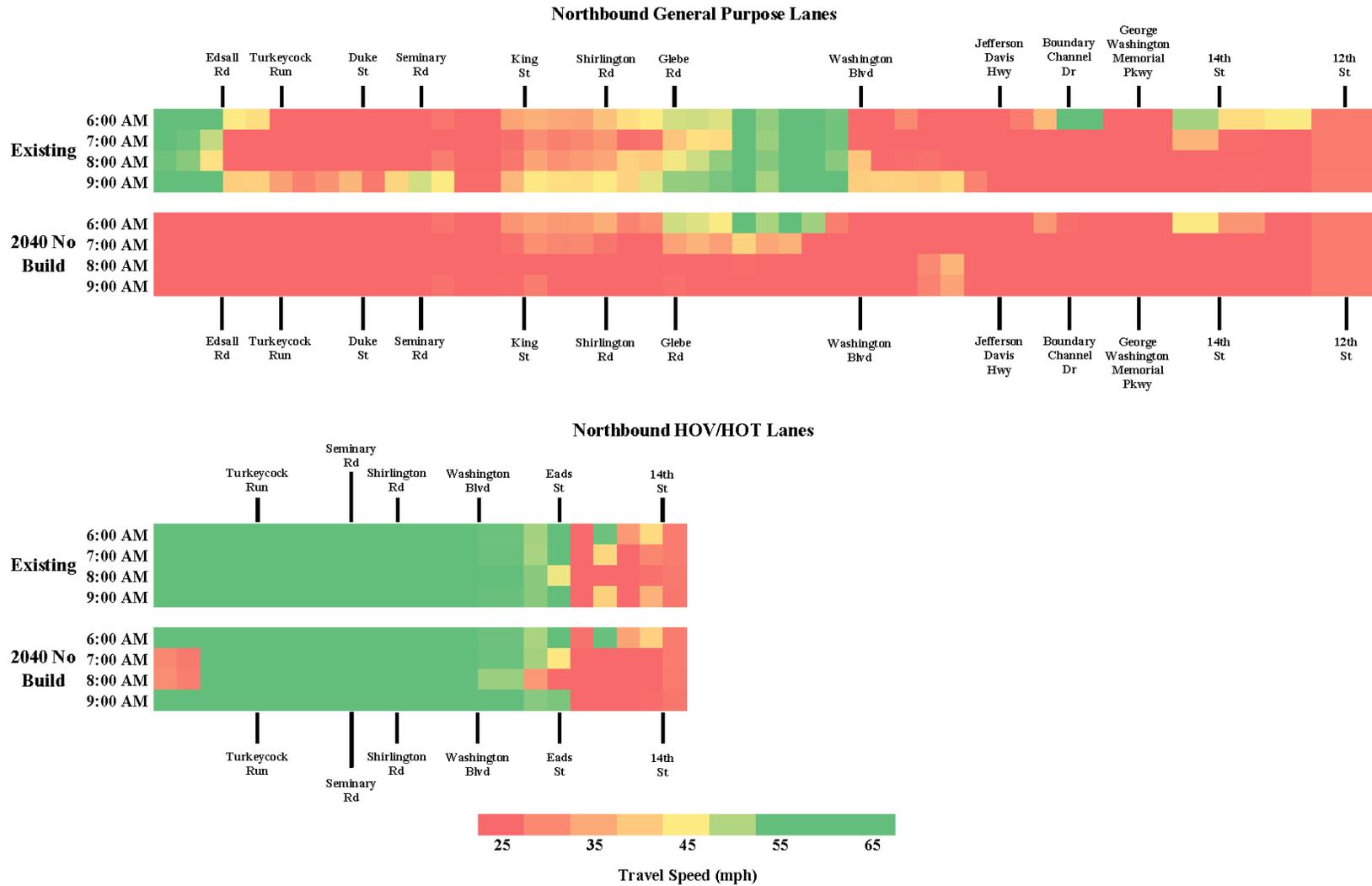
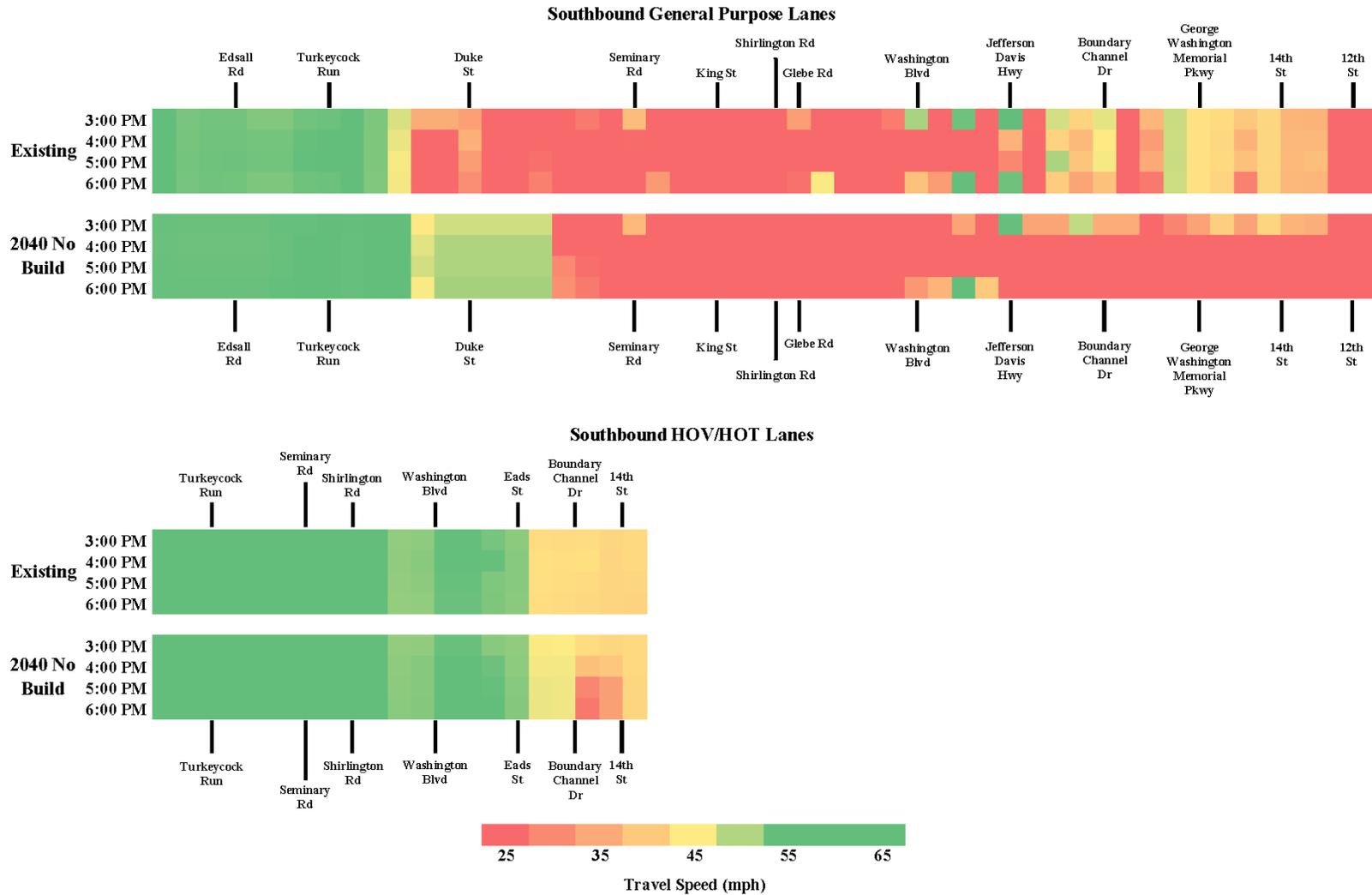


Figure 1-7: PM Peak Period Travel Speeds – Southbound I-395



1.3.2 Provide Additional Travel Choices

I-395 is a multi-modal corridor that provides transportation services to a variety of users between Stafford County and Washington, D.C., in addition to regional travelers. The corridor provides access to the Pentagon which is a regional transit hub that serves the Metro system's Yellow and Blue lines, local and regional commuter buses, formal ridesharing, and informal ridesharing (also known as slugging). Slugging is an important component of travel in the I-395 corridor, which is a form of carpooling from designated pickup and drop off points located in close proximity to an HOV facility. The incentive to the driver and the passenger is the ability to use the HOV facility. Because of the proximity of the Pentagon Reservation and the Pentagon Transit Center (PTC) to the I-395 corridor, the Pentagon Reservation functions as a regional transit hub providing a linkage for commuters. The PTC accommodates eight transit bus services with nearly 850 buses per day and approximately 160 buses in the AM and PM peak hours. Over 19,000 bus passengers travel through the PTC daily from 6 AM to 9 AM and from 3 PM to 6 PM with over 5,600 peak period passengers using the Pentagon Metrorail Station (Washington Headquarters Service, 2015). The I-395 corridor also serves many commuter and local bus lines serving local communities in northern Virginia and Washington, D.C. These transit services suffer from the same congestion deficiencies as other transportation users along the I-395 corridor.

In addition, the existing Express Lanes network is critical because the network provides additional travel choices for a variety of users including motorists along I-95 / I-395/ and I-495. Travel choice is limited for vehicles with less than three occupants that want to continue north along the I-95 / I-395 Express Lanes facility north of the Turkeycock Run Interchange where these vehicles are required to exit the HOT lanes and enter the general purpose lanes. Similarly, vehicles with less than three occupants traveling southbound along I-395 within the project limits do not have an option to access the Express Lanes system until south of Turkeycock Run.

1.3.3 Improve Travel Reliability

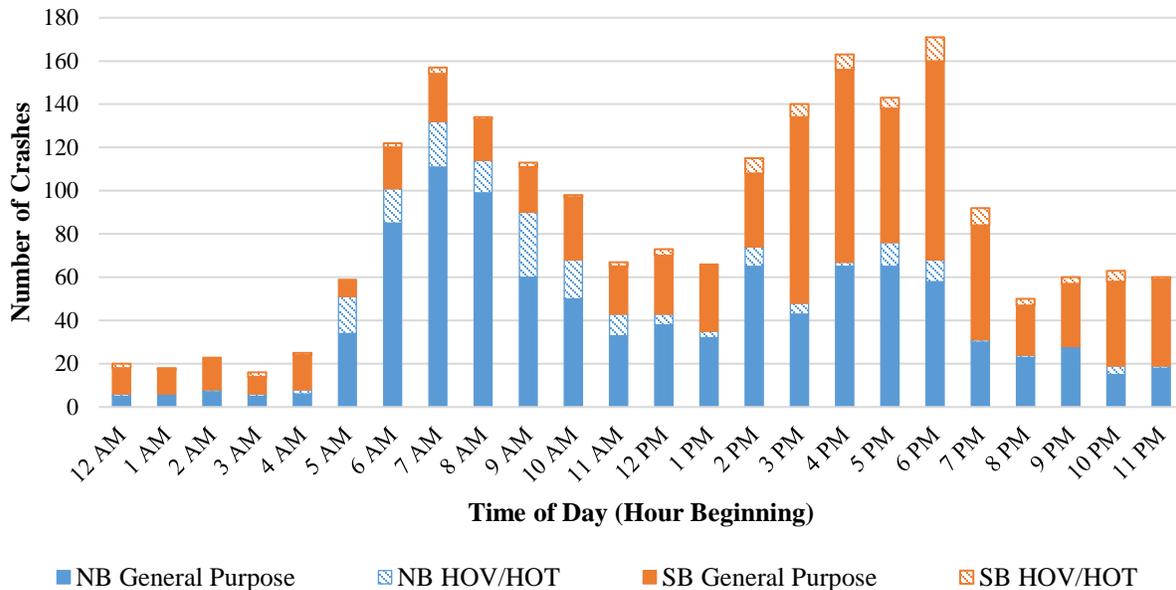
Travel time reliability is a quality of life issue for travelers along I-395 including HOV motorists and those using bus transit services along the corridor. Based on travel speed data in both the I-395 general purpose lanes and HOV lanes, highly variable travel speeds and resulting travel times are experienced by motorists as a result of numerous factors including both recurring and non-recurring congestion, crash incidents, disabled vehicles, and weather events. Although there is a higher degree of travel time reliability in the HOV lanes compared to the general purpose lanes, high levels of congestion and reduced travel speeds are experienced in the northbound HOV lanes in the AM peak period approaching the Eads Street Interchange and entering Washington, D.C. As discussed in **Section 1.3.1**, the duration and extent of congestion within the HOV lanes in this area is expected to increase in the future as traffic volumes increase. There is a need to provide highly reliable travel times for motorists and transit services along the I-395 corridor throughout the day.

1.3.4 Improve Roadway Safety

Recurring daily congestion due to heavy commuter traffic that extends for many hours during both the morning and evening peak periods creates the potential for crashes along the I-395 corridor in both the general purpose and HOV/HOT lanes. Crash data was reviewed along both the I-395 general purpose and HOV/HOT lanes from approximately 0.45 mile south of Edsall Road to the Potomac River during the four-year period from January 1, 2012 through December 31, 2015. A total of 2,622 crashes were reported

including 1,461 (56 percent) rear end crashes, which are frequently attributed to congestion. **Figure 1-8** summarizes weekday (Monday through Friday) crashes by time of day. Seventy-eight percent of all reported crashes occurred on weekdays from Monday through Friday. As shown, 26 percent of all weekday crashes occurred during the AM peak period from 6:00 AM to 10:00 AM and 30 percent of all weekday crashes occurred during the PM peak period between 3:00 PM and 7:00 PM. Fifty-six (56) percent of all weekday crashes occurred during these eight hours indicating a higher proportion of crashes occurring when traffic volumes are highest and congestion contributes to the potential for crashes.

Figure 1-8: Weekday (Monday – Friday) Crashes by Time of Day (2012 – 2015)



Crash rates per 100 million vehicle miles traveled for the northbound and southbound I-395 general purpose and HOV/HOT lanes are summarized in **Table 1-1** for both total crashes and injuries. Calculated crash rates were compared to VDOT’s annually-published statewide average interstate, statewide average urban interstate, and Northern Virginia average interstate rates for both total crashes and injuries.

The total crash rate in the northbound general purpose, southbound general purpose, and northbound HOV/HOT lanes is greater than the statewide average interstate crash rate, statewide average urban interstate crash rate, and Northern Virginia average crash rate. The total crash rate for the southbound HOV/HOT lanes is lower than all three average crash rates; however, crash rates ranging from 134 to 198 crashes per 100 million vehicle-miles traveled (VMT) were reported just south of the Eads Street Interchange in the vicinity of the weave between the on-ramp from Eads Street and the off-ramp to the general purpose lanes, which are greater than all three average crash rates. Of the 68 crashes reported within the southbound HOV lanes from Turkeycock Run to Eads Street, 21 (31 percent) crashes occurred at this location.

Under future No Build conditions, with anticipated increases in travel demand, congestion in the peak periods will increase, thereby increasing the potential for congestion-related crashes which account for the majority of reported crashes under existing conditions.

Table 1-1: Crash and Injury Rate (per 100 million VMT) Compared to Average Statewide Rates

Crash Rate Type	I-395 Crash Rates by Facility (2012 – 2015 Crashes)				Statewide Average Rates ¹		
	NB GP	NB HOV/ HOT	SB GP	SB HOV/ HOT	Interstate	Urban Interstate	Northern Virginia Interstate
Total Crash Rate²	119	109	113	39	68	81	97
Injury Rate³	29	44	37	39	30	37	41

¹ Average of the 2012, 2013, and 2014 crash rates published annually by VDOT's Traffic Engineering Division

² Crashes per 100 million vehicle miles traveled

³ Injuries per 100 million vehicle miles traveled

1.4 PURPOSE AND NEED SUMMARY

Based on the existing and future transportation conditions described above, the purpose and need of the project is to:

- Reduce congestion;
- Provide additional travel choices;
- Improve travel reliability; and
- Improve roadway safety.

CHAPTER 2.0 ALTERNATIVES

The process of developing alternatives to address the transportation needs along the Interstate 395 (I-395) corridor has been ongoing for several years as documented in the *Alternatives Analysis Technical Report* (VDOT, 2016a). This project was previously evaluated as part of a larger project that proposed establishing Express Lanes along the I-95 and I-395 corridors. The original plan was to connect the Express Lanes between I-395 (the Northern Section of the project) and I-95 (the Southern Section of the project) thereby reducing congestion and improving safety of the merging roadways. While Express Lanes were only constructed from Garrisonville Road in Stafford County to Edsall Road in Fairfax County, congestion north of the Express Lanes has continued to increase along I-395. Consultation among Virginia Department of Transportation (VDOT), Federal Highway Administration (FHWA), District of Columbia Department of Transportation (DDOT), Department of Defense (DoD), Resource Agencies, Local Governments, and Stakeholders has resulted in the decision to evaluate a project that would address the identified needs along the I-395 corridor.

2.1 ALTERNATIVES DEVELOPMENT

To address the identified purpose and need, converting the existing High Occupancy Vehicle (HOV) facility to a High Occupancy Toll (HOT) lanes system was the only build alternative evaluated in detail⁷. Since Express Lanes already exist within the median of I-95 from Garrisonville Road in Stafford County to I-395 at Edsall Road in Fairfax County, making the change from HOV to HOT within the median of I-395 would minimize and reduce impacts by not requiring future improvements to the existing general purpose travel lanes beyond what has already been planned regionally. Furthermore, an additional build alternative that did not involve the conversion of the HOV lanes to HOT lanes was not considered as the travel choices and reliability are dependent on connecting the existing HOV facility to the regional Express Lanes network. A No Build Alternative is described in **Section 2.3.1**.

2.2 ALTERNATIVES NOT RETAINED FOR DETAILED STUDY

As discussed above, only one proposed build alternative was evaluated in detail. No other alternatives were developed; therefore, no alternatives have been eliminated from detailed study.

2.3 ALTERNATIVES RETAINED FOR EVALUATION

2.3.1 No Build Alternative

In accordance with the regulations implementing the National Environmental Policy Act (NEPA) (40 CFR § 1502.14(d)), the No Build Alternative has been included for evaluation for the comparison of future conditions and impacts. The No Build Alternative would retain the existing two reversible HOV lanes, existing general purpose lane and associated interchanges in their current configuration, and allow for routine maintenance and safety upgrades. This alternative also assumes that the projects currently programmed and funded in VDOT's Fiscal Year (FY) 2016-2021 Six-Year Improvement Program (SYIP) and the Metropolitan Washington Council of Governments (MWCOC) Constrained Long-Range

⁷ Multiple options for the Eads Street Interchange were evaluated as indicated below in **Section 2.3.2.2**.

Transportation Plan (CLRP) for the National Capital Region would be implemented. The roadway and transit projects listed in the SYIP and MWCOG CLRP within the study area are shown in **Table 2-1**.

Table 2-1: No Build Projects within the I-395 Corridor

Project/Study	Description	Completion Date
I-395 HOV / Transit Ramp at Seminary Road ¹	Construction of a south-facing ramp from the HOV lanes to the top level of the Seminary Road Interchange that provides additional access for HOV and transit	Jan 2016
12th Street Extension ²	Construct 12 th Street between S. Eads Street and S. Fern Street	2016
I-395 4 th Lane South Widening – Duke Street to Edsall Road	Widening of southbound (SB) I-395 to provide one additional through lane from north of Duke Street to south of Edsall Road	2019
Seminary Road and Beauregard Street Ellipse	Modification of the intersection to an ellipse design to eliminate weaving issues on westbound Seminary Road and increase capacity	2020
Boundary Channel Drive Interchange	Interchange modifications to improve operations and reduce weaving along SB I-395 including constructing two roundabouts, providing connections to Long Bridge Park Drive and US Route 1, and multi-modal improvements	Summer 2021
Army Navy Drive Complete Streets ³	Multi-modal improvements along Army Navy Drive between South Joyce Street and 12 th Street including constructing a dedicated bicycle facility and improving transit accommodations	2021
Arlington National Cemetery Southern Expansion Project and Associated Roadway Realignment	Interchange improvements to remove the NW and SW ramps and conversion to a diamond configuration to increase the contiguous area of Arlington National Cemetery	TBD ⁴
Pentagon South Parking Lot Improvements	Reconfiguration of the South Parking Lot as part of the Pentagon Master Plan	TBD ⁵

¹ Not included in base year conditions due to recent opening of the HOV ramp and adjustment period required for full utilization of the ramp.

² Not included in the CLRP, but currently under construction.

³ Not included in the CLRP; however, funding for the project was included in the approved Arlington County 2015-2024 CIP.

⁴ Sponsoring agencies are planning to incorporate this project into 2017 CLRP; anticipate completion between 2020 and 2040.

⁵ The South Parking Lot Improvements associated with the Pentagon Master Plan will be completed following construction of the interim improvements to the South Parking Lot that are incorporated into the I-395 Express Lanes Extension.

Ability of the No Build Alternative to Address the Purpose and Need

As discussed in **Section 1.3** and the *Traffic and Transportation Technical Report* (VDOT, 2016j), traffic volumes are forecasted to increase in the future which will lead to more severe and a longer duration of congestion along I-395 in both the general purpose and HOV lanes during both the AM and PM peak periods. Likewise, increased congestion will further deteriorate travel reliability along I-395. Travel choice will continue to remain limited for vehicles with less than three occupants that want to continue north along the I-95 / I-395 Express Lanes facility north of the Turkeycock Run Interchange where these vehicles are required to exit the HOT lanes and enter the general purpose lanes. Similarly, vehicles with less than three occupants traveling southbound along I-395 within the project limits do not have an option to access the Express Lanes system until south of Turkeycock Run. Under the No Build conditions, with anticipated increases in travel demand, congestion in the peak periods will increase, thereby increasing the potential

for congestion-related crashes. Therefore, the No Build Alternative would not meet the purpose and need for the project.

2.3.2 Build Alternative

The Build Alternative, shown in **Figures 2-1** through **2-5**, converts the two existing reversible HOV lanes within the existing median along the I-395 corridor to three HOT lanes within the existing footprint of the HOV facility from the current I-395 HOT lanes terminus at Turkeycock Run to Eads Street near the Pentagon. The expansion of the existing system of reversible HOV lanes located in the median of I-395 is an extension of the existing I-95 Express Lanes (HOT) to the south. For the majority of the project, the existing reversible HOV lanes are separated from the general purpose lanes by guardrail barriers mounted on a 4 to 6-foot wide concrete island. The existing guardrail and the concrete island would be replaced with double face concrete barriers. The proposed concrete barriers would be installed generally with a 2-foot offset along the western edge of the existing concrete island (to be removed), which provides an additional 2-foot shoulder on the southbound general purpose lanes. The wider shoulder would improve the functionality of the inside shoulder of the southbound general purpose lanes. The remaining portion of the additional width gained from the removal of the concrete islands is allocated to the HOT facility to provide the space required for the three HOT lanes and shoulders. The existing and proposed typical sections are shown in **Figure 2-6**.

Figure 2-1: Build Alternative Section 1



Figure 2-2: Build Alternative Section 2



Figure 2-3: Build Alternative Section 3

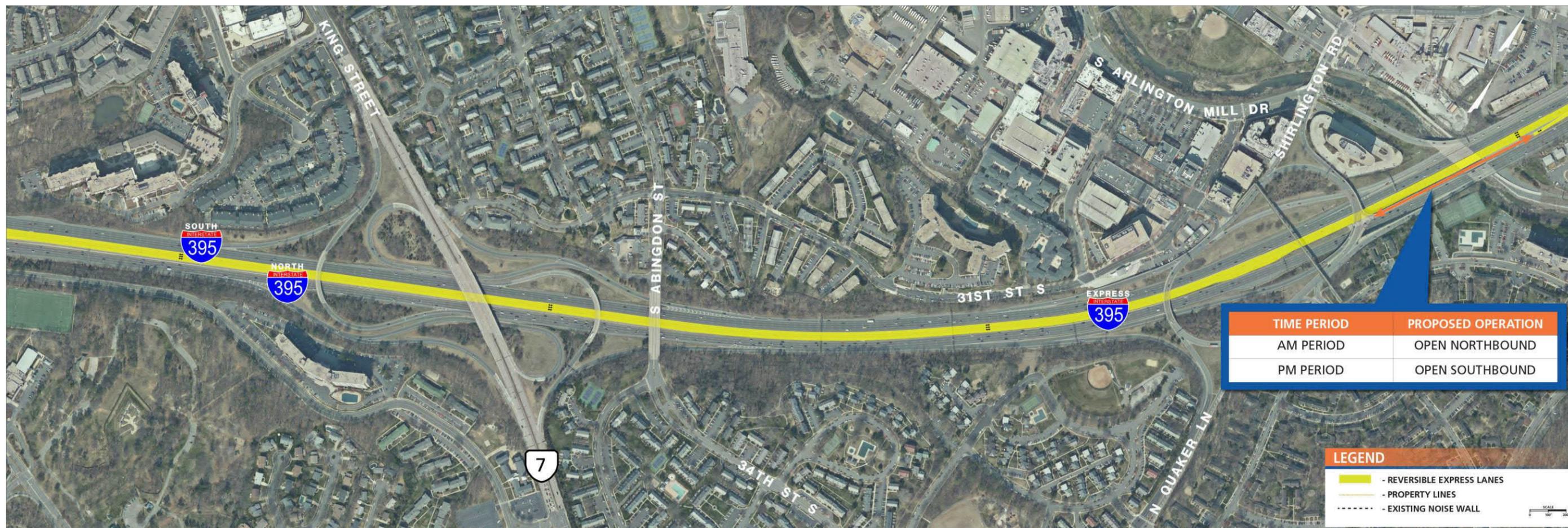


Figure 2-4: Build Alternative Section 4

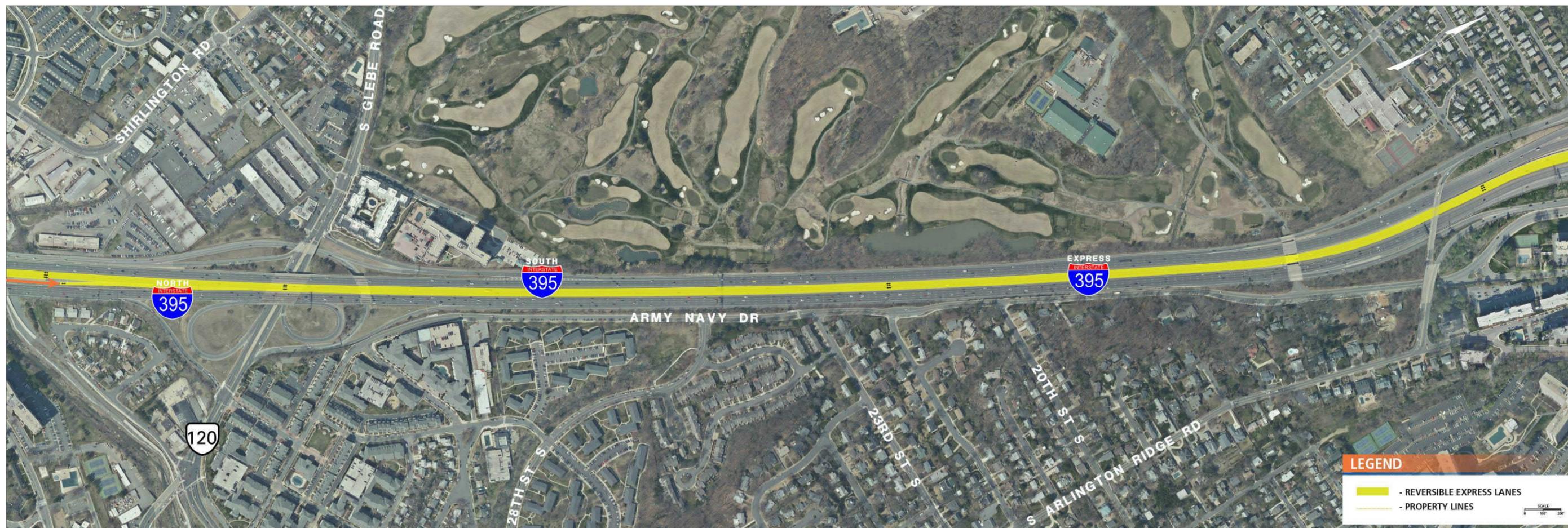


Figure 2-5: Build Alternative Section 5

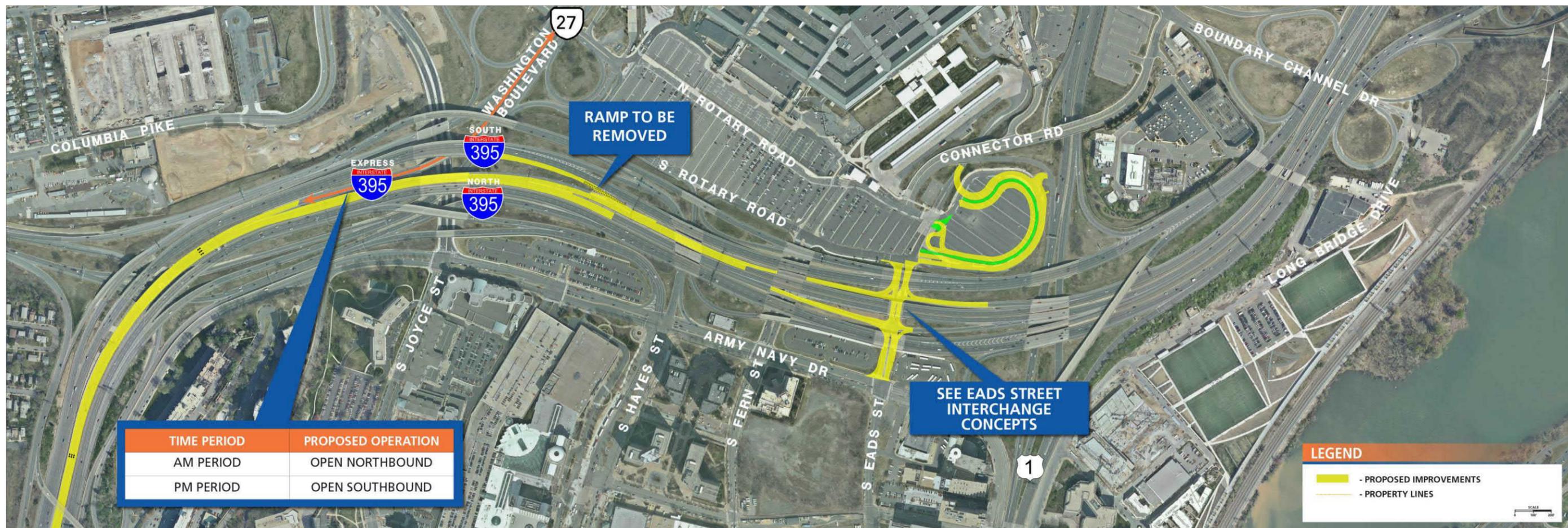
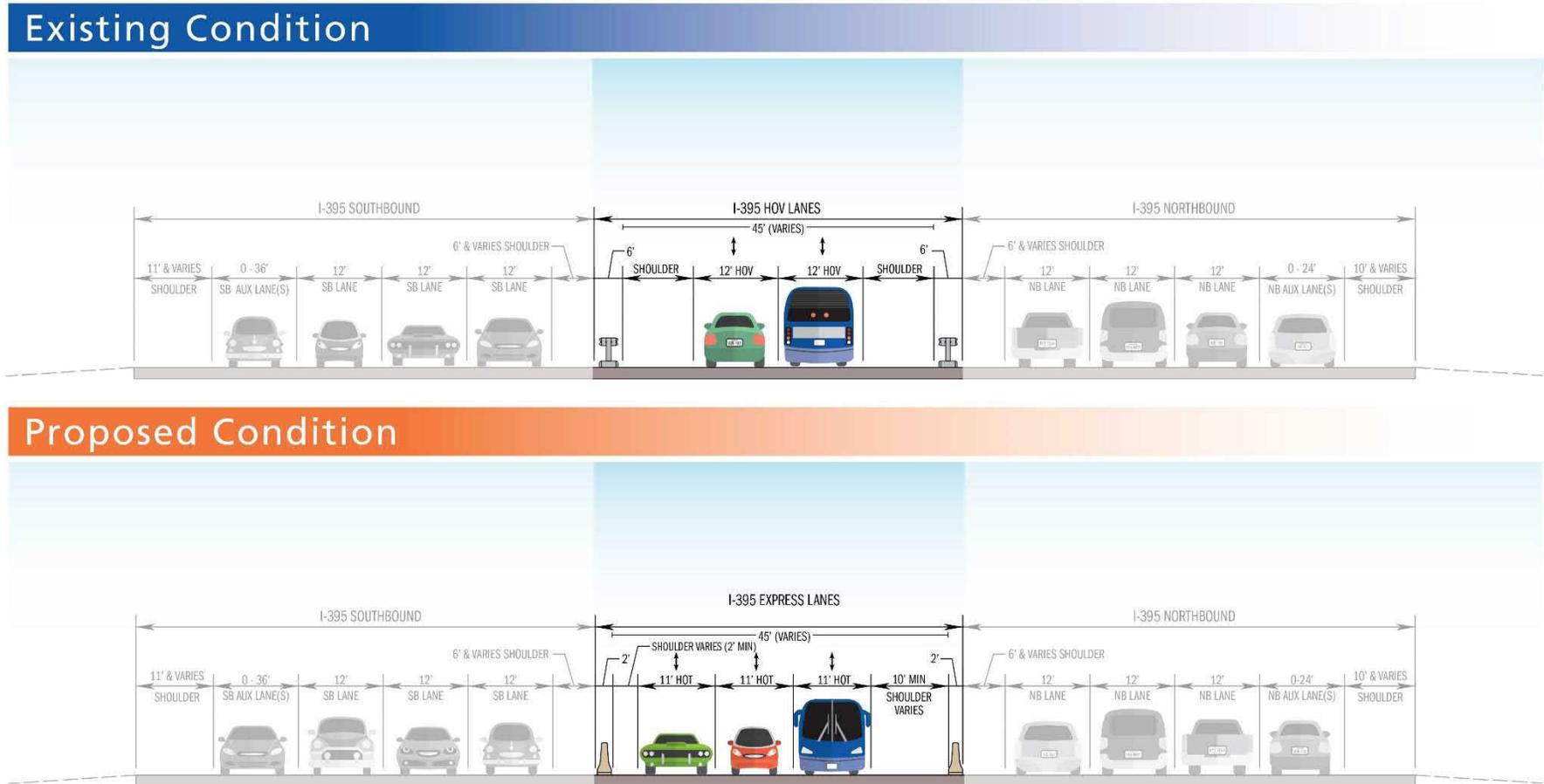


Figure 2-6: Existing and Proposed Typical Section



By maximizing the width between the general purpose lanes and reconstructing the existing paved shoulders, the proposed three HOT lanes would largely be accommodated within the footprint of the existing HOV facility with only minor impacts to the general purpose lane shoulders in the northern section on the southbound side. The available width for this HOT Lane facility is approximately 45 feet (variable), as shown in **Figure 2-6**. The typical section consists of three 11-foot wide travel lanes with a minimum 2-foot shoulder on the west side and a minimum 10-foot shoulder on the east side. Disabled vehicles and emergency responders would use the east side of the corridor during emergency situations. The easternmost travel lane (11 feet wide) along with the eastern shoulder (generally 10 feet) would provide a 21-foot wide travel way which would be sufficient for the emergency vehicles to access incidents along the corridor. Additionally, enforcement/emergency pull-off areas have been proposed where space is available including in the vicinity of Seminary Road Interchange, Shirlington Interchange, and King Street Interchange.

The Build Alternative was developed using current design guidelines including the American Association of State Highway and Transportation Officials (AASHTO) *A Policy on the Geometric Design of Highways and Streets, 2011* (Green Book) and the VDOT Road Design Manual (April, 2016). A Technical Working Group (TWG), comprised of VDOT, FHWA, 95 Express, and support staff, was formed to guide the development of the Build Alternative. The TWG met on a weekly basis to discuss design issues and constraints and to reach consensus on project design.

2.3.2.1 Proposed Access Points to the HOT Lanes

Table 2-2 summarizes the proposed access modifications along the I-395 study corridor associated with the Build Alternative. With the exception of the Eads Street Interchange, all existing access points would remain in their current geometric configuration. Traffic operations at the northern terminus of the proposed I-395 HOT lanes in the vicinity of the Eads Street Interchange are a critical component of the proposed improvements as discussed in detail in **Section 2.3.2.2**. With the exception of the south facing ramp at the Seminary Road Interchange which would remain a HOV ramp at all times, all other access points to and from the proposed I-395 HOT lanes would be converted to HOT ramps.

2.3.2.2 Eads Street Interchange

The Build Alternative includes modifications to the Eads Street Interchange at the proposed northern terminus of the I-395 HOT lanes. The Eads Street Interchange is a critical location in the I-395 HOT lanes system as Eads Street serves the Pentagon Reservation and the Pentagon Transit Center, a major transit hub for the Washington, D.C. region and is a primary origin and destination for transit providers and motorists using the existing I-395 HOV lanes.

Several options have been considered for the Eads Street Interchange. Accessibility and congestion reduction in this area are critical elements for future use of the I-395 HOT lanes. The Eads Street Interchange poses challenges in balancing the needs of all transportation users including transit vehicles, HOV and non-HOV motorists, and pedestrians.

Another key component of the Eads Street Interchange is compatibility with improvements proposed on the Pentagon Reservation. The 2015 Master Plan Update for the Pentagon Reservation establishes a long-term vision for the Pentagon and surrounding facilities, including a reconfiguration of the Pentagon South Parking Lot (Washington Headquarters Service, 2015). The exact timing of the implementation of the

proposed South Parking Lot Improvements is not known at this time and is dependent on federal approvals and funding availability.

Table 2-2: Access Point Modifications

Access Point		Access	
		Existing	Build Alternative
Turkeycock Run (north of Edsall Road)		AM: Full access between NB HOV/HOT lanes and GP lanes PM: Full access between SB HOV/HOT lanes and GP Lanes	AM: Full access between NB HOT lanes and GP lanes PM: Full access between SB HOT lanes and GP Lanes
Seminary Road – South Facing Ramp		AM: NB access from HOV lanes PM: SB access to HOV lanes (HOV at all times)	No change (would remain HOV at all times)
Seminary Road – North Facing Ramp		AM: NB access to HOV lanes PM: SB access from HOV lanes	AM: NB access to HOT lanes PM: SB access from HOT lanes
Shirlington Road – North Facing Ramp		AM: NB access to HOV lanes PM: SB access from HOV lanes	AM: NB access to HOT lanes PM: SB access from HOT lanes
Washington Boulevard – South Facing Ramp		AM: NB access from HOV lanes PM: SB access to HOV lanes	AM: NB access from HOT lanes PM: SB access to HOT lanes
Eads Street Interchange	Ramp from SB HOV Lanes to SB GP Lanes (south of Eads Street)	AM & PM: SB access from HOV lanes	Capacity and operational improvements to be evaluated as part of the Interchange Modification Report.
	Eads Street – NB Off Ramp from HOV	AM: NB access from HOV lanes PM: Closed	
	Eads Street – SB On Ramp to HOV	AM & PM: SB access to HOV lanes	
	Eads Street – NB On Ramp to HOV	AM & PM: NB access to HOV lanes	
	Eads Street – SB Off Ramp from HOV	AM & PM: SB access from HOV lanes	
NB Ramp from GP Lanes to HOV Lanes north of Eads Street		AM & PM: NB access to HOV lanes	AM & PM: NB access to HOT lanes

2.3.2.2.1 Eads Street Initial Interchange Options Considered

An initial range of twelve options for the Eads Street Interchange were considered as part of the original efforts to develop the I-395 Express Lanes project between 2004 and 2009, generally consisting of two families of options:

- *Dedicated Entry and Exit Ramps To and From I-395 HOT Lanes:* Options A and B maintain the current ramp configurations between the I-395 HOT lanes and Eads Street including a northbound I-395 HOT lanes off-ramp to Eads Street and a southbound on-ramp from Eads Street to the southbound I-395 HOT lanes.

- *Dual Reversible Entry and Exit Ramps To and From I-395 HOT Lanes:* Options C through L all include a reversible operation of one or both of the ramps between Eads Street and the I-395 HOT lanes south of Eads Street in addition to modifications to traffic flow and lane configurations along Eads Street and South Rotary Road.

The initial Eads Street Interchange options, and reasons why each option was eliminated from further consideration, are described in detail in the *Alternatives Analysis Technical Report* (VDOT, 2016a). **Table 2-3** summarizes the twelve options previously studied and the reasons why the options were eliminated from further consideration or retained as part of the current study efforts.

Table 2-3: Reason Option Eliminated or Retained for Further Consideration

Option	Reason Option Eliminated or Retained for Further Consideration
Dedicated Entry/Exit Ramps To and From I-395 HOT Lanes	
A	Provides minimal capacity increase on the Eads Street off-ramp from the NB I-395 HOV lanes. <i>A modification to this option that provides additional capacity on the ramp was retained for further consideration as part of the current study efforts.</i>
B	Not consistent with the Pentagon Master Plan along S. Rotary Road due to proposed conversion from one-way to two-way operation west of Eads Street.
Dual Reversible Entry/Exit Ramps To and From I-395 HOT Lanes	
C	Not consistent with the Pentagon Master Plan due to proposed one-way inbound pattern on Eads Street during the AM peak period.
D	Not consistent with the Pentagon Master Plan due to bus-only movements on Eads Street west of South Rotary Road.
E	Not consistent with the Pentagon Master Plan due to proposed one-way inbound pattern on Eads Street during the AM peak period and prohibition of EB through traffic on South Rotary Road during the AM and PM peak periods.
F	Not consistent with the Pentagon Master Plan due to prohibition of SB Eads Street through traffic at South Rotary Road.
G	Provides minimal capacity increase on the Eads Street off-ramp from the NB I-395 HOV lanes to movement restrictions along Eads Street and prohibition of EB South Rotary Road through movements at Eads Street.
H	Not consistent with the Pentagon Master Plan due to proposed one-way inbound pattern on Eads Street during the AM peak period (for non-transit vehicles) and prohibition of EB through traffic on South Rotary Road at Eads Street during the AM and PM peak periods.
I	Directing all traffic entering the Pentagon Reservation (excluding transit vehicles) to use Army Navy Drive and Fern Street would substantially increase traffic volumes to these surface streets and would increase pedestrian and vehicle conflicts. Fern Street is the designated pedestrian route to the Pentagon. <i>This option was retained for further consideration as part of the current study efforts due to the minimal impact on the I-395 bridges and potential simplification of the Eads Street intersection operations.</i>
J	Not consistent with the Pentagon Master Plan due to the prohibition of EB South Rotary Road right-turn movements at Eads Street and SB Eads Street movements at South Rotary during the AM peak period. During the PM peak, Eads Street would operate one-way SB for buses only which is also not consistent with the Pentagon Master Plan.

Option	Reason Option Eliminated or Retained for Further Consideration
K	Not consistent with the Pentagon Master Plan due to the prohibition of the EB South Rotary Road left-turn and right-turn movements and SB Eads Street movements at the Eads Street at South Rotary Road intersection during the AM peak period. Additionally, Eads Street between North Rotary Road and South Rotary Road would operate one-way NB for buses only which is not consistent with the Pentagon Master Plan.
L	Widening of the I-395 HOV bridges over Fern Street and potentially Eads Street would result in major disruption to traffic during construction.

2.3.2.2.2 Eads Street Refined Interchange Options Considered

The initial twelve options considered as part of the 2004 through 2009 studies were reviewed to develop two refined options and two new options to be considered as part of the current study efforts that would best meet the project purpose and need and current constraints of the project, including the proposed improvements associated with the Pentagon Master Plan. The four refined options are discussed below:

Single Reversible Eads Street Ramp

The single reversible Eads Street ramp option would convert the existing I-395 northbound HOV off-ramp to Eads Street into a widened three-lane, reversible ramp. All existing traffic movements would be maintained at the Eads Street Interchange with additional capacity provided to and from Eads Street during the AM and PM peak hours. Traffic signals would be provided along Eads Street at both the northbound and southbound I-395 HOT ramps. Expansion of the existing northbound I-395 HOV off-ramp to three lanes would require reconstruction of the I-395 HOV bridges over Fern Street and potentially Eads Street which would result in major access and maintenance of traffic challenges during construction and therefore, this option was not considered further.

Dedicated Bus Lane and Right-Turn Lane

This option would widen the northbound I-395 HOV off-ramp to Eads Street and establish a bus-only left-turn lane and right-turn lane along the ramp. All traffic (excluding buses) would be directed to make a right-turn onto Eads Street toward the Army Navy Drive intersection. Traffic would then continue to Fern Street to access the Pentagon Reservation. In this option, Eads Street through traffic would be limited to transit based vehicles by creating dedicated bus lanes from the HOT lanes to the Pentagon Reservation. Although the dedicated bus lanes create a more roundabout method of entering the Pentagon for non-transit traffic, this option simplifies the Eads Street intersection operations and prevents reconstruction of the existing I-395 bridges.

Directing all traffic entering the Pentagon Reservation from the I-395 northbound HOT lanes (excluding transit vehicles) to use Army Navy Drive and Fern Street would increase traffic volumes along these streets and would require roadway improvements to mitigate the impacts. Additionally, the diverted traffic volumes would increase pedestrian and vehicle conflicts since Fern Street is the designated pedestrian route to the Pentagon (pedestrians are currently prohibited along Eads Street). Lastly, this option would provide a minimal increase to capacity on the Eads Street ramp compared to existing conditions. For these reasons, this option was not considered further.

Diverging Diamond Interchange

A diverging diamond at the Eads Street Interchange would shift mainline traffic on Eads Street to the opposite side of the roadway in order to receive the I-395 HOT ramps beyond the two proposed signals. All existing traffic movements would be retained with this option. The ramps would maintain their current operational functionality as exit/entrance ramps from the I-395 HOV (future HOT) lanes. The proposed diverging diamond configuration would simplify I-395 HOT egress and ingress movements, as well as reduce the number of signal phases at the ramp signals. Although this option would reduce the number of turning conflicts at the interchange, introducing a diverging diamond at this location is unconventional considering the traffic volumes, emergency evacuation procedures at the Pentagon Reservation, and the dual general purpose and proposed HOT system.

In order to achieve the desired crossover intersection angles (i.e., as close as possible to 90 degrees), this option would likely require reconstruction of the I-395 HOV bridge over Eads Street. This would result in access and maintenance of traffic challenges during construction and therefore this option was not considered further.

Dual Reversible Eads Street Ramps

The Dual Reversible Eads Street Ramps option would increase capacity to and from Eads Street by dividing traffic between two reversible ramps providing a total of four ramp lanes traveling to and from Eads Street. The northbound I-395 HOV off-ramp to Eads Street would operate northbound in the AM peak period and southbound in the PM peak period for traffic traveling to and from Army Navy Drive and the Pentagon City area. The existing ramp from Eads Street to the southbound I-395 HOV lanes would be expanded to two lanes approaching the intersections at Eads Street and operate northbound in the AM peak period and southbound in the PM peak period for traffic traveling to and from the Pentagon Reservation. The use of existing ramp and bridge infrastructure would not require reconstruction of the interchange and comparatively reduced maintenance of traffic impacts.

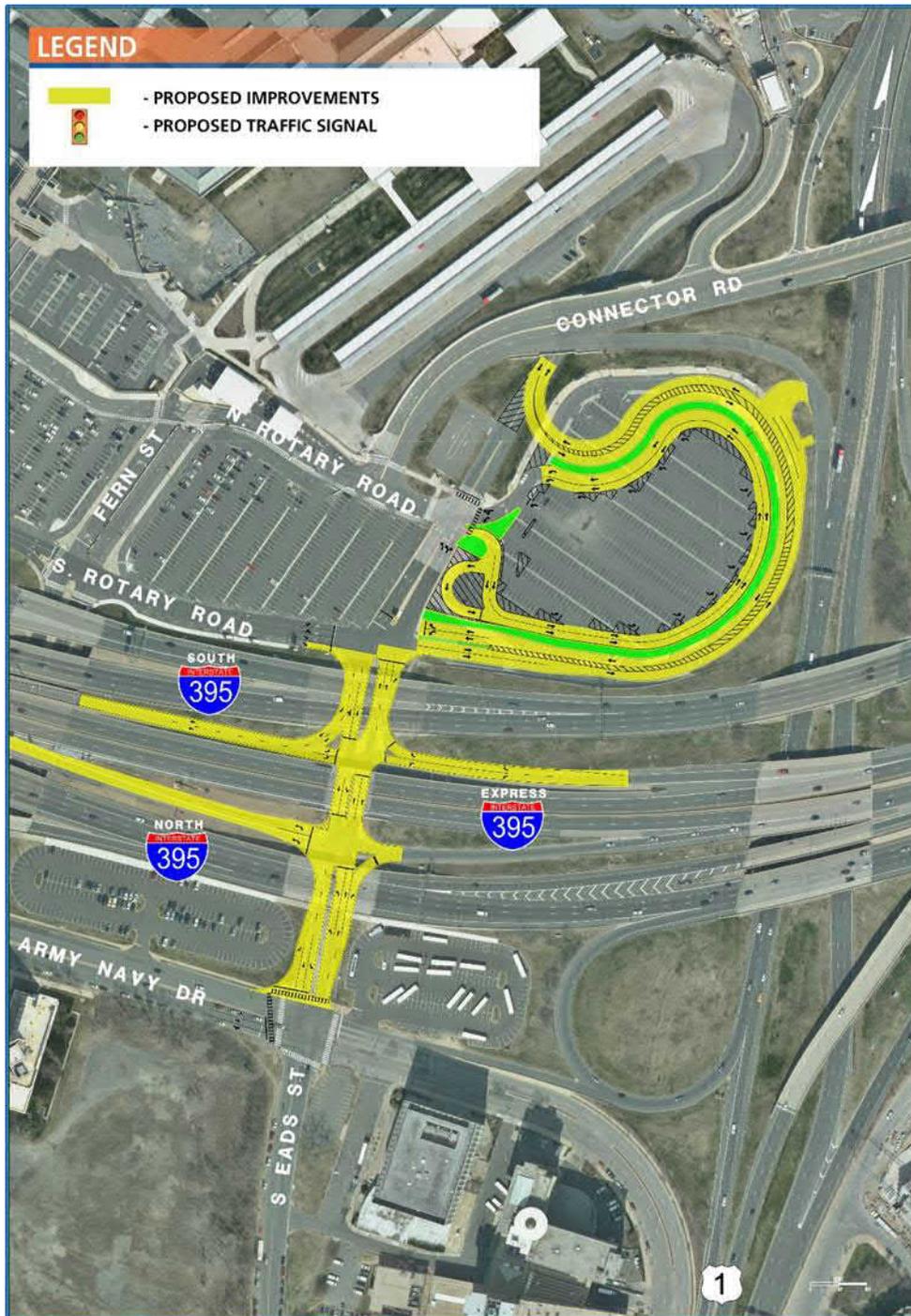
As part of this option, the access to the southbound I-395 general purpose lanes from the existing southbound I-395 HOV lanes would be removed. Access to the southbound I-395 general purpose lanes would be provided via Hayes Street/Army Navy Drive, Washington Boulevard/Columbia Pike, and Boundary Channel Drive instead of the current ramp. This would eliminate a weave condition along the southbound I-395 HOV lanes and eliminate a merge condition along the southbound I-395 general purpose lanes in an area with a high density of access points.

This option would retain the current circulation patterns within the Pentagon Reservation and is consistent with the Pentagon Master Plan improvements in the Pentagon South Parking Lot. Four traffic signals would be constructed along Eads Street at the two I-395 HOT ramp intersections, at South Rotary Road, and at North Rotary Road.

2.3.2.2.3 Eads Street Preferred Option

The Dual Reversible Eads Street Ramps option was selected as the preferred option for detailed study because this option increases capacity on the two ramps serving Eads Street from the south (providing for ramp lanes) and minimizes turning conflicts at the signalized intersections proposed along Eads Street (see **Figure 2-7**). This option also minimizes disruption to the Pentagon South Parking Lot compared to others previously considered.

Figure 2-7: Eads Street Interchange Concept and Pentagon Improvements



2.3.2.3 Pentagon Interim Improvements

As noted above, the timing of the improvements to the Pentagon South Parking Lot is unknown at this time; however, some improvements to the South Parking Lot are required in order to create a smooth transition between the improvements planned at the Eads Street Interchange and within the Pentagon Reservation. As such, VDOT has worked closely with Pentagon staff to develop an interim improvement for the South

Parking Lot that is consistent with the longer term Master Plan improvements and would allow the Eads Street Interchange to operate effectively until the ultimate improvements are implemented. As shown in **Figure 2-7** and documented in the *Alternatives Analysis Technical Report* (VDOT, 2016a), the interim improvements incorporate the following components:

- Direct access to the Pentagon Transit Center via a dedicated two-way bus loop that circulates on the eastern perimeter of the South Parking Lot. Transit vehicles would be separated from passenger vehicles and substantial pedestrian conflicts along North Rotary Road.
- Traffic signalization at the Eads Street at South Rotary Road and Eads Street at North Rotary Road intersections. These signals would be coordinated to provide smooth traffic flow and would be coordinated with the signals along Eads Street at the I-395 HOT ramps and Army Navy Drive.
- A dedicated ridesharing (slugging) area within the parking lot surrounded by the bus loop to accommodate the substantial ridesharing that occurs within this portion of the South Parking Lot.
- A fourth lane along eastbound South Rotary Road approaching Eads Street that would be used to access the future HOT lanes.

2.3.2.4 Structure and Bridge Rehabilitation

No new structures and bridges, or structure and bridge replacements are included as part of the I-395 Express Lanes Project. The Build Alternative includes design and construction of repairs and modifications to various existing bridges (general purpose and HOV) along, over, and adjacent to the proposed I-395 Express Lanes, including but not limited to (detailed information on structure and bridge rehabilitation for this study are included in **Appendix B** of the *Alternatives Analysis Technical Report* (VDOT, 2016a)):

- Mainline Bridges – replacement of bridge barriers/railing systems (includes reconstruction of selected general purpose lane bridge barriers), joint reconstruction at abutments, elimination of joints at piers, deck repairs, milling/hydro-demolition and overlay of selected decks, widening and repairs to approach slabs, widening of one bridge (I-395 HOV Bridge over Country Club Road), backwall reconstruction, beam seat repairs and reconstruction, replace bearing pads, clean and paint beam ends and bearings, modifications related to addition of conduit duct bank, installing new deck drain systems, surface repairs and waterproofing of existing barriers, and substructure repairs to the following bridges:
 - I-395 over Sanger Avenue;
 - I-395 over West Braddock Road;
 - I-395 HOV & Bus Ramp over Four Mile Run;
 - I-395 over Glebe Road;
 - I-395 over Ramp G (Glebe Road);
 - I-395 HOV over Country Club Road;
 - I-395 HOV over EB Route 27 (Washington Boulevard);
 - I-395 HOV & NBL over Route 27 NBL & Joyce Street;
 - I-395 HOV NB and SB over Ramps CC and CE;
 - I-395 HOV over Fern Street;
 - I-395 HOV over Eads Street;
 - I-395 HOV NB and SB over Route 110; and

- I-395 HOV over Pentagon Access Road.
- Ramp Bridges – repairs, including joint reconstruction at abutments, elimination of joints at piers, deck and approach slab repairs, milling/hydro-demolition and overlay of selected decks, beam seat reconstruction, clean and paint beam ends and bearings, surface repairs and waterproofing of curbs and parapets, railing post anchor bolt adjustments, replacing guardrail transitions, and substructure repairs to the following bridges:
 - Ramp B over I-395 SBL;
 - Seminary Road HOV Bus Ramp;
 - Shirlington HOV Bus Ramp;
 - Route 27 Reversible Ramp over Joyce Street; and
 - Ramp G of I-395 NBL over Route 110.
- Pier Protection - addition of structurally independent, crashworthy ground-mounted 54-inch high pier protection barriers at bridges over the 395 Express Lanes.
- Bridge-Mounted Signs - removal of existing sign attachments and/or supports at three existing bridges.

Ability of the Build Alternative to Address the Purpose and Need

2040 No Build and 2040 Build peak hour traffic volumes for northbound and southbound I-395 for both the general purpose and HOV/HOT lanes are summarized in **Figures 2-8 and 2-9**, respectively. As shown, under the Build Alternative, a higher proportion of traffic is carried within the HOT lanes compared to the No Build Alternative resulting in congestion relief within both the general purpose and HOT lanes during peak periods.

A comparison of travel times for 2040 No Build and 2040 Build conditions is summarized in **Figures 2-10 and 2-11** for the peak travel direction (northbound in the AM peak period and southbound in the PM peak period) for each of the four analysis hours (6 AM to 10 AM and 3 PM to 7 PM). **Figures 2-12 and 2-13** summarize the travel speeds by segment for No Build conditions and Build conditions for the northbound I-395 and southbound I-395 travel directions, respectively. **Figures 2-14 and 2-15** summarize the person throughput along I-395 for existing conditions, No Build conditions, and Build conditions in the peak direction at two locations along I-395 – north of Turkeycock Run and north of Glebe Road – for the four-hour analysis periods during the AM and PM peak periods indicating that the Build Alternative has a higher capacity to move people with the availability of the I-395 Express Lanes.

AM Peak Period – Northbound General Purpose Lanes: Under 2040 Build conditions, travel times along the northbound I-395 general purpose lanes decrease by 10 to 11 minutes from 8 AM to 10 AM when compared to 2040 No Build conditions. Travel times increase by up to 2 minutes between Route 1 and the north end of the study area due to higher traffic volumes in the general purpose lanes in this section of the study area compared to No Build conditions.

AM Peak Period – Northbound HOV/HOT Lanes: From 7 AM to 10 AM, travel times decrease by 1 to 6 minutes. From 7 AM to 9 AM, travel times decrease by 1 to 1.5 minutes south of Turkeycock Run as there are fewer northbound motorists in the HOT lanes attempting to exit to the general purpose lanes and

encountering lower congestion levels in the general purpose lanes compared to No Build conditions. Travel times decrease by approximately 4 minutes from 8 to 9 AM between Eads Street and 14th Street in the District as a result in lower traffic volumes and congestion levels in this section compared to No Build conditions.

PM Peak Period – Southbound General Purpose Lanes: Under 2040 Build conditions, travel times along the southbound I-395 general purpose lanes decrease by 6 to 16 minutes between 3 PM and 6 PM. Travel times decrease incrementally from the northern study limits to approximately Glebe Road from 3 PM to 6 PM with an average of 11 minutes of travel time savings over the three hours.

PM Peak Period – Southbound HOV/HOT Lanes: Travel times from 3 PM to 5 PM and 6 PM to 7 PM remain approximately the same in the southbound HOV/HOT lanes when comparing 2040 No Build to Build conditions.

Figure 2-8: 2040 No Build and 2040 Build AM Peak Hour – Northbound I-395

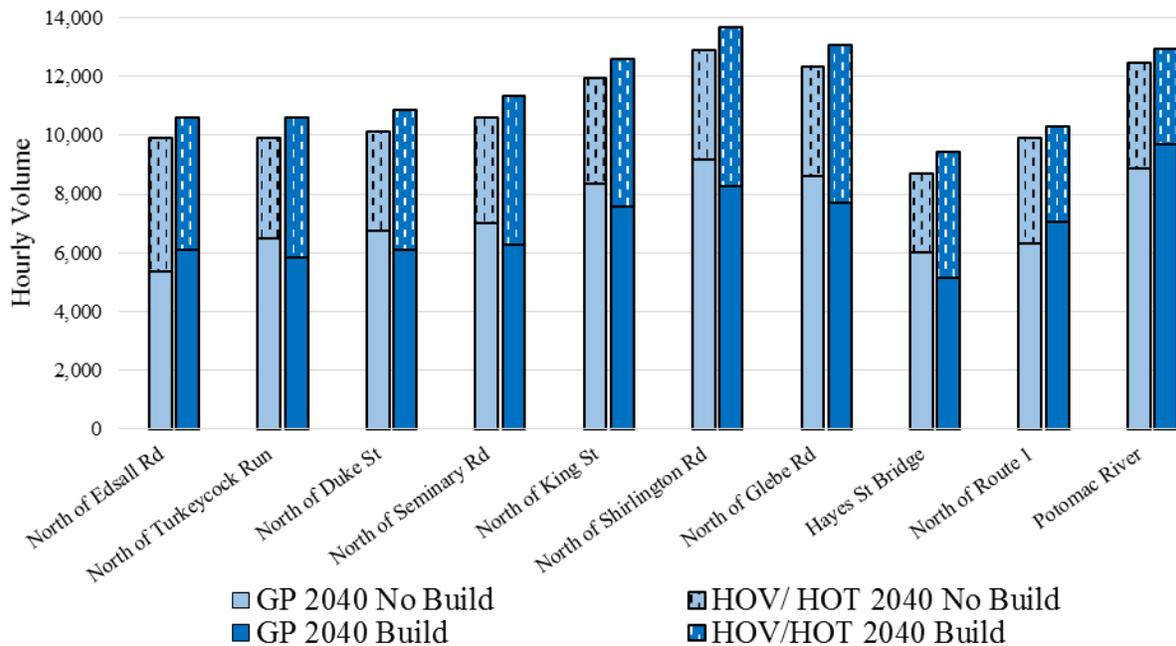


Figure 2-9: 2040 No Build and 2040 Build PM Peak Hour – Southbound I-395

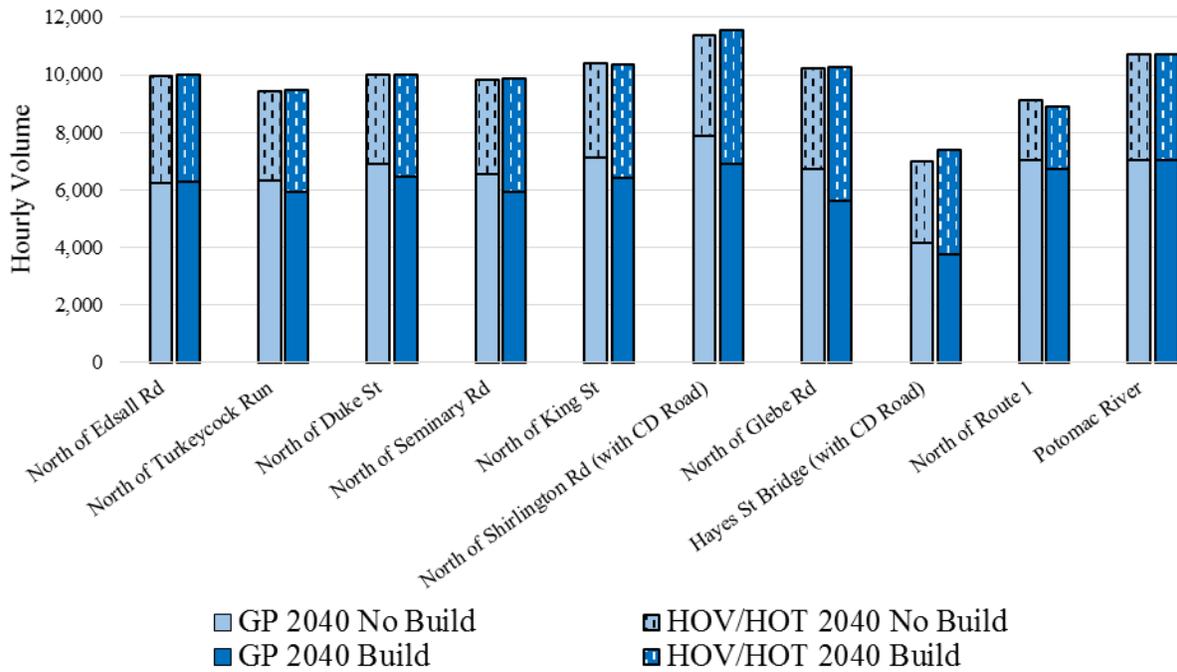


Figure 2-10: Northbound Overall Travel Time Summary - AM Peak Period

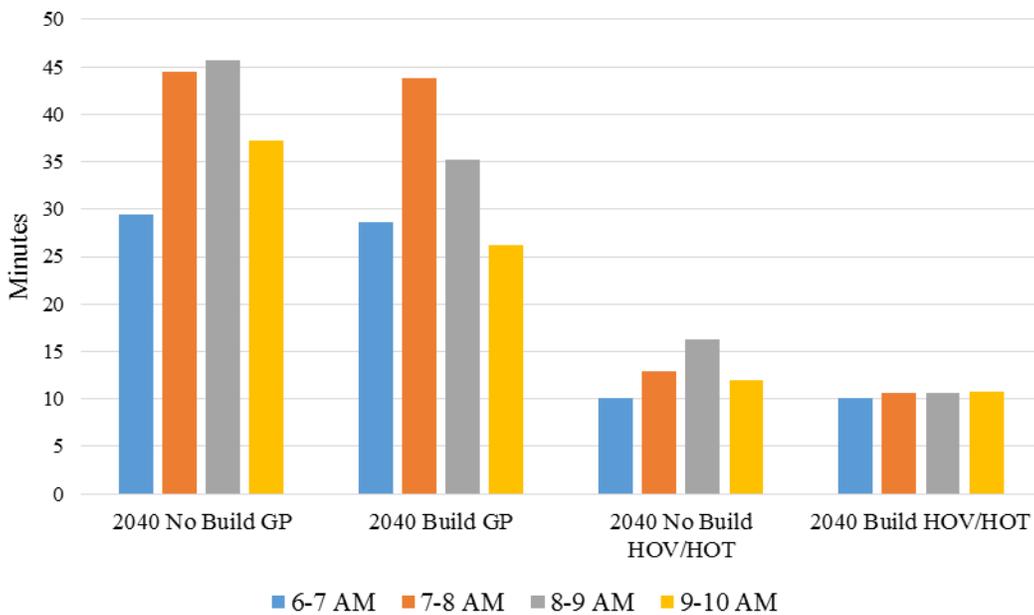


Figure 2-11: Southbound Overall Travel Time Summary - PM Peak Period

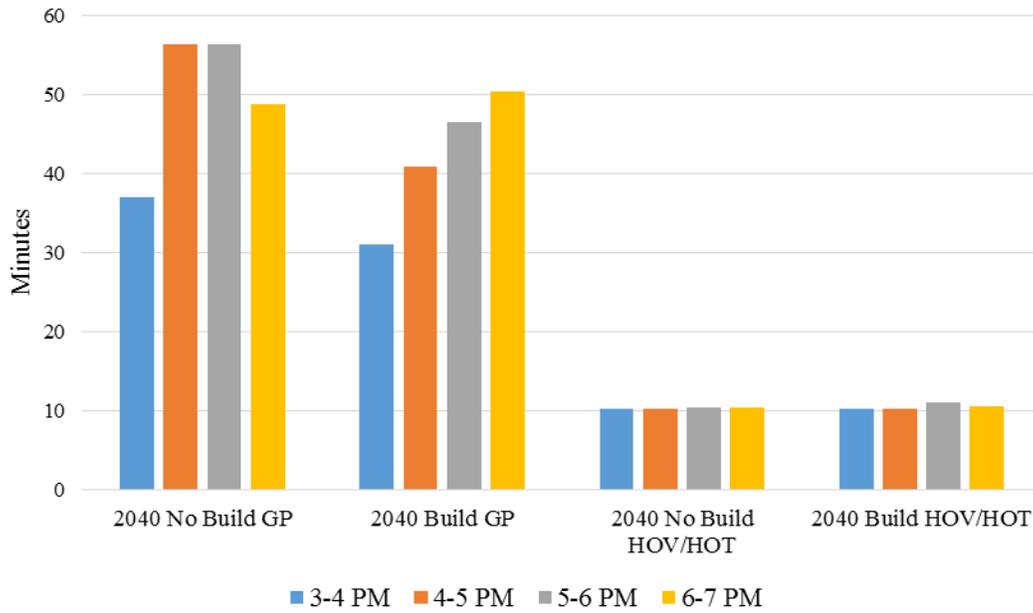


Figure 2-12: AM Peak Period Travel Speeds – Northbound I-395

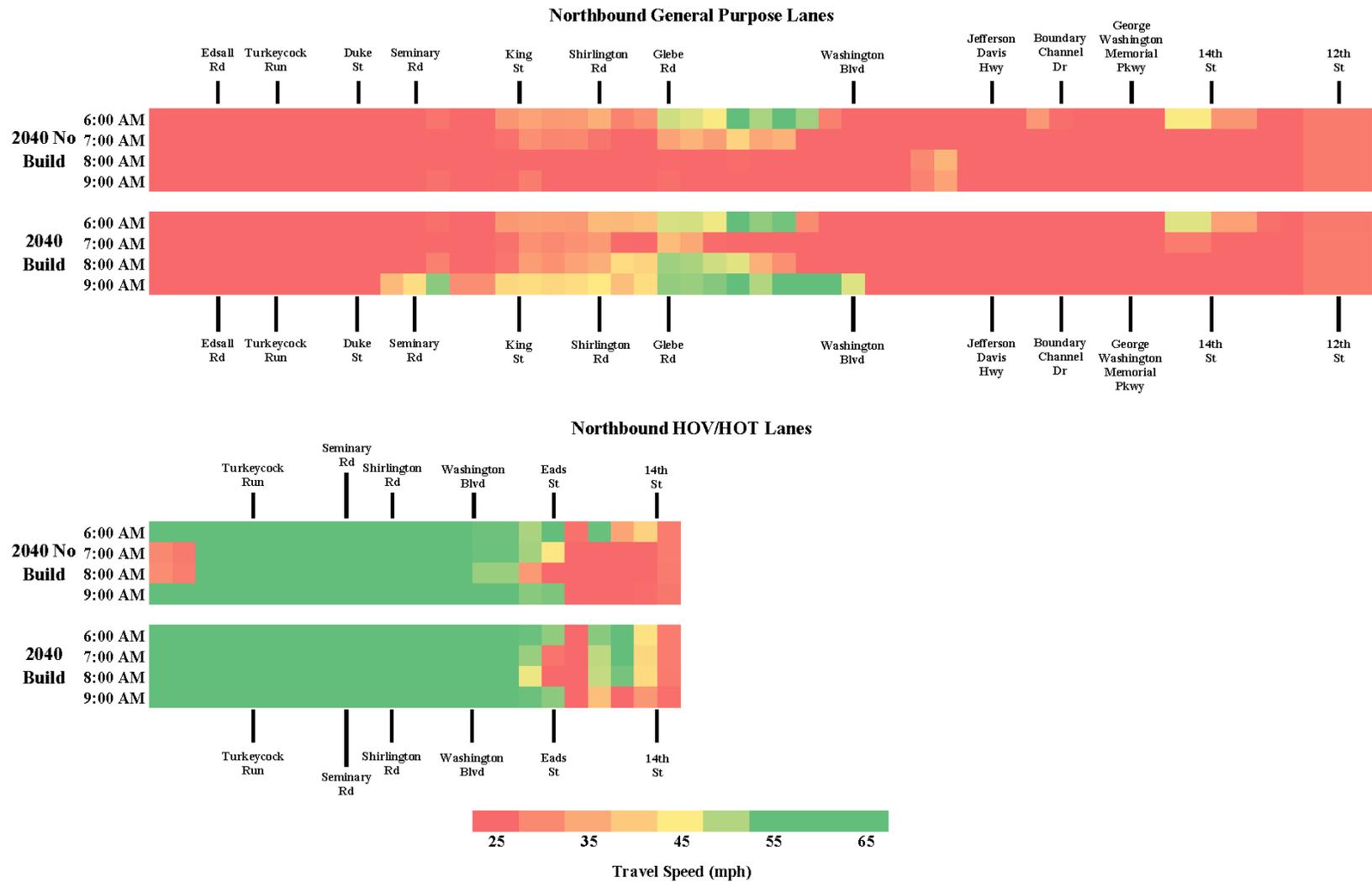


Figure 2-13: PM Peak Period Travel Speeds – Southbound I-395

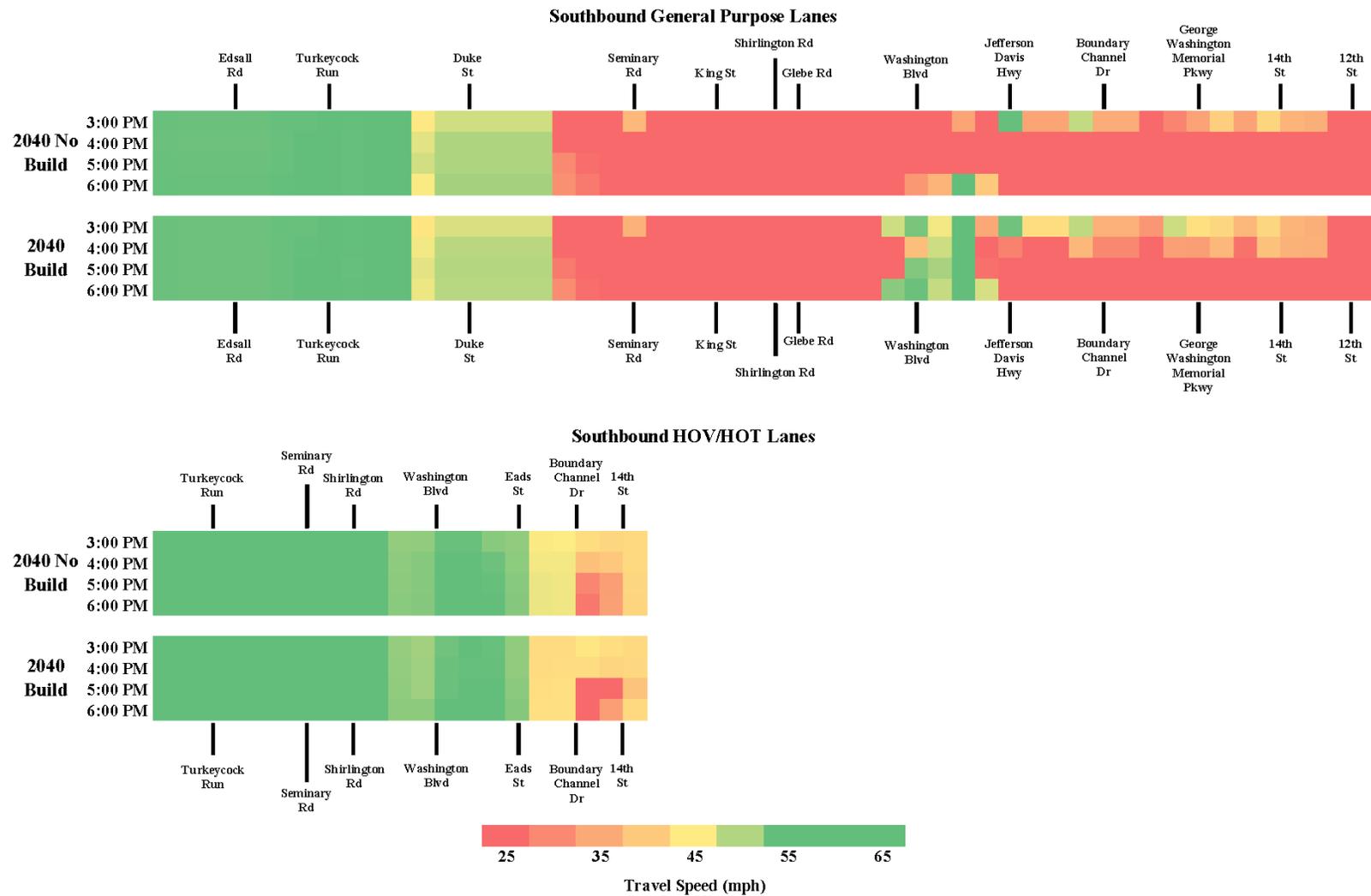


Figure 2-14: Northbound AM Peak Period Person Throughput Comparison

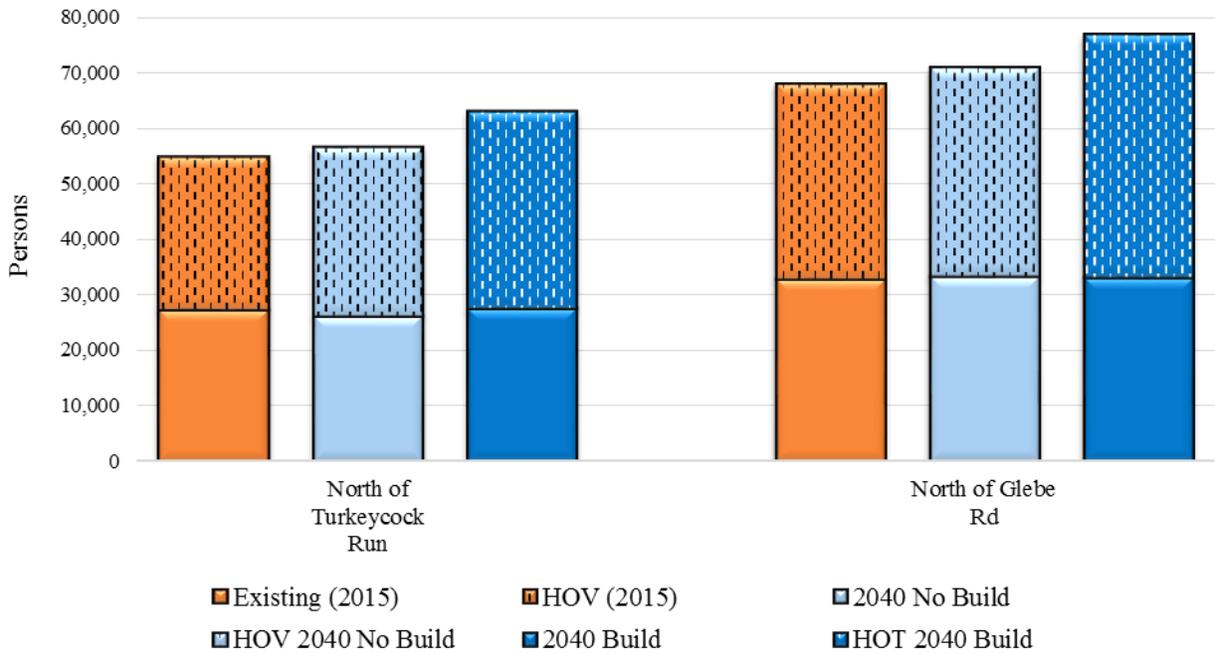
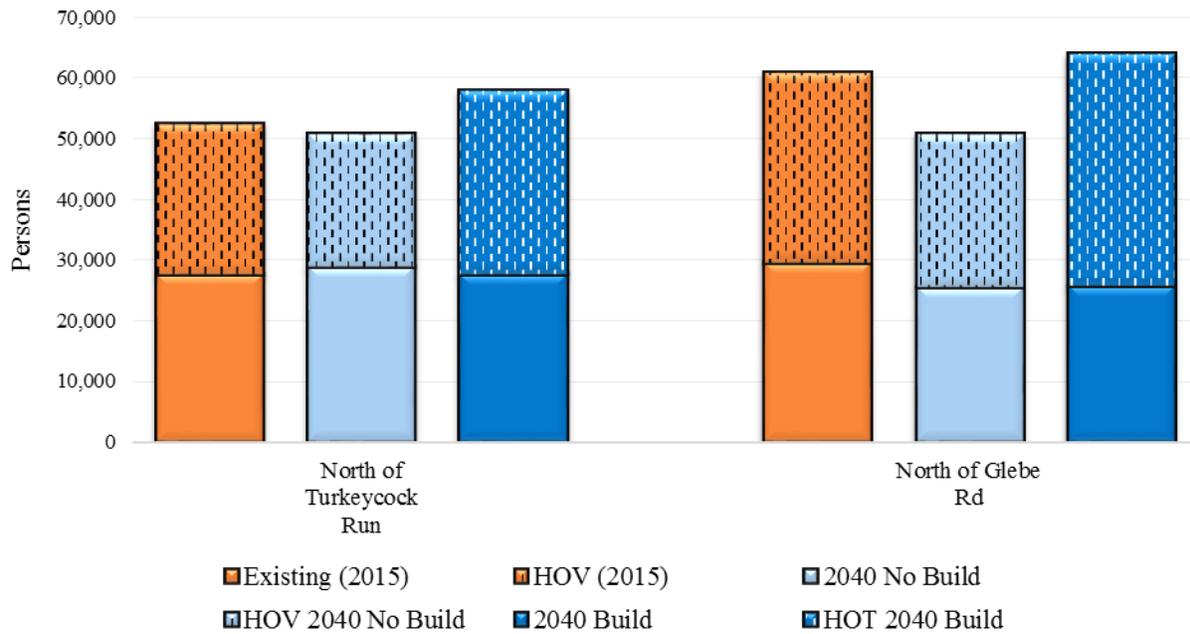


Figure 2-15: Southbound PM Peak Period Person Throughput Comparison



In addition to reducing congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods described above, the extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability. The congestion reduction benefits would reduce the potential for congestion-related rear end crashes in both the general purpose and HOV lanes, which account for more than half of all reported crashes. The I-395 Express Lanes would offer consistent and reliable travel times for all roadway users including HOV motorists and transit buses and provide an additional travel choice for vehicles with less than three occupants that want to continue north along the I-95 / I-395 Express Lanes facility north of the Turkeycock Run Interchange or access the southbound Express Lanes facility exiting Washington, D.C. Although congestion would still exist during peak hours in the general purpose lanes as well as the I-395 Express Lanes approaching Washington, D.C., overall travel speeds would increase and travel times would decrease compared to the No Build Alternative. Additional details are included in the *Traffic and Transportation Technical Report* (VDOT, 2016j).

CHAPTER 3.0 ENVIRONMENTAL CONSEQUENCES

3.1 INTRODUCTION AND OVERVIEW OF ENVIRONMENTAL ISSUES

Social, economic, physical and natural resources have the potential to be affected during transportation projects. Therefore, existing environmental conditions and potential impacts are important to identify and understand. The following sections inventory and analyze the potential environmental effects associated with the No Build Alternative and Build Alternative considered in the Interstate 395 (I-395) Express Lanes Northern Extension Project (Northern High Occupancy Toll [HOT] Lanes) study to extend the I-95 Express Lanes in the City of Alexandria, and Arlington and Fairfax Counties, Virginia. **Table 3-1** summarizes the environmental conditions within the study area and, where applicable, summarizes the estimated environmental impacts to those resources for the No Build Alternative and Build Alternative.

Table 3-1: Summary of Environmental Conditions

Environmental Resource	Resource Summary	Potential Environmental Impact	
		No Build Alternative	Build Alternative
Demographics/ Property Impacts	The Interstate is located in an expanding and demographically diverse region of Northern Virginia. The majority of the project would be constructed within existing Virginia Department of Transportation (VDOT) right of way, requiring no relocations or displacements. The project may result in permanent and/or temporary easements for the placement of signs and noise barriers (see Section 3.2).	Right of Way Acquisition and/or Easements (acres)	
		0	5.30
Environmental Justice	The impacts associated with the No Build and Build Alternatives would not disproportionately impact minority or low-income populations (see Section 3.3).	No disproportionate impacts	
Land Use	All localities along the study area are highly urbanized with mixed use development. The No Build Alternative would have no impact on land use. The Build Alternative is not expected to encourage or accelerate any changes in land use that are not already expected (see Section 3.4).	No substantial impacts	
Community Facilities	The No Build Alternative would have no impacts on community facilities. The Build Alternative has potential to alleviate congestion contributing to minor beneficial increments to community facilities (see Section 3.5).	No substantial impacts	
Recreational Resources	The No Build Alternative would have no substantial impacts on recreational resources. The Build Alternative has the potential to alleviate congestion contributing to minor beneficial increments to recreational resources (see Section 3.6).	No substantial impacts	
Cultural Resources	The Virginia Department of Historic Resources (VDHR) and the District of Columbia State Historic Preservation Office (DC SHPO) have reviewed the undertaking in accordance with the National Historic Preservation Act (NHPA) and concurred that the project will have No Adverse Effect on historic properties. During the design process, additional coordination with VDHR and the DC SHPO will be conducted when more detail is available regarding the need for and design of noise barriers in the vicinity of the historic resources (see Section 3.7).	Historic Resource Properties (acres)	
		0	5.06*
Air Quality	In accordance with VDOT and FHWA guidance, as well as requirements established by the US Environmental Protection Agency (EPA), changes in existing carbon monoxide (CO),	No violation of NAAQS	

Environmental Resource	Resource Summary	Potential Environmental Impact	
		No Build Alternative	Build Alternative
	particulate matter (PM) and mobile source air toxics (MSATs) have been analyzed, in addition to potential construction emissions. As a result of these analyses, no adverse impacts to ambient air quality or human health and welfare are anticipated. In addition, the study alternatives are not expected to cause or contribute to any violations of National Ambient Air Quality Standards (NAAQS) (see Section 3.8).		
Noise	Overall, residential and recreational noise impacts are predicted to occur under the No Build and Build Alternatives. Due to the increased congestion in the future Design Year, noise impacts from the No Build Alternative are slightly less than those under Existing Conditions (2,500). A total of 8.1 miles of barriers have preliminarily been identified as being feasible and reasonable. These noise barriers would benefit 2,027 of the impacted receptors, as well as 2,626 not impacted receptors, at an estimated cost of \$28 million (see Section 3.9).	Noise Receptors (no.)	
		2,419	2,857
Wetlands and Streams	While the roadway would not impact any streams or wetlands, the noise barrier installation has the possibility to result in direct impacts to wetlands (see Section 3.10).	Stream Impacts (linear feet)	
		0	0*
		Wetlands (acres)	
		0	0.004*
Water Quality	Both the No Build and Build Alternatives would have limited direct impacts on water quality (see Section 3.11).	No substantial impacts	
Floodplains	Encroachments on Federal Emergency Management Agency (FEMA)-designated floodplains would be minimal for the Build Alternative; federal regulation and VDOT design parameters would minimize potential effects to floodplains (see Section 3.12).	100-Year Floodplain (acres)	
		0	0.09*
		500-Year Floodplain (acres)	
		0	0.01*
Wildlife and Habitat	The Build and No Build Alternatives would have no impact on habitat or result in the displacement of wildlife. Although there are three wildlife corridors surrounding the study area, none of the wildlife corridors would be modified by the Build Alternative and the Build Alternative would not add impediments to the wildlife utilization. Noise barriers may be placed adjacent to the road and wildlife corridors, but would not impede wildlife movement any more than the existing highway and culverts (see Section 3.13).	Minimal impacts	
Threatened, Endangered, and Special Status Species	Two federally listed species were identified within the vicinity of the project study area: the northern long-eared bat and the dwarf wedgemussel. The northern long-eared bat would not likely be adversely affected and the dwarf wedgemussel would not be impacted by the project. Anadromous Fish Use areas are within two miles of the study area; however, no Anadromous Fish Use areas are currently mapped within the study area and no species are expected to be impacted. However, because Anadromous Fish Use areas are mapped downstream of the study area, any impacts to streams may be subject to time-of-year-restrictions, and, therefore, may require additional resource agency coordination. Further coordination with agencies and final effect determinations would be conducted as a part of the 401/404 permit process (see Section 3.14).	No adverse effects	

Environmental Resource	Resource Summary	Potential Environmental Impact	
		No Build Alternative	Build Alternative
Hazardous Materials	A search of federal and state agency databases identified eight sites of elevated environmental concern within the study area. Reported releases or spills associated with the sites may have potential to impact soil and groundwater in the study area (see Section 3.15).	Sites will be managed and handled in accordance with federal, state, and local procedures	
Indirect and Cumulative Effects	Indirect and cumulative effects from both the No Build and Build Alternatives are expected to be minimal since the proposed improvements are to an existing facility within existing right of way in an environment that is highly developed. Additionally, no induced growth is to be expected as a result of the Build Alternative. The study area and surrounding localities are already highly developed and any growth would continue regardless of the conditions of the surrounding roadway network (see Section 3.16).	Minimal impacts	
Section 4(f)	Minor right of way impacts may occur to several historic properties as a result of noise barriers. If right of way impacts occur, the Section 4(f) use would likely be considered a <i>de minimis</i> impact (see Section 3.17).	Section 4(f) Use (acres of use to historic properties)	
		0	0*

*Currently, 5.96 acres of potential impact are estimated for the construction of noise barriers, with 5.06 acres outside of the VDOT right of way and within historic districts (0.9 acres of potential impact are within VDOT right of way). The 5.06 acres of impact would be considered a Section 4(f) use. This value is based on a conservative estimate of the right of way width required to construct and maintain the barriers (approximately 30 feet). VDOT anticipates that during the final design noise analysis, barrier locations would be refined and may be shifted to be fully located within the VDOT right of way. Additional coordination with the VDHR and DC SHPO will be conducted based on further design details.

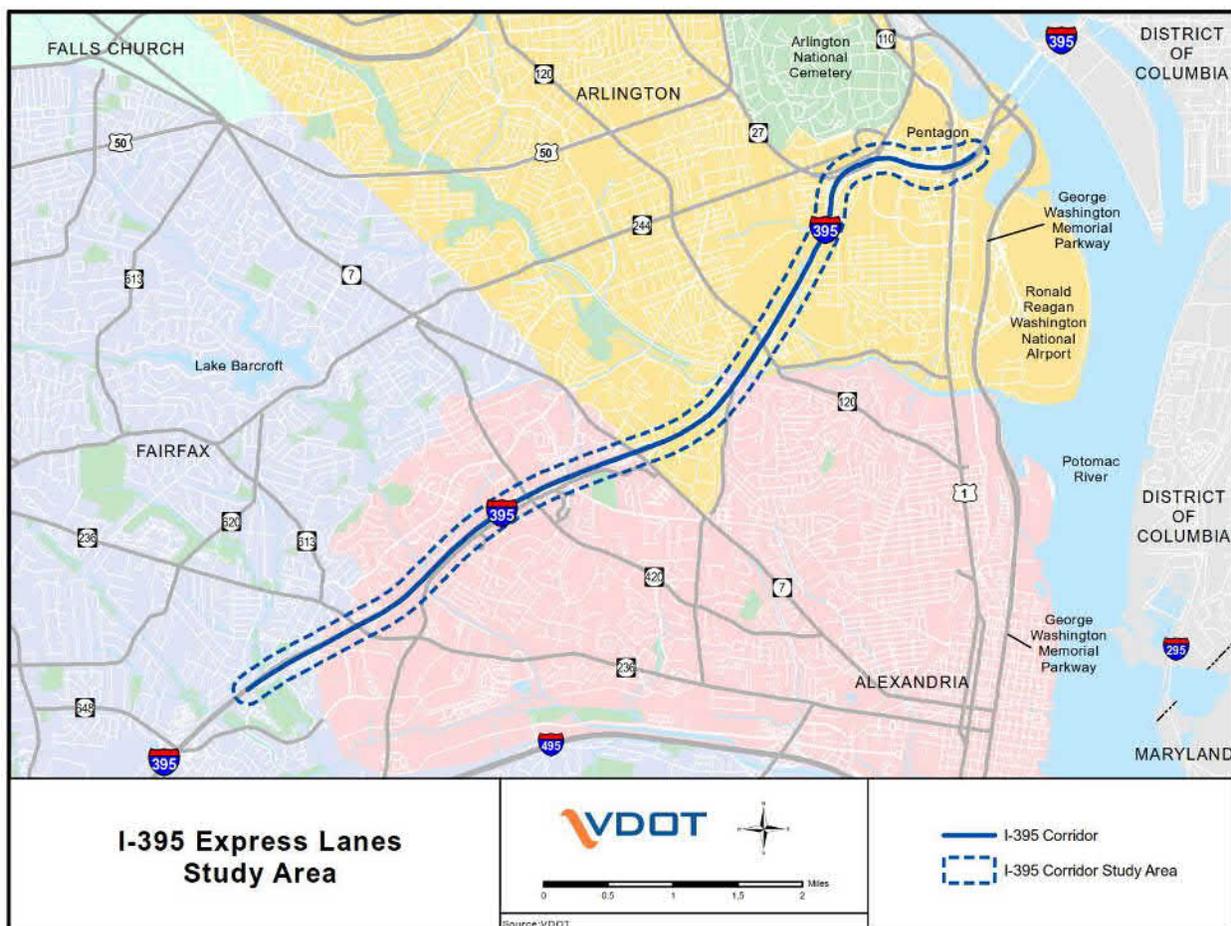
The study area encompasses approximately eight miles of the I-395 corridor from Turkeycock Run in Fairfax County to the vicinity of Eads Street near the Pentagon in Arlington County, as shown in **Figure 3-1**.

Transition areas extending slightly beyond these termini are included in order to connect the proposed improvements with the existing facility on either end. Additional signage, maintenance of traffic, and noise barrier activities are anticipated to occur beyond the study area. Crossroads and interchange areas also are included in the study area, as well as lands adjacent to the corridor⁸.

Potential or estimated environmental impacts of the Build Alternatives were estimated based on the Build Alternative's area of impact. The area of impact has been estimated for alternative comparison purposes and decision-making during the National Environmental Policy Act (NEPA) process, and would be refined as design advances.

⁸ The study area is approximately 600 feet to either side of the existing corridor for a distance of eight miles. The study area is established to identify the full extent of environmental resources and their relevance to the project.

Figure 3-1: Study Area



The specific alternative scenarios are the No Build which would retain the existing I-395 Interstate and associated interchanges in their present configurations, and allow for routine maintenance and safety upgrades, but assumes no major improvements to the I-395 corridor with the exception of the previously committed projects; and the Build Alternative which would extend eight miles along I-395 beginning at Turkeycock Run Interchange, just north of Edsall Road Interchange, to the vicinity of Eads Street Interchange and converts the two existing reversible High Occupancy Vehicle (HOV) lanes to three HOT lanes within the median area between the northbound and southbound I-395 general purpose lanes, as discussed in **Section 2.3.1, 2.3.2** and the *Alternative Analysis Technical Report* (VDOT, 2016a).

3.2 DEMOGRAPHICS/PROPERTY IMPACTS

3.2.1 Existing Conditions

There are over 73,000 residents within the Census block groups within the study area (Census, 2014). Between 1980 and 2014; Fairfax County has seen a larger percent change (87 percent) in total population than the state of Virginia (53 percent). The City of Alexandria has seen a 42 percent population increase and Arlington County a 44 percent population increase.

Fairfax County is the only study area locality to have a higher positive employment percent change (16 percent) than that of Virginia (12 percent), from 2001-2014. According to the Virginia Labor Market Information (LMI), the Professional, Scientific, and Technical Service industry ranks as the largest industry in Fairfax County, the City of Alexandria, and Arlington County with 26 percent, 24 percent, and 19 percent, respectively.

Within the study area Census block groups there is a higher percentage of renter occupied housing (65 to 69 percent) than owner occupied housing (31 to 35 percent) across all localities. The study area census block groups have an average of 12 percent vacant housing units. For more information regarding population, employment, and housing characteristics, refer to the *Socioeconomic Land Use and Technical Report* (VDOT, 2016i).

3.2.2 Future Conditions

No Build Alternative

Although the No Build Alternative would not improve travel through the study area, the lack of improvements would likely not cause people to relocate from the area, as discussed further in the *Indirect and Cumulative Effects Technical Report* (VDOT, 2016e). An additional evaluation of the study area's social characteristics may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

In addition to reducing congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods, the extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability. The improvements would not likely cause people to relocate into or out of the area. Therefore, the Build Alternative would not materially affect population characteristics of the study area.

Construction of the Build Alternative would provide temporary local employment opportunities and support existing local businesses around the corridor (e.g. gas stations and restaurants).

The Build Alternative would be built largely within VDOT's existing right of way and would not result in any displacements or relocations. Noise barrier requirements and locations have not been set; however, minor right of way and/or easements may be necessary. Based upon preliminary design, approximately 5.06 acres may be required. Additionally, approximately 0.24 acres would be required for power, signal, and signage requirements. Further information regarding right of way and/or easements is included in the *Right of Way Technical Report* (VDOT, 2016h).

Since the Build Alternative would not negatively impact population, economic, housing characteristics, or cause displacements or relocations to uses within the study area, no mitigation measures are proposed. Refer to the *Socioeconomic and Land Use Technical Report* (VDOT, 2016i) for additional information.

3.3 ENVIRONMENTAL JUSTICE

3.3.1 Existing Conditions

Of the 45 Census block groups within the study area, 29 are determined to be Environmental Justice (EJ) communities based upon high percentages of minority persons (refer to **Figure 3-2**). A majority of the EJ Census block groups within the study area are generally located on the southwestern portion of the I-395 study area corridor in the City of Alexandria and Fairfax County.

None of the Census block groups within the study area have a median household income below \$23,850, the U.S. Department of Health and Human Services (HHS) 2014 poverty threshold for a family of four (the average household size within the localities within the study ranges between 2.20 and 2.83; therefore using the threshold for a family of four yields a conservative threshold). Thus, no low-income populations have been identified within the project study area and no further assessment of impacts to low-income populations is required.

3.3.2 Future Conditions

No Build Alternative

The No Build Alternative would not improve the travel time within the corridor; however, this delay in travel would be felt by all residents including minority populations and would not impact minority populations disproportionately. Evaluation of the potential effects to environmental justice communities may be required if programmed improvements under the No Build Alternative involve major new construction with federal funding. Potential effects to minority populations would be addressed by the respective project sponsors.

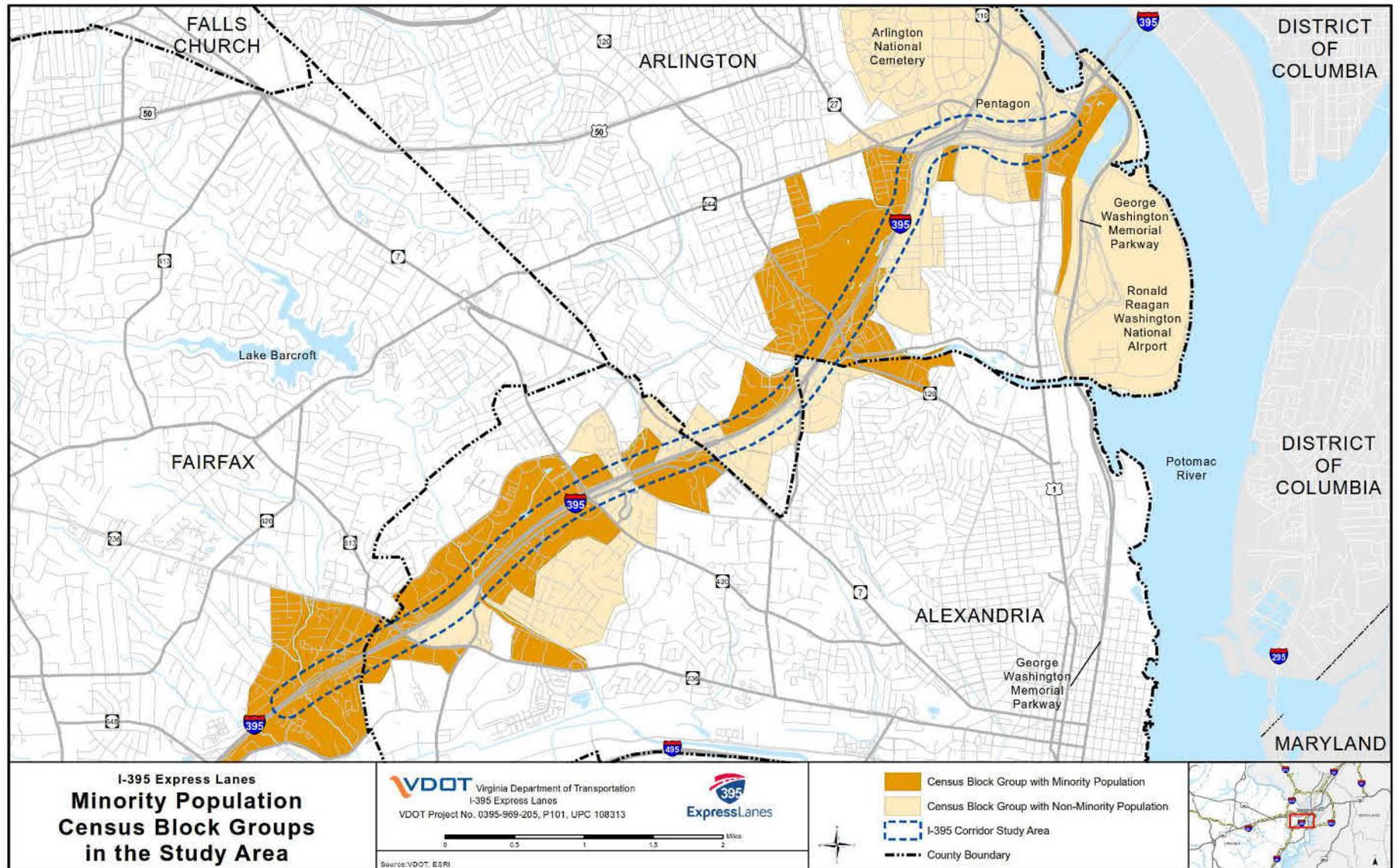
Build Alternative

The Build Alternative would reduce congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods. The extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability, providing benefits to all populations, including minority populations.

The Build Alternative would cause noise impacts to both non-minority and minority populations. In accordance with Federal Highway Administration (FHWA) Order 6640.23, consideration of mitigation for noise impacts (e.g., noise barriers) would be provided without discrimination when warranted and determined to be feasible and reasonable.

The Build Alternative would convert HOV lanes to HOT lanes, requiring that single-occupancy vehicles (SOV) and double occupancy vehicles pay a toll to use the express lanes. Other options are available to users to avoid the tolls associated with the HOT lanes that offer flexibility for all income levels, including the use of the existing general purpose lanes, the use of an E-ZPass Flex which would provide free access to the HOT lanes for carpoolers with three or more people in the vehicle, as well as transit. The FHWA has stated that congestion pricing “places responsibility for travel choices squarely in the hands of the individual traveler, where it can be decided and managed” (FHWA, 2008). While the SOV is often the preferred choice of travel, with increasing benefits to shared passenger transportation alternatives, travelers may decide to change their travel habits.

Figure 3-2: Environmental Justice Block Groups



Maintaining the general purpose lanes along with the HOT lanes allows each individual traveler to choose between the free lanes or the tolled facility based on the value that individual has placed on their time and/or the need for a reliable trip time. With the new cash-based system created by E-ZPass, families that previously could not obtain an E-ZPass transponder due to the lack of a credit card, can now purchase an E-ZPass Reload Card at local convenience stores, such as CVS and 7-11 (see <http://www.ezpassva.com/reloadcard> for more details).

The impacts associated with the Build Alternative would not disproportionately impact minority or low-income populations. Project-related improvements to travel time and travel reliability would benefit both minority populations and non-minority populations. Therefore, no mitigation measures are proposed. Refer to the *Socioeconomic and Land Use Technical Report* (VDOT, 2016i) for additional information.

3.4 LAND USE AND PLANNED DEVELOPMENT

3.4.1 Existing Conditions

The study area is comprised mainly of highly developed urban areas and communities interspersed with parks and recreational uses. Development in the study area primarily consists of residential, commercial, and governmental properties, as listed in **Table 3-2** and shown in **Figure 3-3**.

Table 3-2: Summary of Study Area Land Use

Land Use	Acres	Percent of Study Area Covered
Commercial	100.13	8.9%
Industrial	16.02	1.4%
Institutional ¹	51.60	4.6%
Other ²	13.07	1.2%
Recreational	81.96	7.3%
Residential	363.25	32.4%
Transportation (including I-395)	495.33	44.2%

Source: Geographic Information Systems (GIS) and county data overlays

¹ Institutional land uses includes schools and religious facilities.

² Other land uses includes city-owned, open, vacant, or other public land.

3.4.2 Future Conditions

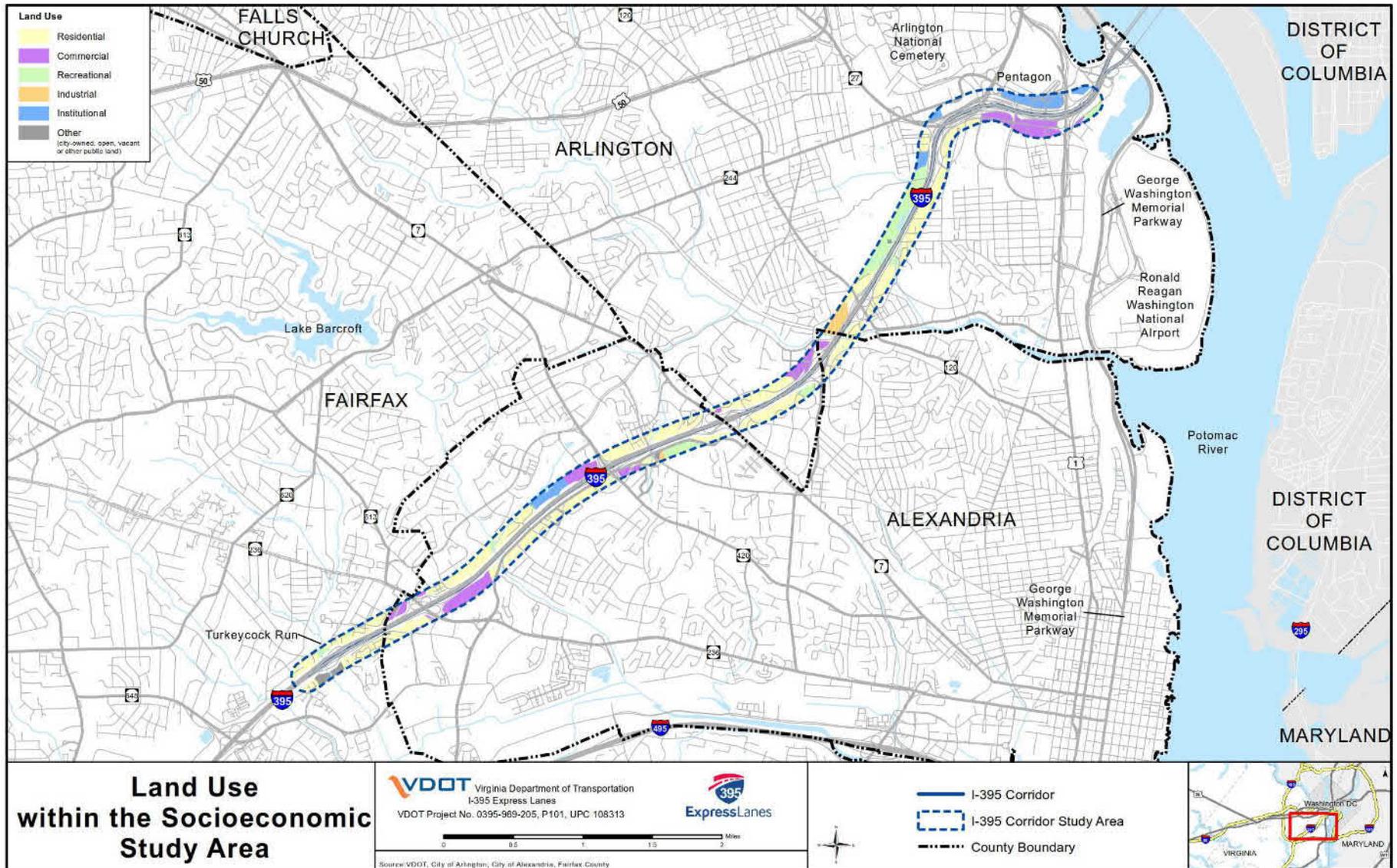
No Build Alternative

Each locality has plans for future development and redevelopment around the study area. These plans for development are not likely to change under the No Build Alternative. Evaluation of the potential effects to land use may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

A commonly stated need for development within each locality is more efficient travel in either the form of better public transportation or improved highway corridors.

Figure 3-3: Land Use within the Study Area



The Build Alternative would reduce congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods. The extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability. These traffic improvements have the potential to aid each locality in future development goals by helping to provide faster more reliable commute times with improved travel times for emergency vehicles. The Build Alternative would have no substantial impacts to land use. Refer to the *Socioeconomics and Land Use Technical Report* (VDOT, 2016i) for additional information.

3.5 COMMUNITY FACILITIES

3.5.1 Existing Conditions

Community facilities are buildings or places that provide a variety of services to the public. Public community facilities generally provide services for general public benefit, and include public schools, healthcare facilities, emergency service facilities, government services, airports, and museums. Privately-held community facilities also serve as important institutions within the community, and include religious facilities, cemeteries, and private schools. The study area contains three religious facilities, one public and two private schools, one museum and visitor center, one fire station, one police station, and two post offices (refer to **Figure 3-4**). The majority of the community facilities are located in Arlington's portion of the study area.

Public transportation systems within the study area include the Metrorail, multiple bus systems, owned by Metrorail, the state or by a locality. Additionally, the Virginia Railway Express runs south of the study area along I-495 with a stop near the Van Dorn Metrorail stop. Refer to the *Socioeconomic and Land Use Technical Report* (VDOT, 2016i) for additional information.

3.5.2 Future Conditions

No Build Alternative

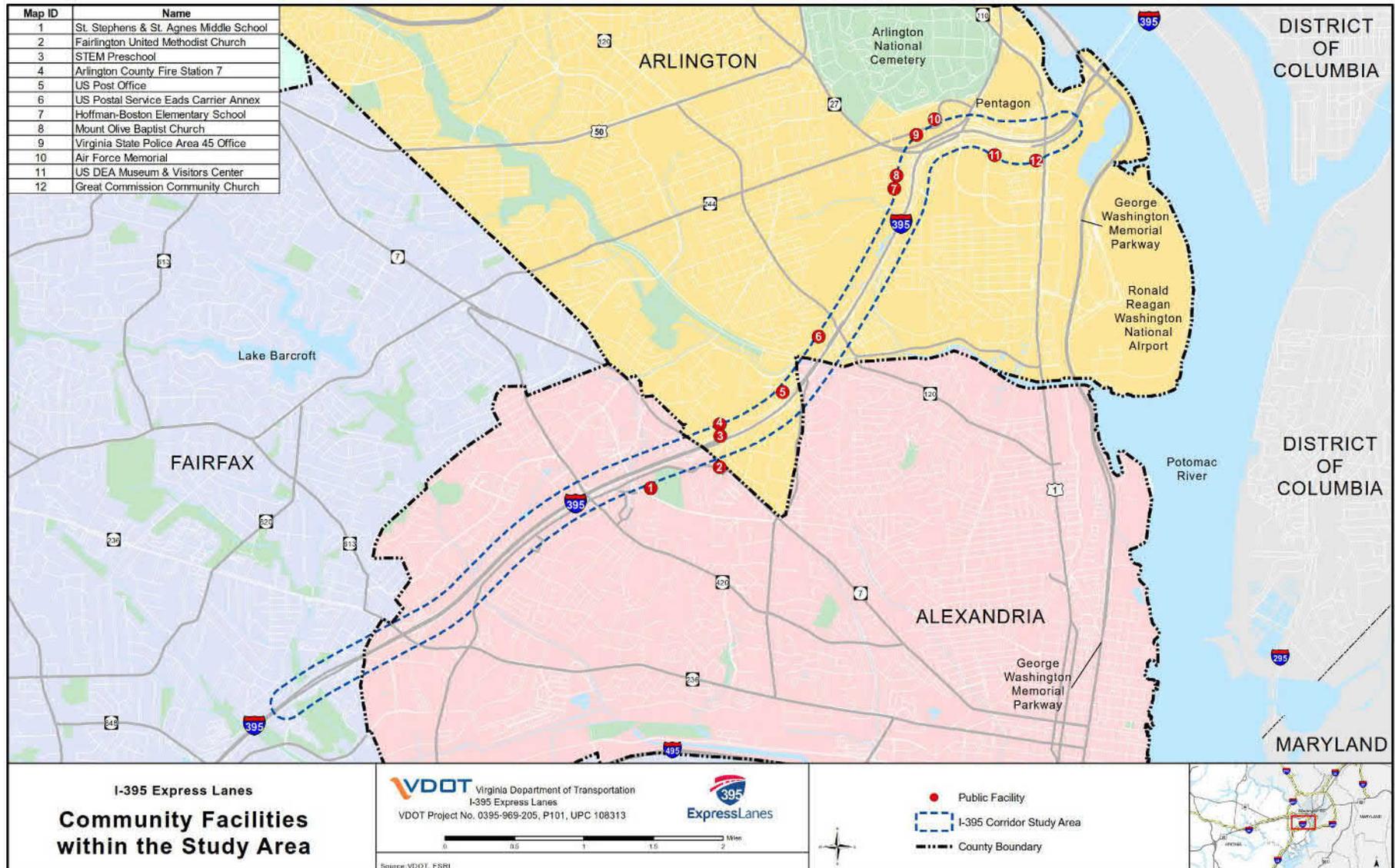
Under the No Build Alternative, travel patterns and access along the I-395 study area would not be improved and travel times for emergency services may be less reliable. Evaluation of the potential effects to community facilities may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

Implementation of the Build Alternative would reduce congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods. The extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability, which would likely increase reliability for emergency services.

The Build Alternative would have no substantial impacts to community facilities; therefore, no mitigation is required. Refer to the *Socioeconomic and Land Use Technical Report* (VDOT, 2016i) for additional information.

Figure 3-4: Community Facilities within the Study Area



3.6 RECREATIONAL RESOURCES

3.6.1 Existing Conditions

For purposes of the study, recreational resources have been identified as any protected area under the jurisdiction of a municipal, state, federal, or conservation entity; or a public area where recreation or preservation is a primary function or resource. A total of fourteen recreational resources are located within the study area. Three parks are located within the City of Fairfax; four parks (one of which is also a museum – the Fort Ward Museum and Park) and two conservation easements are located within the City of Alexandria; and four parks, and a community center are located within Arlington County. These resources are shown in **Figure 3-5**.

3.6.2 Future Conditions

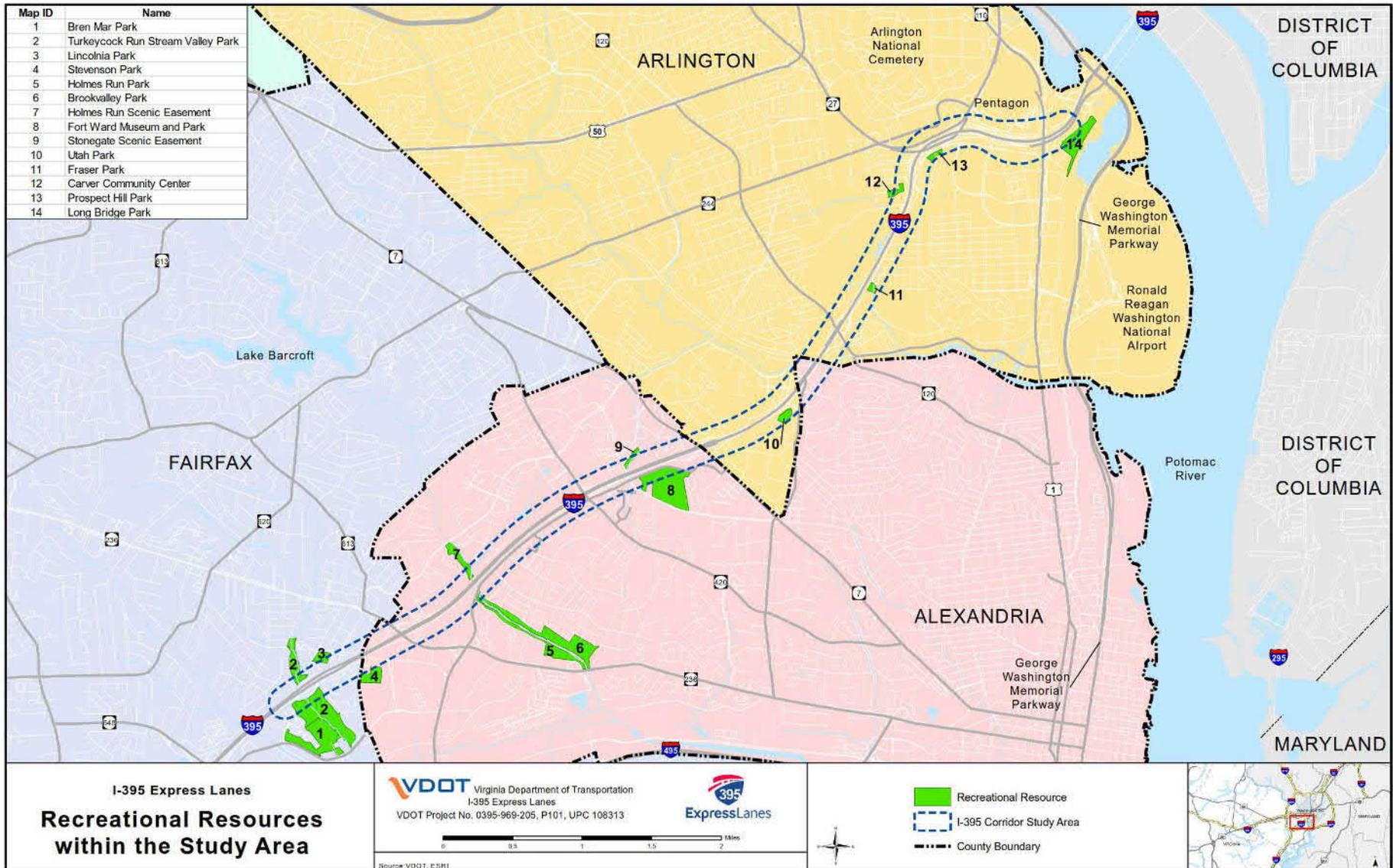
No Build Alternative

Noise impacts are predicted to occur at portions of five recreational resources under the No Build Alternative. Additionally, evaluation of the potential effects to recreational resources may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

Noise impacts are predicted to occur at portions of five recreational resources under the Build Alternative; however none of these impacts would be considered a constructive use under Section 4(f). The number of noise impacts are predicted to increase under the Build Alternative compared to the No Build Alternative, and potential noise mitigation is under consideration for the Build Alternative (see **Section 3.9** and refer to the *Noise Analysis Technical Report* (VDOT, 2016g). Indirect impacts, such as increased traffic volumes may be experienced by recreational resources within the study area. Additionally, the Build Alternative would reduce congestion and overall travel times in both the I-395 general purpose and HOV lanes during peak periods. The extension of the I-395 Express Lanes would increase roadway safety, provide additional travel choices, and improve travel reliability, which may contribute to an increased usage of recreational facilities as some members of the community may find that traveling to the facilities is easier. Since no recreational resources would be substantially impacted by the project, no additional mitigation is proposed outside of the consideration of potential noise barriers. Additional information on recreational resources is provided in the *Socioeconomic and Land Use Technical Report* (VDOT, 2016i).

Figure 3-5: Recreational Resources within the Study Area



3.7 CULTURAL RESOURCES

3.7.1 Existing Conditions

An archaeological and architectural reconnaissance survey was completed to determine the presence of resources in the area of potential effect (APE). Four known historic properties were identified in the vicinity of the APE: the Pentagon (000-0072), the Alexandria Canal Path (44AX0028), Parkfairfax Historic District (100-0151), and the Fairlington Historic District (000-5772) (refer to **Figure 3-6**)⁹.

Five previously-recorded archaeological sites (44AX0028, 44FX2214, 44AX0037, 44AX0176, and 44AX0177) and one newly-recorded archaeological site (44FX3210) are within the project APE. The five previously recorded sites were found to be destroyed within the APE, and site 44FX3210 was determined not eligible for listing in the National Register of Historic Places (NRHP).

3.7.2 Future Conditions

No Build Alternative

The No Build Alternative would have no direct impact on historic resources. An additional evaluation of the study area's cultural resources may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

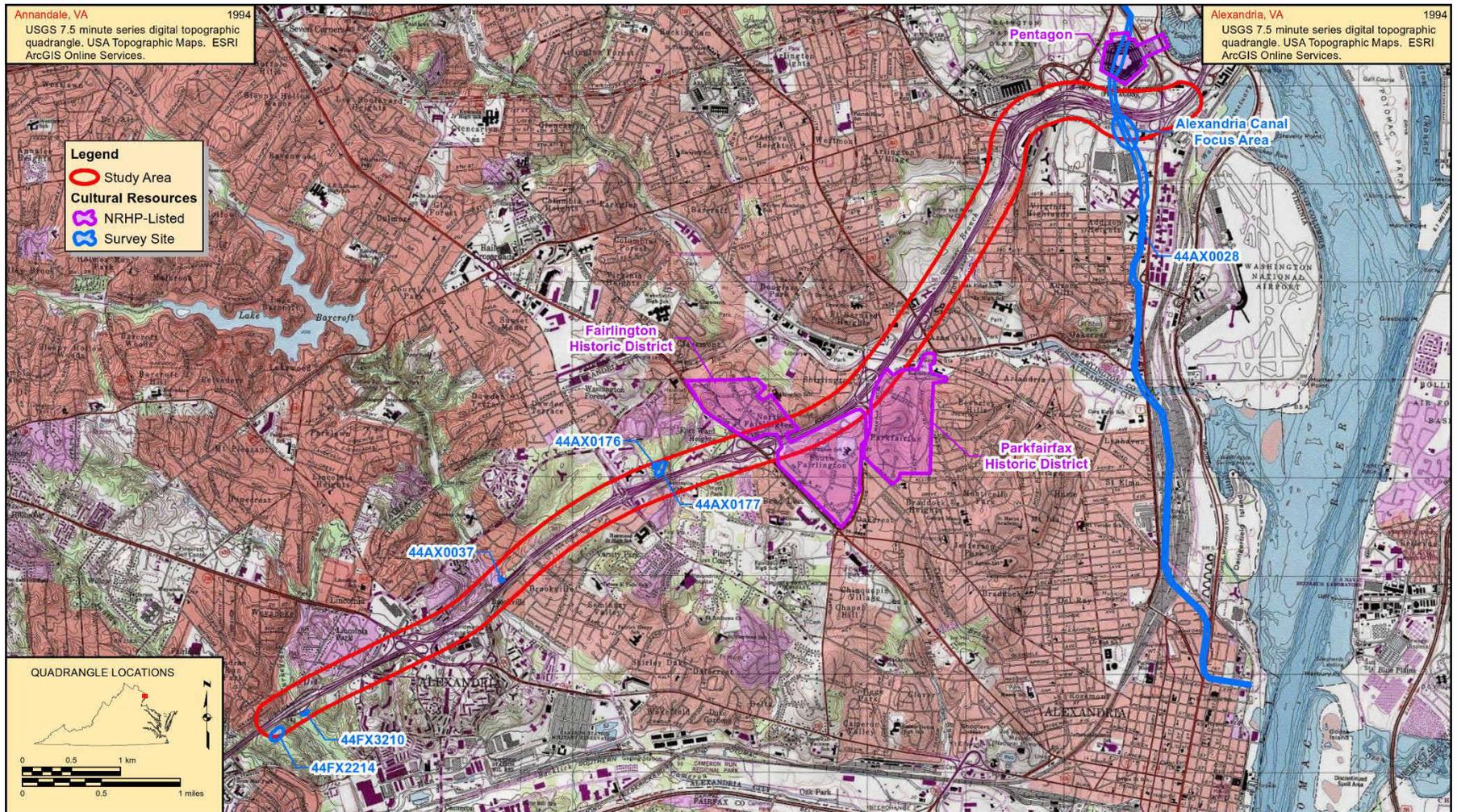
Build Alternative

The Build Alternative would not affect any NRHP-eligible archaeological sites and would have No Effect on the Pentagon and the Alexandria Canal Path. However, since the Fairlington and Parkfairfax Historic Districts are adjacent to the Interstate, there is potential for visual effects to the districts. Additionally, minor right of way and/or easements could be required for the construction of noise barriers.

Based upon preliminary design, the Build Alternative could impact up to approximately 5.96 acres of historic resource property for the construction of noise barriers. As currently proposed, the project would not impact any of the qualities that make the historic resources eligible for listing in the NRHP. Approximately 5.06 acres would be outside of the VDOT right of way and would be located within historic districts (0.9 acres of potential impact are within VDOT right of way). This estimate is based on a conservative estimate of the right of way width required to construct and maintain the barriers (approximately 30 feet). During the final design noise analysis, barrier locations would be refined and may be shifted to be fully located within the VDOT right of way. VDHR and the DC SHPO have reviewed the undertaking within VDOT right of way in accordance with the NHPA and determined that the project will have a No Adverse Effect on historic properties. Additional coordination with VDHR and the DC SHPO will be conducted based on further design details.

⁹ Additional resources were surveyed and identified by others after the cultural resources analysis for this EA was completed. To be conservative, the potential impacts associated with these historic properties have been included in this EA. Additional coordination with VDHR and DC SHPO will be conducted based on further design when more detail is available regarding the need for and design of noise barriers in the vicinity of the historic resources.

Figure 3-6: Cultural Resources within the Study Area



3.8 AIR QUALITY

This section describes the current regulations pertaining to the control of air pollutants, the pollutants of concern, and the effect of the Build Alternative on air quality both during operation of the project and during construction. For further details, refer to the *Air Quality Technical Report (VDOT, 2016a)*.

3.8.1 Existing Conditions

Pursuant to the Federal Clean Air Act of 1970 (CAA), the EPA is required to set the NAAQS for pollutants considered harmful to public health and welfare. Federal actions must not cause or contribute to any new violation of any standard, increase the frequency or severity of any existing violation, or delay timely attainment of any standard or required interim milestone.

EPA designates geographic regions that do not meet the NAAQS for one or more criteria pollutants as “non-attainment areas.” Areas previously designated as non-attainment, but subsequently re-designated to attainment because they no longer violate the NAAQS, are reclassified as “maintenance areas” subject to maintenance plans to be developed and included in a State’s Implementation Plan (SIP). This project is located within areas (Fairfax and Arlington Counties, and the City of Alexandria) that are part of a region currently designated non-attainment or maintenance for one or more of the NAAQS established by the EPA, as follows:

- DC-Maryland-Virginia marginal nonattainment area for the 2008 eight-hour ozone standard, and
- DC-Maryland-Virginia maintenance area for the 1997 primary annual fine particulate matter (PM_{2.5}) NAAQS¹⁰.

As such, federal transportation conformity rule (40 CFR Parts 51 and 93) requirements apply.

In addition, FHWA requires that the project’s effect on carbon monoxide (CO) and mobile source air toxics (MSATs) be assessed, either qualitatively or quantitatively, depending upon the type of project.

3.8.2 Future Conditions

No Build Alternative

Transportation Conformity

Since the No Build Alternative does not plan any new construction, the alternative would be in conformance with the National Capital Region Transportation Planning Board’s (NCRTPB) Constrained Long Range Plan (CLRP) and associated Transportation Improvement Program (TIP), and the associated regional conformity analysis.

¹⁰ On August 24, 2016, EPA issued a final rule (81 FR 58010) titled “*Fine Particulate Matter National Ambient Air Quality Standards: State Implementation Plan Requirements*” that included a revocation of the 1997 primary annual PM_{2.5} standard effective October 24, 2016, and therefore federal transportation conformity requirements pertaining to PM_{2.5} will no longer apply after that date in the DC-Maryland-Virginia maintenance area.

PM_{2.5} Analysis

As discussed below under the Build Alternative, the proposed improvements were not found to be ones of air quality concern for PM_{2.5}, and therefore a detailed quantitative assessment of potential impacts associated with the No Build Alternative was not required.

CO Analysis

While the No Build Alternative would result in increased traffic along local roadways, no assessment was performed due to the FHWA-VDOT 2009 Agreement for No Build Analyses, which states that if the project qualifies as an EA, an analysis of CO is not required. This agreement is based upon FHWA's and VDOT's review of numerous air studies on similar projects that concluded that CO is not anticipated to be adversely affected in the No Build condition, and therefore yields little or no value to the public and does not aid in decision-making.

MSAT Analysis

The effect on MSATs was assessed qualitatively. Since the EPA's vehicle and fuel regulations are expected to result in substantially lower MSAT levels in the future than exist today due to cleaner engine standards coupled with fleet turnover, the MSAT emissions in the study area would be substantially lower under the No Build Alternative than they are today, even accounting for vehicle miles traveled (VMT) growth.

Construction Emissions

Since the No Build Alternative does not plan any new construction, the alternative would not produce any construction emissions.

Build Alternative

Transportation Conformity

The NCRTPB is currently updating its CLRP and associated TIP, and the I-395 Express Lanes project is being included in the associated regional conformity analysis.

PM_{2.5} Analysis

For PM_{2.5}, the screening criteria presented in Appendix L of the ***VDOT Project-Level Air Quality Resource Document (Resource Document)*** (VDOT, 2016k), which were established based on EPA guidance and subjected to inter-agency consultation for conformity, were applied to determine if this project represents one of local air quality concern. Traffic forecasts developed for this project showed that increases in average daily diesel truck traffic associated with the Build Alternative would not exceed 2,000 trucks per day, the criterion established in the ***VDOT Resource Document*** (VDOT, 2016k) for highway capacity expansion. Additional factors that support the conclusion that this project is not one of local air quality concern for PM_{2.5} include:

- Mainline capacity increases usable by trucks are not part of the proposed action;
- The area has already achieved the 1997, 2006 and 2012 PM_{2.5} NAAQS;
- Background concentrations are well below the 1997 NAAQS (8.8 – 9.4 ppb); and,

- EPA has proposed to revoke the 1997 PM_{2.5} NAAQS in its implementation of the 2012 standard. This would change the status of the area from maintenance to attainment of the NAAQS, eliminating PM_{2.5} conformity requirements.

Based on the weight of evidence it was determined that the proposed improvements are not ones of air quality concern for PM_{2.5} and therefore a detailed quantitative assessment of potential impacts was not required.

CO Analysis

A quantitative CO hot spot worst-case screening analysis was performed for the project for purposes of both conformity and NEPA, using inputs and procedures specified in the *VDOT Resource Document* (VDOT, 2016k) and consistent with applicable EPA and FHWA requirements and guidance. The analysis was conducted as follows:

- Modeling was completed for existing (2015), the project opening (2020) and design (2040) years.
- The modeling was conducted with EPA models for emissions and dispersion.
- Analysis was conducted for three highly congested major intersections (Little River Turnpike and Beauregard Street, Seminary Road and Beauregard St EB, S. Glebe Road and NB I-395 Off-ramp) and the interchange between I-395 & Route 27.
- Based on the FHWA-VDOT 2016 Programmatic Agreement, only Seminary Road and Beauregard Street EB required detailed modeling.
- Modeling in all cases was conducted using worst-case assumptions for traffic and facility configurations. For example, at the interchange, worst-case traffic volumes were applied, traffic and emissions were concentrated into a single grade separation rather than modeled over broadly dispersed ramps, and receptors were located at twenty feet from the edge of the travelled roadways rather than outside the right of way limits that are outside the footprint of the interchange and therefore much further away from the modeled roadway.

The results for all of the analyses (intersection and interchange) show that CO concentrations for the Build Alternative are expected to remain well below the CO NAAQS for all locations modeled throughout the corridor for each year modeled. Based on the modeling results, implementation of the project is not expected to cause or contribute to a violation of the CO NAAQS.

MSAT Analysis

Based on FHWA guidance and the forecast total traffic volumes for I-395, this project is categorized as one with high potential effects for MSATs. A detailed quantitative assessment (modeling) following FHWA guidance was therefore conducted for the project to assess the potential impacts for MSATs. The assessment shows that there would be no long-term adverse impacts associated with the Build Alternative and that future MSAT emissions across the entire study corridor would be substantially below today's levels, even after accounting for projected VMT growth.

More specifically, the modeling results indicate that MSAT emissions are expected to increase slightly from the No Build to the Build Alternative in 2020 and 2040, although these increases are not substantial. However, when compared to existing conditions, emissions of all MSAT pollutants under the Build Alternative are projected to be substantially lower than exist today. EPA's stringent vehicle emission and

fuel regulations, combined with fleet turnover, are expected to substantially lower fleet-average emission rates for MSATs in the future relative to today.

Overall, best available information indicates that, nationwide, regional levels of MSATs are expected to decrease in the future due to fleet turnover and the continued implementation of more stringent emission and fuel quality regulations. Nevertheless, it is possible that some localized areas will show an increase in emissions and ambient levels of these pollutants due to locally increased traffic levels associated with the project.

Construction Emissions

The temporary air quality impacts from construction are not expected to be substantial. Emissions will be produced during the construction of this project by heavy equipment and vehicle travel to and from the site. Earthmoving and ground-disturbing operations will generate airborne dust. Construction emissions are short term or temporary in nature. In order to reduce these emissions, all construction activities are to be performed in accordance with VDOT's current Road and Bridge Specifications. These specifications require compliance with all applicable local, state, and federal regulations.

3.9 NOISE

3.9.1 Existing Conditions

A noise analysis was performed in accordance with current FHWA regulations contained in 23 CFR 772 and VDOT's Noise Abatement Policy. For more information regarding noise analysis results, refer to the *Noise Analysis Technical Report* (VDOT, 2016g).

Noise monitoring was conducted at 29 sites during the time period from May 23 to 26, 2016 to characterize noise levels associated with contemporaneous traffic counts conducted in the study area. The average sound level (L_{eq}) ranged from a low of 57 decibels (dBA) at Fort Ward Park, 4301 West Braddock Road, Alexandria to a high of 74 dBA at 2300 24th Road, Arlington.

FHWA's noise-prediction computer model (TNM) was then used to develop a model of the study area which was validated for accuracy with the results of the noise monitoring program. Using the loudest-hour traffic data (determined to be 7:00 a.m. to 8:00 a.m. for Existing Conditions), existing traffic noise levels were predicted for sites representative of all noise sensitive land-users (or receptors) throughout the study area. The predicted existing noise levels are then used as the baseline against which forecasted build year noise levels are compared and potential noise impacts assessed. In addition to the increase in noise levels from existing year to build year, noise impacts are identified where noise sensitive land uses exceed the FHWA Noise Abatement Criteria (NAC). Overall, predicted outdoor noise levels range from 44 to 79 dBA L_{eq} for Existing Conditions. A total of 2,274 residential, one commercial, and 225 recreational receptors have noise levels that approach or exceed the NAC. The NAC is 67 dBA L_{eq} at all residential and recreational receptors and 72 dBA L_{eq} at all commercial receptors.

3.9.2 Future Conditions

No Build Alternative

The loudest-hour of the day for the No Build Alternative was determined to be 5:00 p.m. to 6:00 p.m. Overall, predicted future design year No Build exterior noise levels range from 44 to 79 dBA L_{eq} . No Build sound levels are predicted to remain approximately the same or very slightly lower during the loudest-hour of the day relative to the existing levels. This is due to increased traffic congestion predicted during the loudest-hour travel periods slowing speeds. A total of 2,201 residential, 217 recreational, and 1 commercial receptors were above the NAC.

Build Alternative

The loudest-hour of the day for the Build Alternative was determined to be 8:00 a.m. to 9:00 a.m. Predicted 2040 Build Alternative exterior L_{eq} s are slightly higher than the Existing and No Build levels, and range from 45 to 80 dBA. On average for all receptors, sound levels are predicted to increase from Existing to Build conditions by approximately one dBA. This increase is due primarily to the roadway improvements allowing slightly higher traffic volumes in the loudest-hour periods. A total of 2,600 residential, 256 recreational, and 1 commercial receptors were above the NAC.

Noise impact would occur wherever project noise levels are expected to approach within one dBA or exceed the NAC or when project noise levels cause a substantial increase over existing year noise levels – an increase of 10 dBA or more is considered substantial by VDOT. There are no impacts predicted due to substantial increases in existing noise levels for the I-395 Express Lanes project.

FHWA and VDOT require that noise barriers be both “feasible” and “reasonable” to be recommended for construction. To be feasible, a barrier must reduce noise levels at noise sensitive locations by at least five dBA, thereby “benefiting” the property. VDOT requires that at least 50 percent of the impacted receptors receive five dBA or more of noise reduction from the proposed barrier. Additionally, constructability issues must be assessed, such as safety, barrier height, topography, drainage, utilities, maintenance of the barrier, and access to adjacent properties. In addition to any potential engineering conflicts that are evaluated, VDOT’s noise policy states that noise barrier panels cannot exceed the maximum allowable panel height of 30 feet.

Barrier reasonableness is based on three factors: cost-effectiveness, ability to achieve VDOT’s noise reduction design goal, and voting results of the benefited receptors. To be “cost-effective,” a barrier’s surface area cannot exceed 1,600 square feet per benefited receptor. All receptors located above the barrier maximum height of 30 feet are not assessed or included in the determination of a barrier’s feasibility or reasonableness. The second reasonableness criterion is the ability to achieve VDOT’s noise reduction design goal of seven dBA for at least one of the impacted receptors. The third reasonableness criterion requires that a majority of the benefited receptors (owners and residents of the potentially benefited properties) vote in favor of the barrier for it to be considered reasonable to construct. In order to assess community views, a survey of benefited receptors would be conducted during the final design phase.

Noise barriers were evaluated for all areas where noise impacts were predicted. **Table 3-3** summarizes the total length, estimated cost and benefits that would be provided by the barriers evaluated that were found to be warranted, feasible and reasonable. The barriers that were found to be feasible and reasonable are shown in **Figure 3-7**. **Table 3-4** summarizes the details of all the barriers that were evaluated. A final

decision on the feasibility and reasonableness of noise barriers would be made during the final design noise analysis phase of the project when finalized project design and detailed traffic is developed.

Table 3-3: Summary of Feasible and Reasonable Noise Barriers

Location	Length (mi.)	Estimated Cost (\$31/sq. ft.)	Number of Benefited Receptors*		
			Impacted	Not Impacted	Total
West of I-395	3.7	\$11 million	967	1,157	2,124
East of I-395	4.4	\$17 million	1,060	1,469	2,529
All	8.1	\$28 million	2,027	2,626	4,653

* The number of benefits associated with Barriers 1 and 2 are not reflected in these totals as these barriers were previously evaluated under the I-395 HOV Ramp and Auxiliary Lane Project.

Table 3-4: Summary of Noise Barrier Details

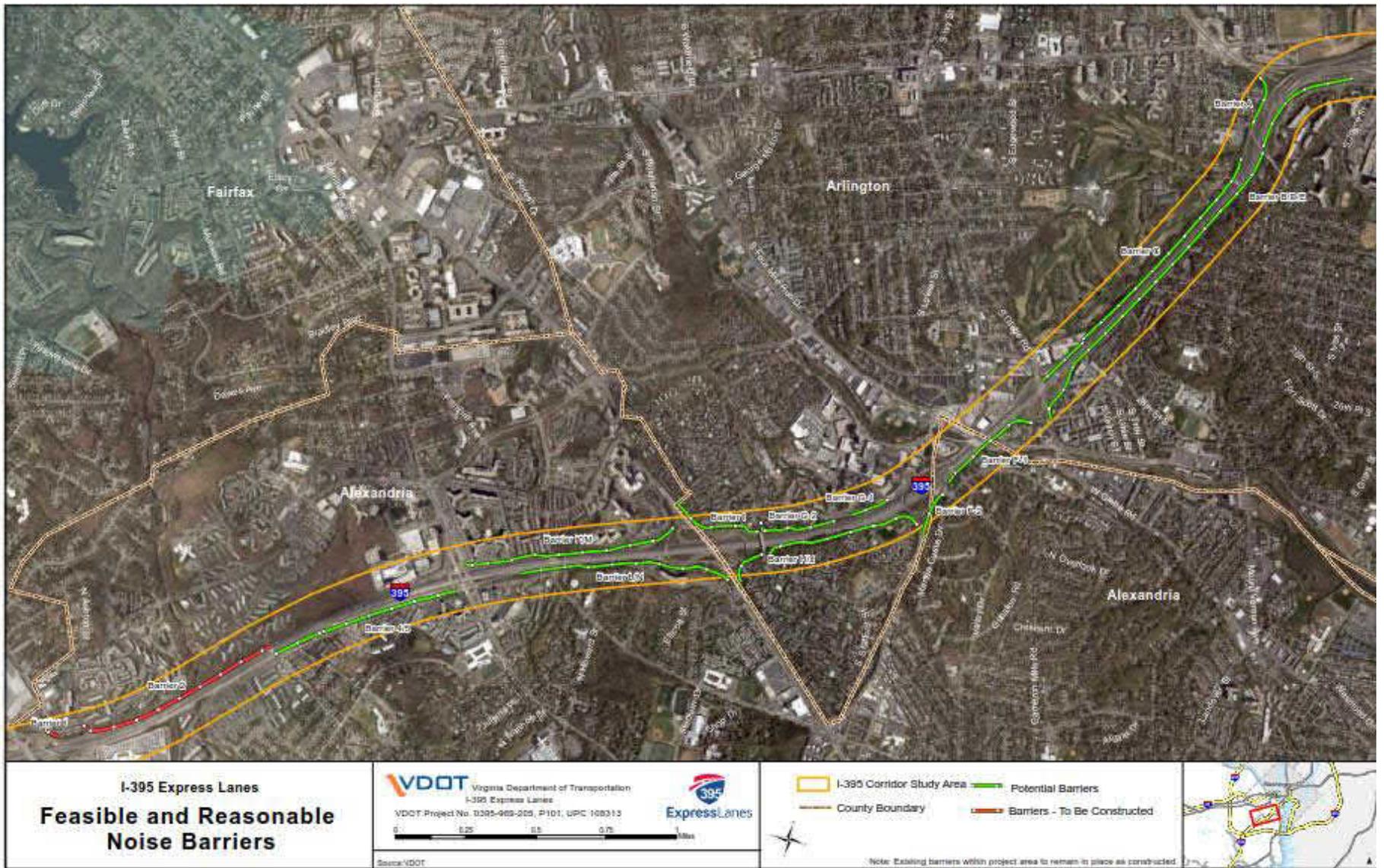
Barrier ID	Length (feet)	Height Range (feet)	Surface Area (square feet [SF])	Cost at \$31/SF	Barrier Surface Area per Benefited Receptor ¹ (SF/BR)	Barrier Status ²
1	243	18-23	5,173	\$160,363	235	F&R*
2	4,557	12-20	65,631	\$2,034,561	128	F&R*
A	1,044	15-24	20,632	\$639,592	625	F&R
B/D/E	8,875	21-30	242,319	\$7,511,889	178	F&R
C	5,636	18-24	103,712	\$3,215,072	319	F&R
CA	450	15	6,750	\$209,250	6750	F&NR
F-1	1,905	18-24	43,798	\$1,357,738	203	F&R
F-2	903	18-21	18,138	\$562,278	302	F&R
FA	1,037	24	24,907	\$772,117	4981	F&NR
G-1	773	21	16,221	\$502,851	147	F&R
G-2	1,569	15-24	30,438	\$943,578	483	F&R
H/J	3,816	27-30	109,541	\$3,395,771	413	F&R
I	1,755	27-30	50,541	\$1,566,771	337	F&R
K/M	4,073	15-18	66,581	\$2,072,381	74	F&R
L/N	4,010	15-27	79,491	\$2,464,221	235	F&R
4/5 ³	3,687	15-20	57,224	\$1,773,944	199	F&R

¹ Where SF/BR exceeds VDOT's maximum of 1,600 SF, a barrier would not be considered cost-reasonable
² Barrier Status: Feasible and Reasonable (F & R); Feasible and Not Reasonable (F & NR); and Not Feasible (NF)
³ This barrier was found to be F & R in the I-395 HOV Ramp and Auxiliary Lane Project.
 *Barriers 1 and 2 from the I-395 HOV Ramp and Auxiliary Lane Project, are to be constructed as part of the I-395 Express Lanes Project.

This noise evaluation is preliminary; a more detailed review would be completed during final design. As such, noise barriers that are found to be feasible and reasonable during the preliminary noise analysis may not be found to be feasible and reasonable during the final design noise analysis. Similarly, noise barriers that were not considered feasible and reasonable may be found to meet established criteria and be recommended for construction. If a noise barrier is determined to be feasible and reasonable in final design, only the receptors that are benefited by the proposed barrier would be given an opportunity to vote whether construction of the noise barrier is wanted.

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 impact from these activities.

Figure 3-7: Potentially Feasible and Reasonable Noise Barriers



3.10 WETLANDS AND STREAMS

3.10.1 Existing Conditions

The study area is located within the Middle Potomac-Anacostia-Occoquan subbasin, the Potomac River-Rock Creek and Potomac River-Cameron Run watersheds, and the Potomac River-Pimmit Run, Potomac River-Fourmile Run, and Cameron Run subwatersheds.

Various named and unnamed streams exist in the study area. Four named perennial streams pass beneath I-395 along the project length: Four Mile Run, Turkeycock Run, Holmes Run, and Long Branch. All streams and natural drainage features ultimately flow to the Potomac River. Four Mile Run and Turkeycock Run are the two longest and most prominent stream courses in the study area.

3.10.2 Future Conditions

No Build Alternative

Under the No Build Alternative, there would be no new stream or wetland impacts are anticipated as a result of Interstate improvements in the study area. An additional evaluation of the study area's wetlands and streams may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

While the roadway would not impact any streams or wetlands, the noise barrier installation, located on the east side of I-395 just north of Route 7, is anticipated to impact approximately 0.004 acres of wetland (refer to **Figure 3-8**).

Additionally, all construction segments would be refined as much as practicable to lessen impacts to wetlands while meeting noise attenuation goals. The use of retaining walls and side slopes would be considered to avoid impacts from lateral encroachment. Compensation for any unavoidable impacts to wetlands would be provided through mitigation banking credits based on approval of permitting agencies. For additional information, refer to the *Natural Resources Technical Report* (VDOT, 2016f).

3.11 WATER QUALITY

3.11.1 Existing Conditions

When surface waters fail to meet water quality standards sufficient to support designated use categories, the waters are classified as "impaired waters" under Section 303(d) of the Clean Water Act (CWA). Of the four named perennial streams within the study area, three are classified as impaired: Holmes Run is impaired due to E.coli and has an impaired benthic-macroinvertebrate community, and Long Branch and the non-tidal portion of Four-mile Run are impaired due to E. coli (VDEQ, 2016). The fourth named perennial stream, Turkeycock Run, is designated as fully supporting one or more designated use categories.

Figure 3-8: Wetland Impacts



3.11.2 Future Conditions

No Build Alternative

Under the No Build Alternative, no water quality changes are anticipated as a result of Interstate improvements in the study area. An additional evaluation of the study area's water quality may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

Temporary impacts to water quality may occur during roadway construction activities through increased sedimentation from land disturbing activities and occurrences of fuel spills or hydraulic spills from construction equipment. During construction, the contractor would adhere to standard erosion and sediment control. Since this project was approved by Virginia Department of Environmental Quality (VDEQ) for stormwater grandfathering under the Part C II technical criteria of 9VAC25-870-93, the contractor would adhere to stormwater criteria prescribed in the regulations preceding July 2014.

Under the Build Alternative, stormwater management would be provided entirely through the purchase of nutrient credits. The total phosphorous removal requirement per VDOT Method IIC Performance Based calculations is less than ten pounds per year and therefore the project is eligible to purchase the entire amount of nutrient credits in lieu of constructing best management practice (BMP) stormwater management (SWM) facilities, in accordance with the Virginia Department of Conservation and Recreation (VDCR) requirements. For additional information, refer to the *Natural Resources Technical Report* (VDOT, 2016f).

3.12 FLOODPLAINS

3.12.1 Existing Conditions

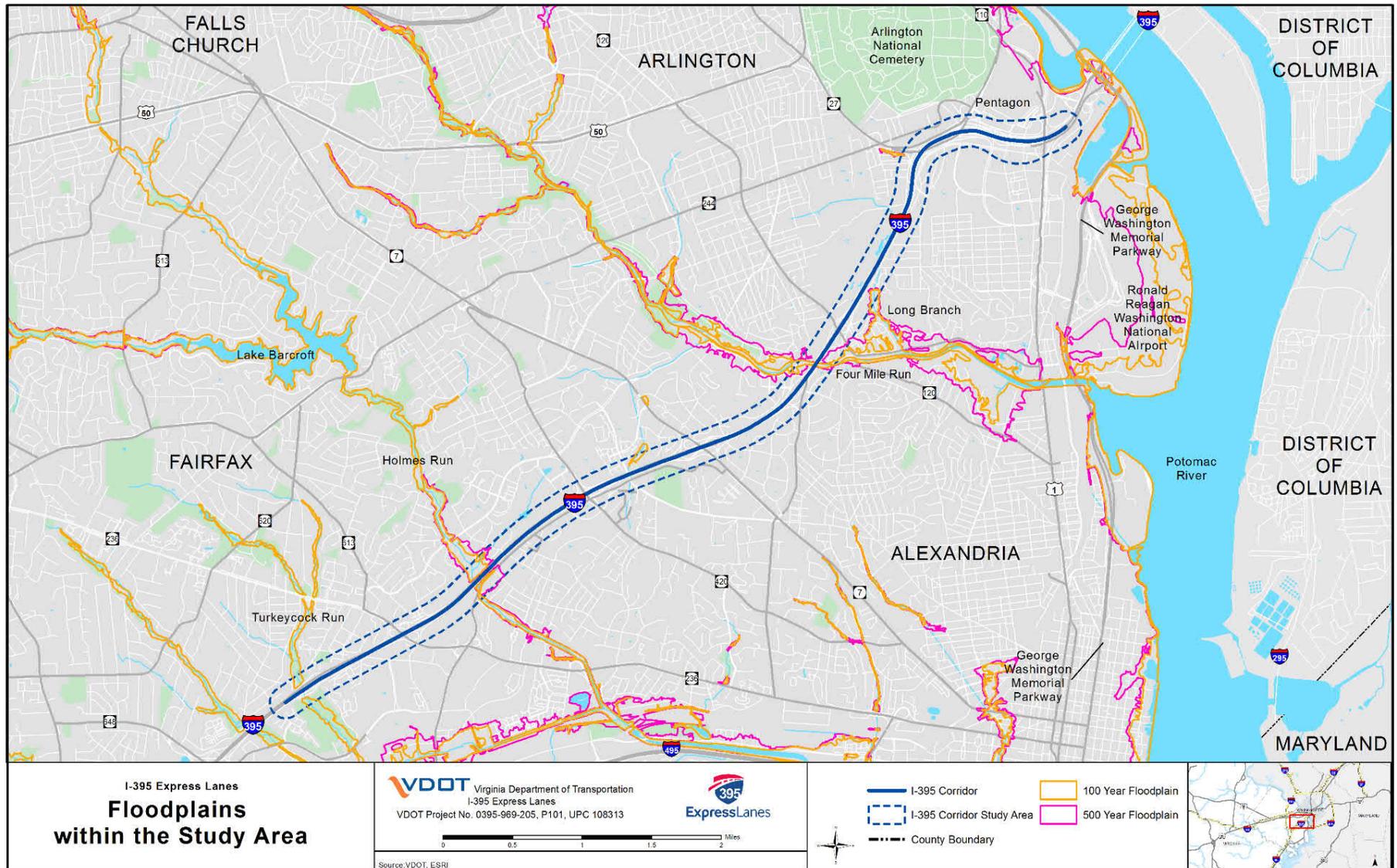
Based on the FEMA Flood Boundary and Floodway maps, the FEMA regulated floodplains within the study area are along Four Mile Run, Turkeycock Run, and Holmes Run. In the past, these floodplains experienced a relatively high level of development encroachment, but are now generally well protected by federal, state, and local regulations. The estimated floodplain acreage in the study area is 46 acres of 100-year floodplains and 43 acres of 500-year floodplains (refer to **Figure 3-9**).

3.12.2 Future Conditions

No Build Alternative

Under the No Build Alternative, no floodplain changes are anticipated as a result of Interstate improvements in the study area. An additional evaluation of the study area's floodplains may be required if any programmed improvements under the No Build Alternative involve major new construction, that is not currently anticipated, with federal funding. These effects would be addressed by the respective project sponsors.

Figure 3-9: Floodplains within the Study Area



Build Alternative

While the roadway would not encroach into floodplains or floodways, noise barriers have the potential to impact 0.09 acres of 100-year floodplains and 0.01 acres of 500-year floodplains. As the design of the noise barriers advances to more detailed design, continued focus would be on avoiding and minimizing floodplain encroachment to ensure that the Build Alternative meets the goals of Executive Order 11998, as amended, Executive Order 13690, and FHWA policy as set forth in 23 CFR §650. During final design, a hydrologic and hydraulic analysis would be required to evaluate the effect of the proposed roadway improvements on stormwater discharge. The results of the study would be used to provide adequate design of the hydraulic opening and proper conveyance of floodwaters to minimize impacts to the floodplain. For additional information, refer to the *Natural Resources Technical Report* (VDOT, 2016f).

3.13 TERRESTRIAL WILDLIFE AND HABITAT**3.13.1 Existing Conditions**

The wildlife in the study area consists of species adapted to urban environments and/or riparian corridors with forested habitat that support fauna usually found in less disturbed floodplain forests. Three urban wildlife corridors exist and are intersected by numerous roads, fragmenting the corridor. However, the corridors are still utilized; often urban-adjusted wildlife species use the corridors that follow the underpasses to pass beneath I-395.

3.13.2 Future Conditions***No Build Alternative***

Under the No Build Alternative, no changes to terrestrial wildlife and habitat are anticipated as a result of Interstate improvements in the study area. An additional evaluation of the study area's terrestrial wildlife and habitat may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

Although there are three wildlife corridors that travel through the study area, none of the wildlife corridors would be modified by the Build Alternative. In addition, the Build Alternative would not add impediments to their utilization by wildlife. Noise barriers may be placed adjacent to the road and wildlife corridors, but would not impede wildlife movement any more so than the existing highway and culverts. For additional information, refer to the *Natural Resources Technical Report* (VDOT, 2016f).

3.14 THREATENED, ENDANGERED, AND SPECIAL STATUS SPECIES**3.14.1 Existing Conditions**

Federally listed terrestrial species within the study area include the northern long-eared bat (*Myotis septentrionalis*) and the dwarf wedgemussel (*Alasmidonta heterodon*).

The northern long-eared bat is federally threatened and during fieldwork, VDOT observed trees within the study area that could serve as suitable summer maternity roost trees for northern long-eared bat.

The dwarf wedgemussel is federally endangered and found in freshwater streams along the Atlantic Coast. VDOT received a scoping response letter from VDCR, dated February 23, 2016, which noted the possible presence of the dwarf wedgemussel (*Alasmidonta heterodon*) in Holmes Run, a stream that runs under the existing I-395 corridor. Through site investigation, suitable habitat for the dwarf wedgemussel was confirmed in Holmes Run in the project area.

The Virginia Department of Game and Inland Fisheries (VDGIF) identified that Anadromous Fish Use areas are within two miles of the study area; however, no Anadromous Fish Use areas are currently mapped within the study area (refer to **Figure 3-10**).

The VDGIF Virginia Fish and Wildlife Information Service (VAFWIS) database indicated that no other potential or confirmed state-listed species are located within two miles of the study area.

3.14.2 Future Conditions

No Build Alternative

Under the No Build Alternative, no changes to threatened, endangered, or special status species habitat or populations are anticipated as a result of Interstate improvements in the study area. Additionally, since Anadromous Fish are not in the study area, no impacts are anticipated to Anadromous Fish Use. An additional evaluation of the study area's threatened, endangered, or special status species may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

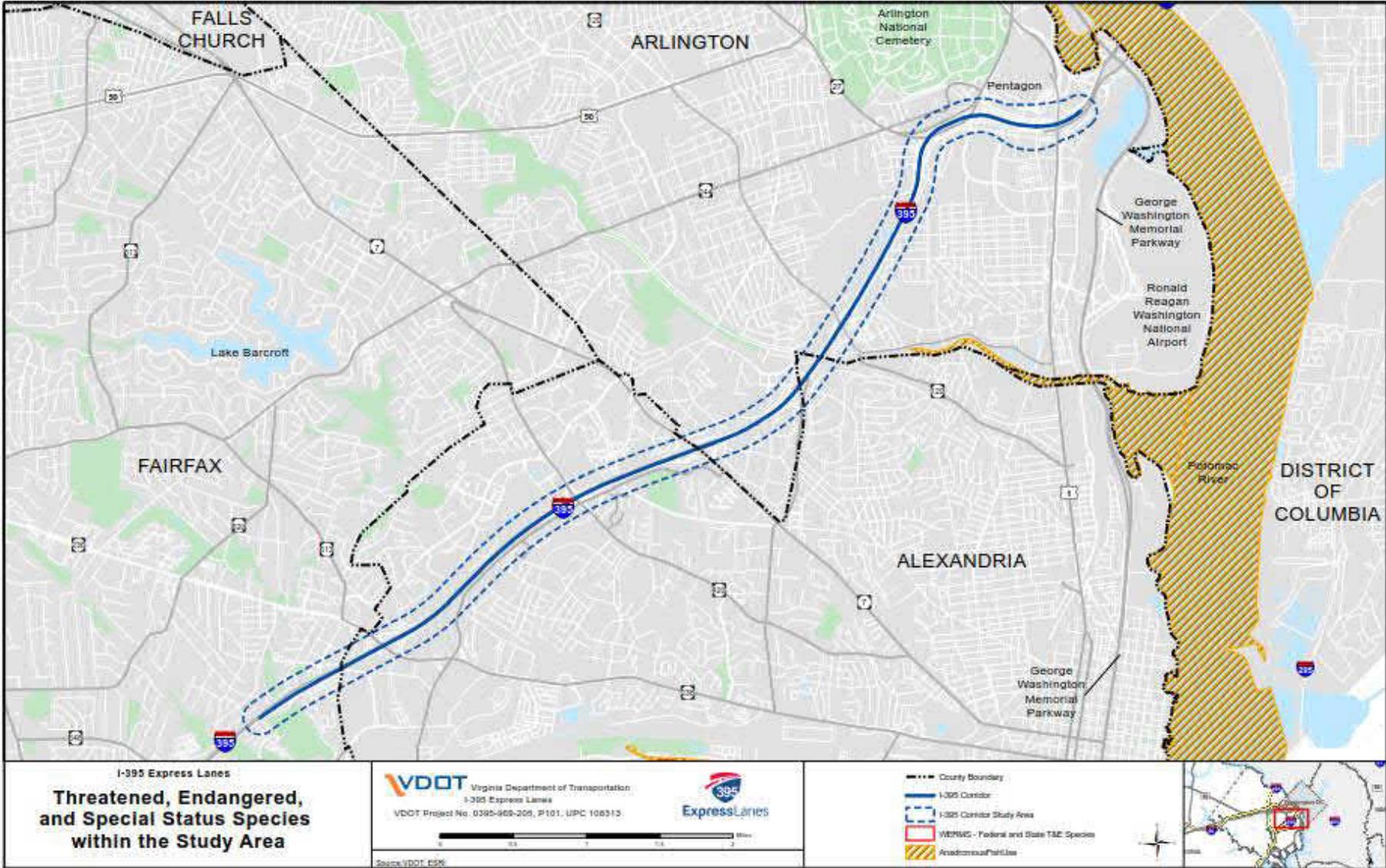
The Build Alternative would not impact any streams; therefore, no impact would occur to the dwarf wedgemussel. Additionally, no known or documented hibernacula or maternity roosts that the northern long-eared bat use occur in the study area; therefore, the northern long-eared bat would not likely be adversely affected. Although no impacts to Anadromous Fish use areas are currently proposed, because Anadromous Fish use areas are mapped downstream of the study area, any impacts to streams may be subject to time-of-year-restrictions, and, therefore, may require additional resource agency coordination. Further coordination with agencies and final effect determinations for listed species would be conducted as a part of the 401/404 permit process. For additional information, refer to the *Natural Resources Technical Report* (VDOT, 2016f).

3.15 HAZARDOUS MATERIALS

3.15.1 Existing Conditions

Environmental Data Resources, Inc. (EDR) was utilized to perform a search of Federal and State regulatory agency databases within a ½-mile radius from the study area corridor to identify potential recognized environmental concerns (RECs). Eight sites of elevated environmental concern were identified.

Figure 3-10: Threatened, Endangered, and Special Status Species and Resources within the Vicinity of the Study Area



3.15.2 Future Conditions

No Build Alternative

The No Build Alternative would not disturb soil or groundwater that might have been impacted by any of the hazardous material sites. An additional evaluation of the study area's hazardous materials may be required if any programmed improvements under the No Build Alternative involve major new construction with federal funding. These effects would be addressed by the respective project sponsors.

Build Alternative

For most cases, it is difficult to determine from the EDR report and field verification how much of a substance was released, how much was removed, whether hazardous materials were cleaned up to the satisfaction of the jurisdictional agency, and whether hazardous substances remain. There is the potential that reported releases or spills associated with the sites may have impacted soil and groundwater within the study area corridor.

Prior to acquisition of right of way and construction, thorough site investigations would be conducted to determine whether any of the sites are actually contaminated, and, if so, the nature and extent of that contamination would be assessed. Sites that are identified to include potential contamination would be characterized by conducting thorough site investigations (i.e. Phase I Environmental Site Assessments (ESAs) and, if necessary, Phase II ESAs) to determine the presence of and/or the extent of contamination. Undocumented hazardous materials that are encountered during construction efforts shall be managed, handled and disposed of in accordance with federal, state and local regulations. For additional information, refer to the *Hazardous Material Technical Memorandum* (VDOT, 2016d).

3.16 INDIRECT AND CUMULATIVE EFFECTS

3.16.1 Indirect Effects

According to the Council on Environmental Quality (CEQ), indirect effects are "...effects, which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems" (40 CFR 1508(a)). The indirect effects analysis relies on the planning judgment described in the National Cooperative Highway Research Program (NCHRP) 25-25 program, Task 22, *Forecasting Indirect Land Use Effects on Transportation Projects* (TRB, 2007). For additional information, refer to the *Indirect and Cumulative Effect Technical Report* (VDOT, 2016e).

No Build Alternative

Under the No Build Alternative, indirect effects related to increased traffic delays and lack of travel reliability would have a negative impact on businesses and residents. Proximity effects associated with the existing facility, including noise, air quality, and visual intrusions would continue to affect parks and historic resources. Potential indirect effects could be associated with petroleum from vehicles, and salt or chemicals due to road maintenance.

Build Alternative

Indirect effects from the Build Alternative are expected to be minimal since the proposed improvements are to an existing facility within existing right of way in an environment that is highly developed and influenced by highway-related pressures. The Build Alternative is expected to improve travel times, provide better access for public transit, and reduce congestion at Eads Street, encouraging businesses to remain in place. Additionally, as part of the Development Framework Agreement (see **Appendix C: Framework Agreement**), 95 Express would fund an annual transit payment.

Potential indirect impacts to wetlands, streams, water quality, floodplains, wildlife habitat, and threatened, endangered, or special status species could result from increased stormwater runoff due to increases in impervious surfaces. However, indirect effects associated with sediment transport should be minor during construction through the proper use of stormwater control measures. During construction, VDOT would adhere to standard erosion and sediment control and stormwater measures and the associated required monitoring protocols.

Proximity effects associated with the existing facility, including noise, air quality, and visual intrusions would continue to impact historic resources; however, based on VDHR and DC SHPO coordination the Build Alternative would not adversely affect historic resources. Additional coordination with the DC SHPO and VDHR will be conducted during the final design noise analysis.

No induced growth is to be expected as a result of the Build Alternative. The study area and surrounding localities are already highly developed and any growth would continue regardless of the conditions of the surrounding roadway network.

3.16.2 Cumulative Effects

CEQ defines cumulative effects (or impacts) as “...the impact on the environment, which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-federal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time” (40 CFR § 1508.7). The cumulative effects analysis is based on the process outlined in *Fritiofson v. Alexander*, 772 dF.2d 1225 (5th Cir. 1985), as described in FHWA’s *Guidance: Questions and Answers Regarding the Consideration of Indirect and Cumulative Impacts in the NEPA Process* (FHWA, 2014). Both the No Build Alternative and Build Alternative would contribute minimal incremental effects to socioeconomic, natural, and historic resources.

No Build Alternative

The Indirect and Cumulative Effects (ICE) study area has been in a progression of development since the early 1900s, being fully developed in the 1970s, in part due to the adjacency of the area to Washington D.C. The potential for future development is largely limited to redevelopment due to lack of vacant land within the ICE study area. Potential redevelopment may increase congestion on the Interstate, causing drivers to divert onto local roadways.

Historically, conversion of natural areas to developed land has had the greatest impact on the area. This development has helped lead to the degradation and/or loss of natural resources over time. The degree of degradation was in part due to the lack of strong federal, state, and local protective regulations. Under the

No Build Alternative there would be continued but reduced impact to terrestrial habitat from development due to the existing urbanized environment. Under the No Build Alternative, unconstrained runoff entering waters that are already impaired would continue to accelerate changes in the microbenthic structure and composition. These effects could result in changes in aquatic community structure at a local level, but may also extend further to include changes in ecosystem structure and function in the absence of proper mitigation.

Prior to the NHPA and local protective measures, the impact to historic resources through the development of the area was much higher than the potential for impacts today. Any projects that would occur under the No Build Alternative would have the potential to impact historic resources. The full extent of any architectural or archaeological resource impacts would be uncertain until the project specifics are known. However, for projects requiring a federal action, the NHPA of 1966 is in place to ensure these properties are considered during project planning. Additionally, local governments, VDHR, and the DC SHPO also aid in the protection of these properties whether they are private or public undertaking.

Build Alternative

The Build Alternative would alleviate congestion, thus contributing to minor beneficial cumulative effects to socioeconomics, land use, and community facilities. The short-term impact of more jobs and associated expenditures resulting from the Build Alternative is expected to benefit the local communities. Once complete, this project is not anticipated to create induced growth or infill development beyond what was anticipated without the project.

The Build Alternative's impacts to wetlands and water quality would contribute to the cumulative effects that have occurred in the past to natural resources within the study area. However, mitigation measures would compensate for impacts to wetlands and water quality. In addition, potential minimization strategies such as shifting potential noise barriers away from historic resources would be considered.

For additional information, refer to the *Indirect and Cumulative Effect Technical Report* (VDOT, 2016e).

3.17 SECTION 4(F)

Section 4(f) of the U.S. Department of Transportation Act of 1966 (49 U.S.C. § 303(c)) makes provisions for the preservation of public parks and recreational areas, wildlife and waterfowl refuges, and historic sites on or eligible for listing in the NRHP. The recreational and historic resources identified in **Sections 3.6 and 3.7** were evaluated to determine if any of the impacts to the resources would be considered a "use." The evaluation was guided by the definition of "use" in 23 CFR 774.17. A determination of *de minimis* impact can be made only if the project would not adversely affect the features, attributes, or activities qualifying the property for protection under Section 4(f).

No Build Alternative

Under the No Build Alternative there would be no use of Section 4(f) resources. An additional evaluation of the Section 4(f) resources located in the study area may be required if any programmed improvements under the No Build Alternative involve major new construction with federal transportation funding. These effects would be addressed by the respective project sponsors.

Build Alternative

As discussed in **Section 3.6**, fourteen recreational resources are located within the study area. While none of these resources would be directly impacted by the Build Alternative, the resources could experience indirect effects, such as increased noise or traffic during construction and once the facility is operational. However, none of these impacts would constitute a use of Section 4(f) property.

As discussed in **Section 3.7**, four known historic resources are located within the APE¹¹. Currently, 5.96 acres of potential impact is estimated for the construction of noise barriers, with 5.06 acres outside of the VDOT right of way and within historic districts (0.9 acres of potential impact are within VDOT right of way). The 5.06 acres of impact would be considered a Section 4(f) use. This value is based on a conservative estimate of the right of way width required to construct and maintain the barriers (approximately 30 feet). VDOT anticipates that during the final design noise analysis, barrier locations would be refined and may be shifted to be fully located within the VDOT right of way. Additional coordination with the VDHR and DC SHPO will be conducted based on further design details.

¹¹ Additional resources were surveyed and identified by others after the cultural resources analysis for this EA was completed. To be conservative, the potential impacts associated with these potential historic properties have been included in this EA. Additional coordination with VDHR and DC SHPO will be conducted based on further design details in the vicinity of the historic resources.

CHAPTER 4.0 COORDINATION AND COMMENTS

Pursuant to 23 CFR 771.111 and the Council on Environmental Quality (CEQ)'s *Memorandum for General Counsels, NEPA Liaisons, and Participants in Scoping*, the Virginia Department of Transportation (VDOT), in cooperation with Federal Highway Administration (FHWA), has coordinated extensively with local, state, and federal entities (stakeholders) as well as engaged in public involvement efforts throughout the development of the Interstate 395 (I-395) Express Lanes Project, in order to provide information and solicit feedback. Stakeholders were contacted early in the study and asked to assist in determining and clarifying benefits, interests, concerns, and issues relative to the study. The stakeholder feedback received in response to these coordination efforts was used to inform the study. Agency consultation and public participation for this study has been accomplished through formal and informal methods, which include project development team meetings, interagency correspondence, Public Information Meetings (PIM), and Stakeholder Technical Advisory Group (STAG) meetings. This coordination is discussed in greater detail in the sections below. Additionally, as guided by FHWA Order 6640.23A and FHWA Memorandum Guidance on Environmental Justice (EJ) and National Environmental Policy Act (NEPA), proactive efforts were taken to ensure meaningful opportunities for public participation by all interested parties, including low-income and minority populations.

4.1 AGENCY COORDINATION

VDOT mailed scoping letters to the following federal, state, and local agencies and organizations to obtain pertinent information and to identify key issues regarding the potential environmental impacts for this study.

- City of Alexandria
- County of Arlington
- City of Fairfax
- District of Columbia
- County of Fairfax
- Metropolitan Washington Council of Governments
- George Washington Memorial Parkway, National Park Service
- National Capital Planning Commission
- National Oceanic and Atmospheric Administration, Habitat Conservation Division
- United States Air Force, Air Force Memorial Foundation
- United States Army Corps of Engineers
- United States Department of Agriculture, Natural Resources Conservation Service
- United States Department of Defense, Office of Economic Adjustment
- United States Department of Defense, Integrated Services Division (Pentagon)
- United States Department of Homeland Security, Federal Emergency Management Agency
- United States Department of Homeland Security, United States Coast Guard
- United States Department of Housing and Urban Development
- United States Department of the Interior, Office of Environmental Policy and Compliance
- United States Department of the Interior National Park Service, Northeast Region
- United States Department of the Interior Fish and Wildlife Service
- United States Environmental Protection Agency
- United States Department of Agriculture, Forest Service
- Virginia Department of Health

- United States Department of Transportation, Federal Railroad Administration
- United States Department of Transportation, Federal Transit Administration
- Virginia Department of Agricultural and Consumer Services
- Virginia Department of Aviation
- Virginia Department of Conservation and Recreation
- Virginia Department of Emergency Management
- Virginia Department of Environmental Quality
- Virginia Department of Forestry
- Virginia Department of Game and Inland Fisheries
- Virginia Department of Historic Resources
- Virginia Department of Housing and Community Development
- Virginia Department of Mines, Minerals and Energy
- Virginia Department of Rail and Public Transportation
- Virginia Economic Development Partnership
- Virginia Marine Resources Commission
- Virginia Outdoors Foundation
- Virginia State Police Department
- Washington Metropolitan Area Transit Authority

4.1.1 Agency Scoping Responses

In response to the scoping letters, VDOT received responses from a number of agencies identifying transportation needs, environmental resources, and other relevant factors to be analyzed in this Environmental Assessment (EA). Responses were received on behalf of the following agencies (see **Appendix B: Correspondence** for full responses):

- **Air Force Association** – Requested free access points for patrons who wish to visit the Memorial.
- **City of Alexandria** – Response stated concerns about impacts the project may have on cut through traffic between I-395 and I-495 along the Quaker Lane and Seminary Road corridors. Recommended examining improvement options to the North Bound Quaker Lane merge onto Shirlington Circle to eliminate the confusion with the current yield sign. Indicated concern for impacts to local traffic created by local residents who would no longer be able to use the High Occupancy Vehicle (HOV) lanes during non HOV hours and must use other routes. Response sought additional information on potential impacts to local priority projects, congestion, and access management.
- **County of Arlington** – Response stated that the County supports the level of analysis conducted and wants to participate in development of the EA and community outreach. Noted primary concerns relate to the spillover impact of any additional traffic on arterials in the already congested Pentagon City neighborhood. Noted that the project should not undermine regional investments in transit and local investments in transit oriented development. Response sought additional information on potential gantry locations in the vicinity of the Pentagon to facilitate operations.
- **County of Fairfax** – Recommended that provisions be made for integration of bicycle lanes into ramps and crossing for the I-395 project. Noted that Route 236 is planned to be widened to six lanes in the vicinity of I-395. Indicated that buses currently leaving the Pentagon Transfer Center at the Pentagon use the Connector Road and Boundary Channel Drive to access I-395 general purpose (GP) lanes and recommended that the Pentagon maintain this movement and that the

project not impact the ability of buses entering and leaving the Pentagon Transfer Center to access the GP lanes at the Boundary Channel Drive Interchange. Noted that the EA should address impacts to wetlands, streams, floodplains, consider stormwater management, etc. Identified several parks within the vicinity of the project that serve the community and provide ecosystem services and water quality benefits to the Cameron Run watershed. Noted that unavoidable impacts to Park resources should be mitigated in consultation with Park Authority staff and recommended consultation with Virginia Department of Historic Resources (VDHR) in accordance with Section 106 of the National Historic Preservation Act (NHPA).

- **Virginia Department of Conservation and Recreation (VDCR)** – Response noted the potential for the dwarf wedgemussel (*Alasmidonta heterodon*) to occur in the Holmes Run stream. The species is currently classified as endangered by the United States Fish and Wildlife Service (USFWS) and Virginia Department of Game and Inland Fisheries (VDGIF). VDCR recommends implementation of, and strict adherence to, applicable state and local erosion and sediment control/storm water management laws and regulations. Recommended coordination with USFWS and VDGIF, to ensure compliance with protected species legislation. To minimize the potential for invasive species infestation, recommended that the project be conducted to minimize the area of disturbance, and disturbed sites should be revegetated with desirable species. Noted that the proposed project would not affect any documented state-listed plants or insects.
- **Virginia Department of Environmental Quality (VDEQ) Air Division** – Response noted that during the execution of the project, the following Virginia Air regulations should be considered: 9 VAC 5-40-5600 et. seq. – open burning and 9 VAC 5-50-60 et seq. – fugitive dust emissions. Additionally, during construction, all precautions are to be taken to restrict emissions of volatile organic compounds (VOC) and oxides of nitrogen (NO_x).
- **VDEQ Office of Environmental Impact Review** – Response noted that VDOT would need to file a Federal consistency document to the Office of Federal Consistency Review.
- **VDEQ Office of Wetlands and Stream Protection** – Response noted that based on the information provided, VDEQ is unable to determine impacts to surface waters. Recommend an onsite delineation to determine location, extent, and type of wetland or other surface waters present. Noted that the applicant should minimize impacts to surface waters to the greatest extent practicable. Indicated that the Office of Water Protection Division was unaware of any current or proposed projects that would have specific identifiable impacts to the area under VDOT’s study area. VDEQ recognized that the project would have positive indirect effects, e.g. improved safety and traffic flow, but noted that VDEQ is not qualified to identify road project benefits. VDEQ recommends adherence to all appropriate environmental permits. VDEQ recommended the use of the Coastal Geospatial and Educational Mapping System (GEMS) database and the Virginia Environmental Geographic Information System (VEGIS) viewer to help inform the planning process.
- **Virginia Department of Mines, Minerals and Energy (VDMME)** – Response indicated that VDMME did not see conditions that would require further review.
- **Department of Rail and Public Transportation (DRPT)** – Response noted that DRPT had just initiated a parallel transit and Transportation Demand Management study.
- **Federal Railroad Administration (FRA)** – Response indicated that there is no connection for this proposal to any existing or proposed railroad.
- **Housing and Urban Development (HUD)** – Response indicated that the Richmond field office can find no impact as a result of VDOT’s project plans.

- **Natural Resources Conservation Service (NRCS)** – Response indicated that the corridor does not contain prime, unique statewide or locally important farmland.
- **United States Army Corps of Engineers (USACE)** – Response indicated that the USACE considers a full range of public interest factors, and conducts a public interest analysis in order to identify the least environmentally damaging practicable alternative, which is the only alternative the USACE can authorize. Factors to be considered include land use, floodplain hazards and values, water supply and conservation, water quality, safety, cost, economics, threatened and endangered species, historic and cultural resources, navigation, and environmental justice. Additionally, the USACE authorized FHWA to conduct coordination on behalf of USACE for the I-395 Express Lanes project in accordance with Section 7 of the Endangered Species Act.
- **United States Forest Service (USFS)** – Response indicated that unless National Forest System lands are impacted or VDOT is seeking a specific area of expertise the USFS can provide, the Service has no comment.
- **USFWS** – Response noted that USFWS does not provide individual responses to requests for environmental reviews and directed VDOT to utilize their project review website to ensure that potential impacts to important natural resources are minimized and appropriate permits are applied.
- **Virginia Department of Agriculture and Consumer Services (VDACS)** – Recommended VDOT consider impacts of farmland and forest lands, and that VDOT adequately consider alternatives and mitigating measures. Recommended contacting VDCR for any inquiries related to state protected plant and insect species.
- **VDGIF** – Response recommended accessing the Virginia Fish and Wildlife Information Service (VAFWIS) website for information on wildlife resources under their jurisdiction that may be present in or near the project site.
- **Virginia Department of Health (VDH)** – Response noted that there are no apparent impacts to public drinking water sources due to the project.
- **VDHR** – Response noted that the undertaking has the potential to affect properties that are listed or eligible for protection under the National Register and requested VDOT to continue consulting with them pursuant to Section 106 of the NHPA.
- **Virginia Marine Resources Commission (VMRC)** – Advised that if any portion of the project involves any encroachments channelward of ordinary high water along natural rivers and streams above the fall line or mean low water below the fall line, a permit may be required.
- **Virginia Outdoors Foundation (VOF)** – Response noted that there are no existing or proposed VOF open space easements within or in the vicinity of the project.

4.2 PUBLIC INVOLVEMENT

Public involvement is a critical element in the development and delivery of transportation projects. VDOT strives to provide opportunities to the public to participate in public decisions on transportation projects and programs.

4.2.1 Public Information Meetings

VDOT held two Formal PIMs to provide an opportunity for any person, organization, or agency to express their concerns related to the proposed project and provide comments. The first meeting was held on April 11, 2016 from 6:30 p.m. to 8:30 p.m. at Wakefield High School, 1325 South Dinwiddie Avenue, Arlington, Virginia. The second meeting was held on April 13, 2016 from 6:30 p.m. to 8:30 p.m. (meeting concluded at 8:50 due to volume of commenters) at Francis C. Hammond Middle School at 4646 Seminary Road, Alexandria, Virginia.

The purpose of the meetings was to provide the public an opportunity to informally review the proposed improvements and discuss them with VDOT, representatives of 95 Express Lanes, LLC (95 Express), and the DRPT. Pursuant to Federal and state regulatory requirements and in accordance with VDOT's Policy Manual for Public Participation in Transportation Projects (VDOT 2015a), the meeting was advertised in local newspapers, on the study website, and via a press release. Additionally, a total of 108,656 postcards were mailed on March 24, 2016 to residents of the Counties of Arlington and Fairfax, and the City of Alexandria for both PIMs. Comment sheets and informational handouts were provided at the meeting and were also made available on the study website. Project display boards were available for review at the meeting and were also made available on the study website. During each meeting the VDOT representatives formally presented the project. Following the formal presentation representatives from VDOT, 95 Express, and the DRPT responded to public comments. VDOT representatives were available to discuss the study and explain project display boards. Questions were answered during the public forum as well as during one on one discussions. In total, 26 comment forms and 36 emailed or mailed comments were received during the PIM's or during the 10-day comment period following the Meetings. Thirty-three oral statements were recorded at the meetings.

4.2.2 Location Public Hearing

Following circulation of the EA, VDOT will hold Combined Location and Design Public Hearings for this project. The first Combined Location and Design Public Hearing will be held on October 24, 2016 at Wakefield High School, 1325 South Dinwiddie Avenue, Arlington, Virginia. The second public hearing will be held on October 26, 2016 at Francis C. Hammond Middle School, 4646 Seminary Road, Alexandria, Virginia. In addition, all public and agency comments received during the 30-day comment period that will follow the release of the EA will be taken into consideration and incorporated, as appropriate, in the revisions for the Revised EA. All comments received during the public hearing and public comment period will become part of the public hearing record, and all substantive comments will be addressed.

4.2.3 Additional Coordination Efforts

In addition to the coordination previously discussed, numerous other meetings and coordination efforts were conducted with federal, state, and local agencies throughout the study process including:

- Three STAG meetings;
- Coordination with District of Columbia State Historic Preservation Office;
- Technical working group meetings (traffic, engineering, etc.); and
- Department of Defense (Pentagon) meetings.

Mailing List

A study mailing list was developed, and 1,073 property access letters were mailed pursuant to §33.1-94 of the Code of Virginia. Four hundred and forty seven were mailed to the residents of the Alexandria area, 311 were mailed to residents of Arlington County and 315 were mailed to Fairfax residents. VDOT mailed property owners within the study area that an agent of VDOT may need to access their property to locate property lines and utilities; locate and review physical features and existing conditions; take photographs; talk to property owners; verify property tax information; perform environmental resource surveys; investigate potential environmental impacts; and conduct all testing and sampling, including, but not limited to shovel tests, soil samples, and borings. The letter included contact information for the VDOT Project Manager, should letter recipients have questions or concerns.

Website

Information for the study, including the EA and all technical documentation, is available to the public through the following VDOT website:

http://www.virginiadot.org/projects/northernvirginia/395_express.asp.

The website has been updated as new information has become available. For example, upon initiation of the study a notice was posted to provide preliminary study information. As the study progressed and PIM dates were set, the dates along with meeting materials were posted and included comment forms for the public to provide feedback on the study.

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Appendix A: List of Technical Reports

Appendix A LIST OF TECHNICAL REPORTS

Air Quality Analysis Technical Report

Alternatives Analysis Technical Report

Cultural Resources Technical Memorandum

Hazardous Materials Technical Memorandum

Indirect and Cumulative Effects Technical Report

Natural Resources Technical Report

Noise Analysis Technical Report

Right of Way Technical Report

Socioeconomics and Land Use Technical Report

Traffic and Transportation Technical Report

Appendix B: Agency Coordination



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

4975 Alliance Drive
Fairfax, VA 22030

CHARLES A. KILPATRICK, P.E.
COMMISSIONER

August 3, 2016

Mr. Sajeel S Ahmed, SES
Director, Facilities Services
FSD DIR 1155 Defense Pentagon Room 2E1008
Washington D.C.20301-1155

Dear Mr. Ahmed,

Thank you for providing consolidated comments on the proposed improvements (herein referenced as “Option 4”) to the Pentagon Reservation South Parking Area as it relates to the Virginia Department of Transportation (VDOT) I-395 Express Lanes Northern Extension project. Please note that the key features associated with Option 4 that has been presented and coordinated with the Pentagon Technical Team consisted of concept-level design.

As discussed in several coordination meetings with the Pentagon technical team, Transurban is developing the project as part of an existing Comprehensive Agreement with VDOT and is in the final stages of releasing a Request for Proposals (RFP) in order to retain a design-build contractor. As such, it will be the responsibility of the selected design-build team to advance the concept prepared for Option 4 to the final design stage. Based on this project delivery approach there are several comments provided by the Pentagon technical team that will be completed as part of the design effort, such as roadway geometry and paving design that at this point in the project is not available for review.

VDOT is committed to continuing to facilitate the development of the proposed improvements on the Pentagon Reservation and will work with Transurban and their design-builder to provide the Pentagon technical team milestone review (60% and 100%) opportunities.

VDOT offers the following responses to the comments received in June 2016.

Pentagon Consolidated Comments

To minimize any duplication and/or rework of efforts in the future, DoD recommends VDOT team construct to the DoD’s South Parking project plans as shared with VDOT. These include:

- Concrete surfaces for all new and re-surfaced roads; bus loop, new 4th lane, connection from bus loop to the PTC access road, and Eads street intersections.

VDOT Response: Concrete surfaces at the bus loop, connection from bus loop to the PTC access road, and Eads Street intersections will be provided as part of the Option 4 improvement.

- Please add Eads Street straightening to Option 4.

VDOT Response: Option 4 does not include the realignment of Eads Street; however, based on the configuration of the bus loop, future realignment by others is not precluded.

- Signalizing the Eads Street, South Rotary, and North Rotary intersections.

VDOT Response: Traffic Signalization will be implemented at Eads Street/South Rotary and Eads Street/ North Rotary. VDOT will facilitate a Memorandum of Agreement for the operations of these signals between Arlington County, VDOT and the Pentagon Reservation.

If due to any funding constraints, the above mentioned DoD's permanent South Parking Reconfiguration project is not able to be implemented, DoD recommends the following priority:

- Bus loop around the pork chop area, with new roads constructed with concrete surface, i.e. from 110 ramp to PTC connection. This minimizes some rework in the future.
- 4th lane construction with concrete surface.
- Signalization of Eads street, south rotary, and north rotary roads, with Arlington County signals synchronization.
- Straighten Eads Street; intersections with concrete surface.

VDOT Response: Items as described in the set of comments above are not fiscally constrained to the award of the Atlantic Gateway FASTGRANT. These proposed improvements at the Pentagon Reservation are part of the project scope for the I-395 Express Lanes Northern Extension.

Request DoD and VDOT technical teams continue to work the details for the implementation. Following are more detail comments.

VDOT Response: Option 4 was presented to the Pentagon technical team at a "design concept level" in order to capture necessary key features that improved circulation on the Pentagon Reservation in addition to complementing the proposed Eads Street interchange modifications. Technical design details will be handled by the selected Design-Build team. Transurban will be releasing the Request for Proposals to the shortlisted teams by mid-August 2016. As typical in any design-build project, the points listed below will be advanced from the existing concept into a design plan within a budget as identified by the design build team. Neither VDOT nor Transurban are in the position to continue to negotiation technical details as listed below due to the design-build process. However, as discussed in our previous meetings, the Pentagon Reservation technical team will have an

opportunity to review the design at the 60% and 100% stages. VDOT will facilitate those meetings. Therefore, for items listed below that do not have a specific response, consider those items to be covered by the design-builder.

1. A technical description/discussion is needed to further discuss the Option 4 exhibit VDOT presented to FSD. Some of the 2-D geometries in the exhibit seem to follow the roadway geometries in our design, which is a good sign. FSD requests a copy of the VDOT's RFP excerpts (text and exhibits) containing their proposed work on Pentagon Reservation.

2. Please confirm that HOV/HOT gates on S. Rotary will be deployed during AM peak / retracted PM peak, and that previous gate discussions indicated horizontal gates should be used for pedestrian safety reasons.

VDOT Response: Correct, gates are down in the AM peak period when the reversible ramp at Eads Street is open to the north and gates are up in the PM peak period when the reversible ramp is open to the south. Pedestrians will only be accommodated at Fern Street and South Rotary. Improvements to pedestrian movements will not be provided at Eads Street and South Rotary as it is not encouraged.

3. During AM peak for the HOT proposal, I-395 SB HOV (coming from D.C.) Pentagon employees who currently exit onto Eads (destination S.P.) will be diverted to Boundary Channel Drive or exit 8A and then hairpin onto S. Rotary? How do these diverted volumes affect congestion on S. Rotary, Connector road, and or N. Rotary?

VDOT Response: VDOT will cover these specifics at the August 11, 2016 traffic meeting.

4. Since the changes to the current HOV on-ramps / off-ramps at Eads, closure of the slip-ramp to the general purpose I-395 SB lanes will affect traffic volumes and circulation on Eads, Army-Navy Drive, and Fern, please provide over-view of how these off-reservation critical intersections will function during AM and PM peak and then drill down to the Pentagon south parking.

VDOT Response: VDOT will cover these specifics at the August 11, 2016 traffic meeting.

5. Is the intent to create a safe pedestrian route from Army-Navy Drive to South Rotary Road along the south curb line with signalized intersections with cross-walk timers? Currently pedestrian traffic is prohibited due to present on-ramp / off-ramp limited controls but how will the pedestrian crosswalk interval(s) affect Eads inbound and outbound? Are you also proposing crosswalk timing Eads / S. Rotary?

VDOT Response: Pedestrians will only be accommodated at Fern Street and South Rotary. Improvements to pedestrian movements will not be provided at Eads Street and South Rotary as it is not encouraged.

6. How will the additional Eads underpass lane (make right turn onto HOV/HOT on-ramp or straight to Army-Navy Drive) affect congestion and weaving from the S. Rotary slug lines and the Pentagon outbound onto Eads during PM peak?

7. Asphalt pavement is not appropriate for both Eads intersections due to high water table and poor geotechnical conditions.

8. Are all sluggers currently on “pork chop” to be moved to the area shown in option 4? Is the proposed new slug area curb line smaller or about the same as existing? Slug route have different “ridership” and want to make sure sufficient curb line / queuing is provided.

VDOT Response: “Pork Chop” sluggers will use the area labeled as “New Slug Line” which is approximately 450 feet in length on the concept plan, which is similar in length to the existing sidewalk that is 500 feet in length.

9. Does this plan include the dedicated bus lane? Confirm intent is to use new raised median (slug lines) and grass median to segregate bus lanes? “Buses only” signage required at bus lanes entrance at Eads / S. Rotary and right turn lane under I-395 overpass.

VDOT Response: Option 4 includes a dedicated two-way bus loop consistent with the Master Plan.

10. To accommodate PFPA security requirements on the bus lanes to and from the PTC, install conduits and concrete cut-outs in the concrete roadbed for installation at a later time.

11. Confirm bus lanes design criteria for turning radii and sufficient width to go around a disabled bus.

12. Confirm proposed pedestrian crosswalk timers at signalized intersections on the reservation. Concur that Option 4 removes bus / pedestrian conflict at Eads and N. Rotary for sluggers.

VDOT Response: Pedestrian crosswalk timers will be installed at all new dedicated pedestrian crosswalks.

13. Confirm if intent is to provide for pedestrian pathway along south curb line with crosswalk timers for signalized intersections along Eads under I-395 over-pass. If yes, then pedestrian crosswalk and timers will be required at Eads / S. Rotary for pedestrian crossing in front of bus lanes.

VDOT Response: Pedestrians will be accommodated at Fern Street and South Rotary. Improvements to pedestrian movements will not be implemented at Eads Street and South Rotary as it is not encouraged.

14. Current taxi stand to remain – signage / barrier required to block any traffic proceeding taxi stand toward PTC.

VDOT Response: Current taxi stand is proposed to be abandoned as shown in the Option 4 concept. Future removal will be determined through stormwater management.

15. Confirm existing Fern Slug lines to remain as is.

VDOT Response: No improvements are proposed to the Fern Street slug lines.

16. Confirm two lane widths for proposed “pork chop” slug lines – curbside pick-up and by-pass lane.

17. For the installation of Call boxes, require two (2) X 2" conduits stub-outs / mounting pedestal for installation

18. Pedestrian pathways are not clearly defined on the drawing. There are areas marked as pedestrian pathways, (such as the area by the taxi stand) that need to be clarified before comment can be provided.

19. The roadway adjacent to the slug lane will not work as shown because traffic coming from the parking areas and trying to enter the driving lanes cannot make a left turn without entering (partially at least) the slug lane.

20. The large area in the pork chop between N Rotary and S Rotary marked for pedestrian’s forces cars to make a sharp right and then sharp left turn. This is not necessary. The reason the large pedestrian area exists now is to facilitate pedestrians coming off the tour buses. Since they are no longer going to be using this area, it no longer needs to be kept for pedestrians.

VDOT Response: This area is to accommodate the taxis since the existing taxi area will be abandoned.

21. The areas set aside for green space are too small to maintain without irrigation. If the intent is keep these for storm water management considerations, other means (permeable surfaces) should be considered.

22. Many of the islands located in the pork chop are oddly configured. This is likely do to parking space alignment. Consider curving these islands instead to make them more usable as sidewalks.

23. What is the total parking impact under this configuration?

VDOT Response: 335 spaces (Master Plan is at 370 spaces)

24. Vehicle entrance and exiting into the pork chop might be confusing because it is located so close to each other.

25. Lanes 28 and 29 are dead ended which is not a desirable configuration.

26. How does this plan affect the fire hydrants in the south parking area?

PFPA Comments

1. If cameras are associated with the traffic lights, PFPA would unquestionably need access to them.

VDOT Response: No objection. Access to the traffic lights will be outlined in the Memorandum of Agreement between Arlington County, VDOT and the Pentagon Reservation.

2. PFPA would also need the ability to manually override the traffic lights, only for emergency and Mission purposes.

VDOT Response: No objection

3. Ensure pedestrian safety is addressed around the Eads St. / South Rotary area, to include the vicinity of the planned traffic (gate) arms for the HOT Lanes ramp.

VDOT Response: Pedestrians will be accommodated at Fern Street and South Rotary. Improvements to pedestrian movements will not be implemented at Eads Street and South Rotary as it is not encouraged.

4. Is this (VDOT) project in coordination with the WMATA Safe Track? Since its , PPD has experienced a noticeable increase in vehicular traffic, to include transit buses, on the nearby roadways (including I-395) and it has directly impacted the traffic flow into the Pentagon Reservation especially in the mornings. If both projects were simultaneous, the Pentagon Reservation would potentially be facing a greater negative impact.

VDOT Response: VDOT and the Department of Rail and Public Transportation are in close coordination with WMATA on Safe Track and will continue throughout the entirety of the Safe Track initiative.

Thank you for the review of the Option 4 concept plan and associated comments. We look forward to continue coordinating this important regional transportation improvement. As the project progresses, please do not hesitate to contact me directly at Amanda.Baxter@vdot.virginia.gov or 703-259-1996.

Sincerely,



Amanda J. Baxter
Special Projects Development Manager

cc: Ms. Regina Grant, Director, Integrated Services Division
Dr. Georgine K. Glatz, P.E., Director, Engineering & Architecture Division
Mr. Karl Rohrer, Head of Delivery, Transurban

Mr. Marc Holma
Mr. C. Andrew Lewis
July 8, 2016
Page 8 of 10

The Virginia State Historic Preservation Officer (SHPO) concurs that the undertaking, VDOT Project Number: 0395-969-205; UPC: 108313, will have no adverse effect on historic properties.



for Ms. Julie V. Langan
Director, Virginia Department of Historic Resources

3 August 16
Date

2016-0089



FACILITIES SERVICES
DIRECTORATE

DEPARTMENT OF DEFENSE
WASHINGTON HEADQUARTERS SERVICES
1155 DEFENSE PENTAGON
WASHINGTON, DC 20301-1155



JUL 28 2016

Mr. John Simkins
Planning and Environment Team Leader
U.S. Department of Transportation
Federal Highway Administration
P.O. Box 10249
400 N. 8th Street Rm. 750
Richmond, VA 23240

Subject: Interstate 395 (I-395) Express Lanes Project, Counties of Fairfax and Arlington and
City of Alexandria, Cooperating Agency Invitation

Dear Mr. Simkins:

In response to your memorandum dated 8 July 2016, your invitation to establish the Department of Defense (DoD) as a cooperating agency in preparation of the Environmental Assessment (EA), in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's regulations implementing the National Environmental Policy Act (NEPA), is accepted.

DoD agrees to the responsibilities as a cooperating agency as stated:

1. Provide meaningful input on determining the range of alternatives to be considered for the South Parking Lot improvements, and the methodologies and level of detail needed in the assessment of impacts.
2. Participate in coordination meetings and joint field reviews as appropriate, and to the extent agency resources allow.
3. Timely review and comment on environmental documentation to reflect the views and concerns of [the] agency.

My point of contact for this matter is Ms. Regina M. Grant, Director, Integrated Services Division at (703) 614-6443 or regina.m.grant6.civ@mail.mil.


Sajeeel S. Ahmed
Director

cc:
Amanda Baxter
VDOT Special Projects



U.S. Department
of Transportation

**Federal Highway
Administration**

Virginia Division
(804)775-3320

July 8, 2016

P.O. Box 10249
400 N. 8th Street Rm. 750
Richmond, Virginia 23240
<http://www.fhwa.dot.gov/vadiv/>

IN REPLY REFER TO:

Interstate 395 (I-395) Express Lanes
Project
Counties of Fairfax and Arlington
and City of Alexandria
Cooperating Agency Invitation

Mr. Sajeel S. Ahmed, SES
Director, Facilities Services
FSD DIR 1155 Defense Pentagon Room 2E1008
Washington, D.C. 20301-1155

Dear Mr. Ahmed:

The Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration (FHWA), has initiated a study for the I-395 Express Lanes Project (Northern High Occupancy Toll [HOT] Lanes) that would extend the I-95 Express Lanes in the counties of Fairfax and Arlington, and the city of Alexandria (herein referenced as "the Project"). In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and the regulations implementing NEPA, VDOT is preparing an Environmental Assessment (EA) to assess and document potential environmental impacts associated with the Project. The study area encompasses approximately eight miles along I-395 from Turkeycock Run to the vicinity of Eads Street near the Pentagon (see Figure 1). The proposed transportation improvements include the expansion and conversion of the two existing reversible high occupancy vehicle (HOV) lanes on I-395 to three managed HOT lanes.

Due to proposed improvements to the South Parking Lot of the Pentagon Reservation as part of the Project, FHWA invites the Department of Defense (DoD) to be a cooperating agency in preparation of the EA in accordance with 40 CFR 1501.6 of the Council on Environmental Quality's regulations implementing NEPA. As a cooperating agency, the DoD would have the following responsibilities related to this role:

1. Provide meaningful input on determining the range of alternatives to be considered for the South Parking Lot improvements, and the methodologies and level of detail needed in the assessment of impacts.

2. Participate in coordination meetings and joint field reviews as appropriate, and to the extent agency resources allow.
3. Timely review and comment on environmental documentation to reflect the views and concerns of your agency.

Thank you in advance for your consideration, and we look forward to receiving your response to our invitation to serve as a cooperating agency. If you have any questions or need additional information, please contact me at (804) 775-3347 or john.simkins@dot.gov.

Sincerely,



John Simkins
Planning and Environment Team Leader

Enclosure: I-395 Express Lanes Study Area (Figure 1)

cc: Amanda J. Baxter, VDOT Special Projects

GOVERNMENT OF THE DISTRICT OF COLUMBIA
STATE HISTORIC PRESERVATION OFFICE



**DC STATE HISTORIC PRESERVATION OFFICE
FEDERAL AGENCY SECTION 106 REVIEW FORM**

TO: Ms. Heather Williams, Virginia Department of Transportation

ADDRESS: Via email to: heather.williams@vdot.virginia.gov

PROJECT NAME/DESCRIPTION: I-395 Express Lane Signage

PROJECT ADDRESS/LOCATION DESCRIPTION: I-395 the Vicinity of the Jefferson Memorial, Tidal Basin and the Washington Channel

DC SHPO PROJECT NUMBER: 16-0516

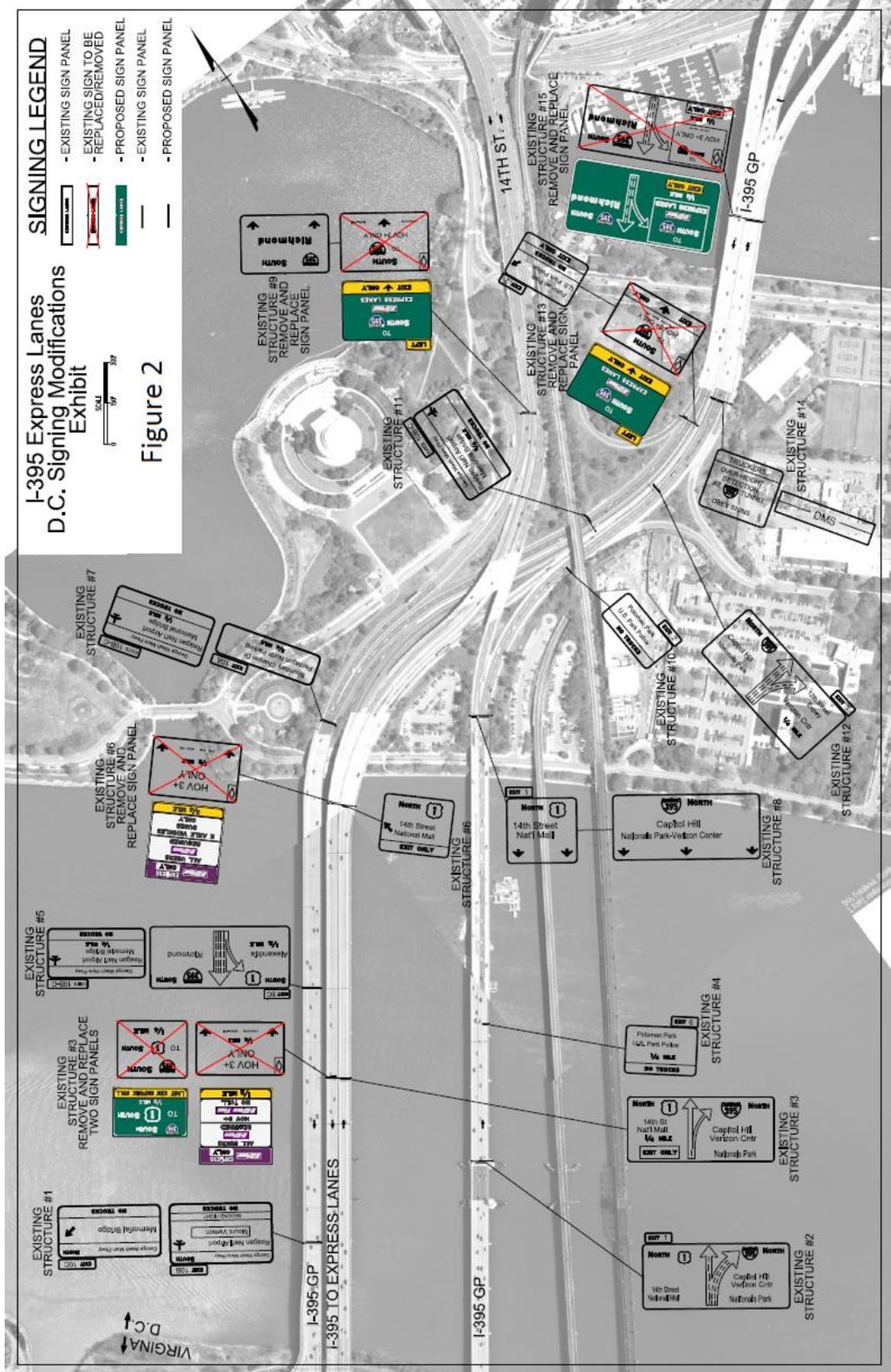
The DC State Historic Preservation Office (DC SHPO) has reviewed the above-referenced federal undertaking(s) in accordance with Section 106 of the National Historic Preservation Act and has determined:

- This project will have **no effect** on historic properties. No further DC SHPO review or comment will be necessary.
- There are **no historic properties** that will be affected by this project. No further DC SHPO review or comment will be necessary.
- This project will have **no adverse effect** on historic properties. No further DC SHPO review or comment will be necessary.
- This project will have **no adverse effect** on historic properties **conditioned upon** fulfillment of the measures stipulated below.
- Other Comments / Additional Comments (see below):

We understand that the work proposed within the District of Columbia is limited to modifying the few signs identified in the attached map. Although the project's Study Area and Area of Potential Effect did not include any portions of the District of Columbia or identify any historic properties within DC that had the potential to be affected by the undertaking, there are numerous historic properties immediately adjacent to the area where sign replacement is proposed. However, since the modified signs will essentially be the same sizes and in the same locations as the existing signs and we do not believe that any of the work proposed within Virginia will be visible from DC, we concur with VDOT's determination that the proposed undertaking will have "no adverse effect" on historic properties.

BY: 
C. Andrew Lewis
Senior Historic Preservation Specialist
DC State Historic Preservation Office

DATE: July 21, 2016



Nies, Nicholas

From: Simkins, John (FHWA) [mailto:John.Simkins@dot.gov]
Sent: Friday, July 08, 2016 3:16 PM
To: NPS_NHL_NEReview@nps.gov
Cc: Williams, Heather (VDOT)
Subject: I-395 Express Lanes - Consultation Involving a National Historic Landmark

In accordance with 36 CFR 800.10(c), the Federal Highway Administration is notifying the National Park Service of consultation involving a National Historic Landmark: the Pentagon. The attached letter to the Virginia SHPO and the Washington, D.C. SHPO describe the project as well as its effects on historic properties. As explained on page 5 of the letter, the Virginia Department of Transportation has determined that the project will have no effect on the Pentagon.

Please let me know if you have any comments or questions.

John

John Simkins
Planning and Environment Team Leader
FHWA - Virginia Division
(804) 775-3347
John.Simkins@dot.gov

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Friday, July 08, 2016 1:42 PM
To: andrew.lewis@dc.gov; Holma, Marc (DHR)
Cc: Biesiadny, Tom; yon.lambert@alexandriava.gov; Dleach@arlingtonva.us; Baxter, Amanda (VDOT); Simkins, John (FHWA); Ross, Helen P. (VDOT)
Subject: I-395 Express Lanes - SHPO correspondence

Please see attached. As requested the original letter to follow in mail.

Thank you,
-Heather

Heather Williams
Location Studies Project Manager
Office: 804-786-1872
Cell: 804-912-3406



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION
1401 EAST BROAD STREET
RICHMOND, VIRGINIA 23219 2000

Charles A. Kilpatrick, P.E.
Commissioner

July 8, 2016

Ms. Julie V. Langan, Director
Attention: Mr. Marc Holma
Office of Review and Compliance
Virginia Department of Historic Resources
2801 Kensington Avenue
Richmond, VA 23221

Mr. David Maloney, SHPO
Attention: Mr. C. Andrew Lewis
Senior Historic Preservation Specialist
DC Office of Planning/DC State Historic
Preservation Office
1100 4th Street, SW, Suite E650
Washington, DC 20024

RE: Interstate 395 (I-395) Express Lanes
City of Alexandria, Arlington, and Fairfax Counties Virginia
VDOT Project Number: 0395-969-205; UPC: 108313

Dear Mr. Holma and Mr. Lewis,

As described in the January 26, 2016 letter to your office, the Virginia Department of Transportation (VDOT), in cooperation with the Federal Highway Administration, is preparing an Environmental Assessment (EA) for the I-395 Express Lanes Project (Northern High Occupancy Toll [HOT] Lanes) to extend the I-95 Express Lanes in Alexandria, Arlington, and Fairfax Counties, Virginia. The proposed improvements include the expansion and conversion of the two existing reversible high occupancy vehicle (HOV) lanes on I-395 to three managed HOT lanes. The project is being developed as the result of a public-private partnership between VDOT and 95 Express Lanes, LLC (95 Express). Under the provisions of the Public-Private Transportation Act (PPTA) of 1995, 95 Express will build, operate, and provide routine maintenance on the lanes under the ownership and oversight of VDOT.

The study area encompasses approximately eight miles of the I-395 corridor from Turkeycock Run in Fairfax County to the vicinity of Eads Street near the Pentagon in Arlington County, as shown in **Figure 1**. Transition areas extending slightly beyond these termini are included in order to connect the proposed improvements with the existing facility on either end¹. In addition, signage will be required to extend beyond the termini to notify users of the HOT facility. The signage will be approximately the same size and same location as the existing HOV signage, including signage in DC between the Virginia State line and the northern bank of the Washington Channel (**Figure 2**).

¹ The study area is approximately 600 feet to either side of the existing corridor for a distance of eight miles. The study area was developed to quantify the full extent of environmental resources and their relevance to the project.

VDOT first conducted cultural resource studies for the I-395 Express Lanes Project in 2007. The following summary describes all such previous studies as they relate to the currently proposed project. The conclusions of the previously-completed surveys remain valid and provide adequate basis for concluding the Section 106 review process for the current project.

Previous Studies

Dovetail Cultural Resources Group I, Inc. (Dovetail), and Thunderbird Archaeology conducted architectural and archaeological surveys, between 2006 and 2008, for the proposed I-95/I-395 High Occupancy Vehicle/Bus/High Occupancy Toll (HOV/Bus/HOT) Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties, and the City of Alexandria, Virginia. The studies considered the approximately 36-mile long project area extending northeast along I-95 from the vicinity of Garrisonville Road in Stafford County and continuing along I-395 to the vicinity of the Eads Street interchange in Arlington County. However, only the southern 28 miles of the project, from Garrisonville Road in Stafford County to Edsall Road in Fairfax County, were constructed. The currently-proposed I-395 Express Lanes Project will complete the northernmost eight-mile section of that project, from Edsall Road in Fairfax County to the Eads Street interchange in Arlington County. Thus, the following summaries of the results of the 2006-2008 surveys focus attention on those resources recorded within the study limits of the I-395 Express Lanes Project.

Architectural Surveys

In May 2007 Dovetail conducted an architectural survey for the I-95/I-395 HOV/Bus/HOT Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties and the City of Alexandria, Virginia (Goff and Barile, 2007). The area of potential effects (APE) for architectural resources was defined as all areas within the viewshed of the proposed project where alterations to the setting and feeling of historic properties may occur. Following completion of a records review and background research, four known historic properties were identified in the vicinity of the northern eight-mile section of the project: the Pentagon (000-0072), the Alexandria Canal Path (44AX0028), Parkfairfax Historic District (100-0151), and the Fairlington Historic District (000-5772) (Figure 3). Of these, only the Alexandria Canal and the Fairlington Historic District were subject to field reconnaissance; the Pentagon and Parkfairfax Historic District were determined to be outside their APE as discussed below.

The Alexandria Canal operated in the mid-nineteenth century as an extension of the Chesapeake and Ohio Canal, effectively linking Alexandria to Cumberland, Maryland and providing a trade link to the western states and territories. The property was recorded by the Virginia Department of Historic Resources (DHR) as an archaeological site in 1983. During the field reconnaissance, Dovetail determined that the portion of the Alexandria Canal within the APE had been destroyed. Dovetail did identify one relatively undisturbed area along the path of the Alexandria Canal, but this area was located outside of the APE, approximately 300 feet south of the I-395 between S. Fern Street and S. Eads Street. As this area was not within the APE, the eligibility of this resource for listing in the National Register of Historic Places (NRHP) was not evaluated.

The Fairlington Historic District is a 1940s garden apartment complex that straddles the interstate at S. Abingdon Street, just east of the King Street (Route 7) interchange. The district was listed in the NRHP in 1999. During the field reconnaissance, Dovetail found that the district remains eligible for listing in the NRHP. Topography and vegetative cover effectively screened the individual resources within the district

from view of the project. In a letter dated August 5, 2008, DHR concurred with VDOT's conditional finding of No Adverse Effect for I-395 portion of the proposed project, pending review of the design and placement of sound walls in the vicinity of the Fairlington Historic District, should sound walls be determined to be necessary (Marc Holma to Helen Ross, August 5, 2008).

The Pentagon was constructed between 1941 and 1943, and is the home of the U.S. Department of Defense. The Pentagon sits north of I-395 between S. Washington Boulevard and Jefferson Davis Highway. The iconic building is listed in the NRHP and designated a National Historic Landmark (NHL). During the 2007 investigations, Dovetail concluded:

While the boundaries of the resource are located adjacent to the I-395 corridor, its principal resource stands over 800 feet (243.8 m) from the I-395 roadbed. Since the project's scope of work for this location involves minor modifications only within the existing VDOT ROW, Dovetail architectural historians determined that the resource is not within the project APE due to its distance from the undertaking, existing modifications and the limited scope of work for this area. As such, a formal architectural survey was not completed on this resource during the current project (Goff and Barile 2007:14).

The Parkfairfax Historic District is located directly northeast of the Fairlington Historic District near the N. Quaker Lane interchange. The Parkfairfax Historic District is a 1940s garden apartment complex that was listed in the NRHP in 1999. During the 2007 investigations, Dovetail concluded, "Because work in the area near the Parkfairfax Historic District will be confined to restriping existing pavement in the center of the I-395 corridor and no construction will occur outside of the median, it was determined that the resource is not within the APE" (Goff and Barile 2007: 17). Thus, like the Pentagon, the Parkfairfax Historic District was not subject to formal architectural survey.

Archaeological Surveys

In 2006-2007, Thunderbird Archaeology conducted a Phase I archaeological survey for the proposed I-95/I-395 HOV/Bus/HOT Lanes Project in Arlington, Fairfax, Prince William, and Stafford Counties and the City of Alexandria, Virginia (Buchanan et al. 2007). The APE for archaeological resources was defined as the corridor directly impacted by construction of the project, which varied in width from 100 feet to 1,400 feet. The majority of the APE was previously disturbed by the construction of I-95/I-395. In the northern eight-mile section of the project, the majority of the areas requiring archaeological survey were bump-outs where flyover ramps or associated facilities such as park and ride lots were planned. The 2006-2007 survey identified two previously recorded sites and one newly recorded site within this northern eight-mile section.

The Alexandria Canal (Site 44AX0028), was found to be destroyed within the APE. Site 44FX2214 consisted of a prehistoric camp and a nineteenth century dwelling site, but was found to be destroyed within the APE. Site 44FX3210 was a low-density assemblage of nineteenth century artifacts that may represent a field scatter or may be peripheral refuse associated with a dwelling outside of the APE. The site is not eligible for listing in the NRHP. Later in 2007 and 2008, Thunderbird Archaeology completed three addendum reports examining additional areas. These additional survey efforts did not identify any other archaeological sites within the northern eight-mile section of the APE (Mullen and Carrol 2007; Hutson 2008; Hutson and Mullen 2008).

Current Project

Information presented in the previous survey reports described above provides adequate basis for assessing the potential effects of the currently-proposed I-395 Express Lanes Project to historic properties. A review of the National Park Service's NRHP map shows that there have been no new NRHP listings in the vicinity of the proposed project since completion of the original surveys. Current project plans call for all improvements to be largely within current I-395 right of way and will include reconstructing the existing shoulders to full strength pavement, resurfacing the existing travel way, re-striping the reversible roadway to provide three managed HOT lanes, and placing signs of approximately the same size and location as the existing HOV signage. The project continues to have low potential to affect historic properties. Given that most work will occur in previously-disturbed areas and that the outer footprint of the interstate will be largely unchanged, the project's potential to affect historic properties is low.

Architectural Resources

The APE for Dovetail's 2007 architectural survey included the viewshed for improvements to the I-395 corridor between Turkeycock Run in Fairfax County and S. Eads Street near the Pentagon in Arlington County. The report does not include detailed mapping depicting the exact extent of the APE considered, thus the new APE may be larger than the original APE, particularly the area extending beyond S. Eads Street to the east and northeast. The area is defined by an elaborate network of modern roads and ramps accessing I-395, the Pentagon, and other local amenities, with buildings dating from the mid-twentieth century to the present. The Virginia Cultural Resource Information System (VCRIS) identifies three resources in this area that were surveyed after Dovetail's 2007 report:

- DHR # 000-4385 is a switching station for the Richmond, Fredericksburg, & Potomac Railroad Spur Line. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor. A review of available aerial and street-view photographs indicates that the building has been demolished and has been replaced by a modern office building.
- DHR # 000-9727 is an office building at 400 Army Navy Drive. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor. The building sits over 300 feet south of I-395 and over 150 feet east of S. Eads Street. The existing setting includes a busy four-lane frontage road, clear view of the interstate, and surrounding development including mid-late twentieth to early twenty-first century tall commercial buildings with associated surface parking lots and multilevel parking deck.
- DHR # 029-5470 is the Washington, Arlington, and Falls Church Electric Railway. While the full railway corridor is mapped in VCRIS, only a portion located in Fairfax was previously surveyed. The resource has not been formally evaluated, but was recommended not eligible for listing in the NRHP by the previous surveyor. Given the extent of dense late twentieth and twenty-first century development in this area, the possibility that any remnants of the railway corridor remain within the APE is highly unlikely.

Thus, based on available information, there are no other known historic properties located within the APE for the existing project that could be affected by the currently-proposed I-395 Express Lanes Project.

For the four identified historic properties located in the vicinity of the currently-proposed project, the determinations of effect made following the 2007 Dovetail survey investigations remain appropriate:

The Alexandria Canal Path (44AX0028) has been destroyed within the direct APE. While portions of the canal path located outside of the direct APE have not been formally evaluated for listing in the NRHP, the resource is of such a nature that improvements within existing VDOT right of way have no potential to visually affect the site, particularly given the extent of landscape change in the vicinity since the canal's period of significance. Thus, the proposed project will have No Effect on this site.

The Pentagon (000-0072) was not located in the APE for the previously-proposed project. As part of the currently-proposed I-395 Express Lanes Project, modifications are proposed to the Eads Street interchange to address existing capacity deficiencies and improve transit access to the Pentagon Transit Center and Pentagon Reservation. Improvements may include temporary and permanent construction easements or minor improvements within the Pentagon parking lot. Even though these improvements may be visible from the Pentagon, these improvements will be far removed from the NHL boundary for the Pentagon, which includes only the building footprint, the river terrace to the northeast, and the mall terrace to the north-northwest. Furthermore, any improvements made in the immediate vicinity of the Pentagon would be in keeping with the more ambitious plans, assessed in the Pentagon Reservation Master Plan Update EA (AECOM and Timmons Group, 2014), that aims to, among other goals, improve transportation to, and circulation within, the site. As described in the EA all development outlined in the plan will conform to existing exterior design standards meant to manage change within the NHL property. As such, the EA concludes that "the Master Plan Update's short-term and long-term impacts to historic resources are anticipated to be negligible" (AECOM and Timmons Group, 2014:4-9). Given that the currently-proposed project may include improvements that implement a very small component of the circulation improvements assessed in the Pentagon Reservation Master Plan Update EA, these improvements would have No Effect on the significant character-defining features of the Pentagon that make this resource eligible for listing in the NRHP and designation as a NHL.

The Fairlington Historic District (000-5772) straddles the interstate and is within the APE for the currently-proposed project. As previously noted, DHR and VDOT previously agreed to a conditional finding of No Adverse Effect for the northern segment of the previously-proposed project, pending review of the design and placement of sound walls in the vicinity of the Fairlington Historic District, should sound walls be determined necessary (Mark Holma to Helen Ross, August 5, 2008). The noise analysis for the I-395 Express Lanes Project is currently underway and is anticipated to be completed in late summer 2016. Should they become a component of the undertaking VDOT will coordinate the results, potential location(s), and design of sound walls. Any potential sound walls are anticipated to be constructed within existing VDOT right of way and outside the district's historic boundary; therefore, the sound

walls will not directly affect the district. As currently proposed, the project would not impact any of the qualities of the districts that make the districts eligible for listing in the NRHP. While the sound walls may be visible from some locations within the district, the construction of sound walls would not likely alter or diminish any of the character-defining features of the Fairlington Historic District that make this resource eligible for listing in the NRHP. All other improvements near the district are expected to occur within the median of I-395 and will have minimal visual effect on the historic property due to disturbed context of the roadway prism. Thus, until more detail is available regarding the need for and design of sound walls in the vicinity of the Fairlington Historic District, a conditional finding of No Adverse Effect remains appropriate.

The Parkfairfax Historic District (100-0151) abuts the interstate and is within the APE for the currently-proposed project. The district was considered to be outside of the APE for the previously-proposed project because all work within the vicinity of this resource would occur within the existing median, thus posing minimal potential to visually or otherwise affect the qualities of the historic district. Thus, the potential effects of sound walls to the Parkfairfax Historic District were not addressed by DHR and VDOT in their previously agreed upon finding of conditional No Adverse Effect. However, for the current project, conclusions reached with the Fairlington Historic District would be similar for the Parkfairfax Historic District. As currently proposed, the project will not impact any of the qualities of the districts that make the districts eligible for listing in the NRHP. Any potential sound walls are anticipated to be constructed within existing VDOT right of way, so the sound walls will not directly affect the Parkfairfax Historic District but may be visible from the district. Additional project improvements near the district are expected to occur within the median of I-395, thus these improvements will have minimal visual effect on the historic property. Until more detail is available regarding the need for and design of sound walls in the vicinity of the Parkfairfax Historic District, the currently-proposed project will result in a finding of No Adverse Effect, as the I-395 Express Lanes Project has potential to minimally alter but not diminish the significant qualities of the Parkfairfax Historic District.

Archaeological Resources

Previous archaeological studies did not identify any eligible resources within the APE for the current project. It appears that Thunderbird's archaeological survey and addenda provided full coverage of the current APE, including areas extending to the northernmost end of the study area and areas in the Pentagon parking lot. Thus, the currently proposed I-395 Express Lanes Project has no potential to affect significant archaeological sites.

Determination of Effect

In accordance with 36CFR 800.5(a), VDOT has applied the criteria of adverse effect to historic properties within the corridor study area, including proposed signage locations within existing interstate right of way, for the proposed project. The regulations implementing Section 106 of the National Historic Preservation Act define an effect as an, "alteration to the characteristics of a historic property qualifying it for inclusion in or eligible for the National Register" [36CFR800.16(i)]. The effect is adverse when the alteration of a qualifying characteristic occurs in a "manner that would diminish the integrity of the property's location, design, setting, material, workmanship, feeling or association" [36CFR800.5(a)]. The

Mr. Marc Holma
Mr. C. Andrew Lewis
July 8, 2016
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VDOT recommends that the project to expand and convert the two existing reversible high occupancy vehicle (HOV) lanes on I-395 to three managed HOT lanes including sign placement within existing interstate right of way, will have no adverse effect on historic properties.

The VDOT invites you to indicate your concurrence with our No Adverse Effect determination recommendation by signing below within thirty (30) days after receipt of this letter. Please return the original signature to this office.

Thank you for your assistance. If you have any question or need additional information about this report or project please do not hesitate to contact me at 540-899-4033 or at Helen.Ross@VDOT.Virginia.gov.

Sincerely,



Helen P. Ross
District Preservation Manager

Enclosures and Attachments

Cc (email): Tom Biesiadny - Fairfax County
Mr. Dennis Leach - Arlington County
Yon Lambert - City of Alexandria
Amanda Baxter - VDOT Special projects Development Manager
John Simkins - FHWA

Mr. Marc Holma
Mr. C. Andrew Lewis
July 8, 2016
Page 8 of 10

The Virginia State Historic Preservation Officer (SHPO) concurs that the undertaking, VDOT Project Number: 0395-969-205; UPC: 108313, will have no adverse effect on historic properties.

Ms. Julie V. Langan
Director, Virginia Department of Historic Resources

Date

Mr. Marc Holma
Mr. C. Andrew Lewis
July 8, 2016
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The DC State Historic Preservation Officer (SHPO) concurs that the replacement of signs within the DC border consistent with Figure 2 will not diminish any of the characteristics of any adjacent historic properties since the signs will be replacing existing signs of approximately the same size and in approximately the same location. In accordance with 36 CFR 800.2(a)(2) DC SHPO agrees to designate Virginia SHPO as the lead SHPO to act on DC SHPO's behalf in the Section 106 process.

Mr. David Maloney, DC State Historic Preservation Officer
District of Columbia Historic Preservation Office

Date

References

AECOM and Timmons Group

2014 Environmental Assessment Pentagon Reservation Master Plan Update. Prepared for the Washington Headquarters Services, Department of Defense, Washington D.C.

Buchanan, Brian, Christopher Shephard, David Carroll, Curt Breckenridge, Johnna Flahive, Christine Jirikowic, Tammy Bryant, and William P. Barse

2007 Phase I Archaeological Investigations of the I-95/395 HOV/Bus/HOT Lanes Project Arlington, Fairfax, Prince William and Stafford Counties and the City of Alexandria, Virginia. Thunderbird Archaeology, Gainesville, Virginia.

Goff, Todd M. and Kerri S. Barile

2007 Reconnaissance Architectural Survey for the I-95/I-395 HOV/Bus/HOT Lanes Project, Arlington, Fairfax, Prince William, & Stafford Counties, & the City of Alexandria, Virginia. Dovetail Cultural Resource Group I, Inc., Fredericksburg, Virginia.

Hutson, Jarod

2008 Addendum to the Phase I Archaeological Investigations of the I-95/395 HOV/Bus/HOT Lanes Project Arlington, Fairfax, Prince William and Stafford Counties and the City of Alexandria, Virginia. Thunderbird Archaeology, Gainesville, Virginia.

Hutson, Jarod and John P. Mullen

2008 Third Addendum to the Phase I Archaeological Investigations of the I-95/395 HOV/Bus/HOT Lanes Project Arlington, Fairfax, Prince William and Stafford Counties and the City of Alexandria, Virginia. Thunderbird Archaeology, Gainesville, Virginia.

Mullen, John P. and David Carrol

2007 Addendum to the Phase I Archaeological Investigations of the I-95/395 HOV/Bus/HOT Lanes Project Arlington, Fairfax, Prince William and Stafford Counties and the City of Alexandria, Virginia. Thunderbird Archaeology, Gainesville, Virginia.

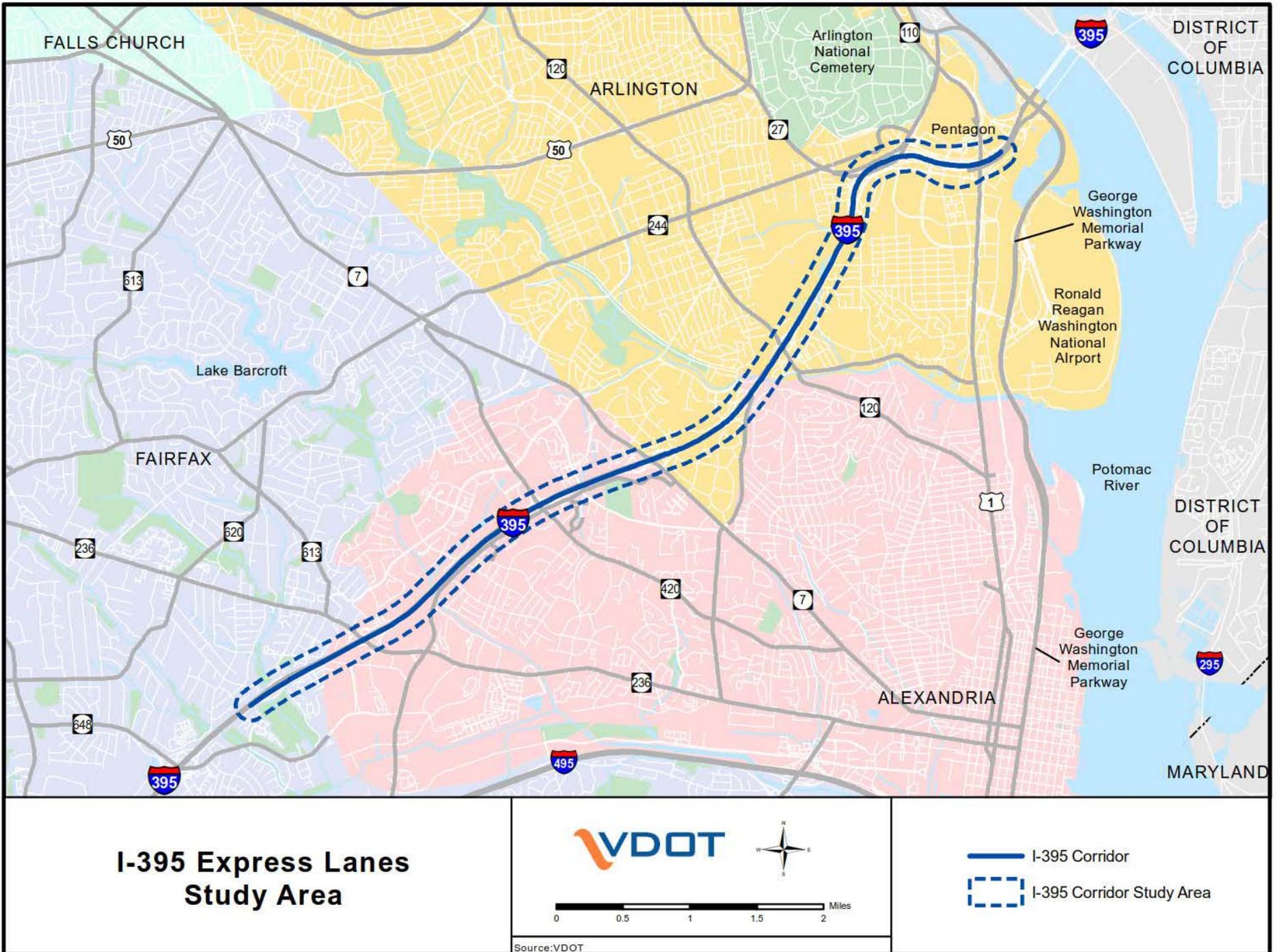


Figure 1

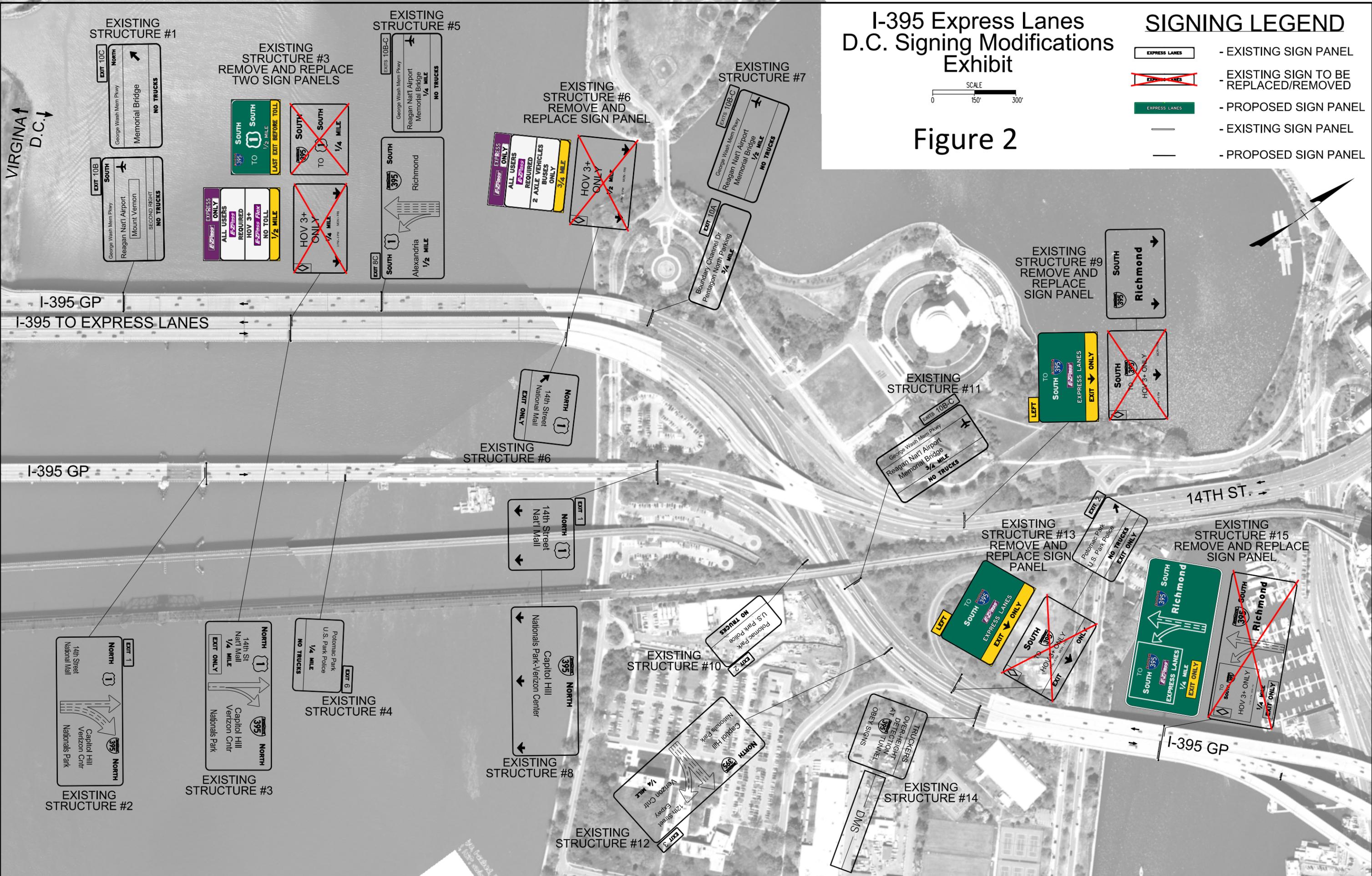
I-395 Express Lanes D.C. Signing Modifications Exhibit

SIGNING LEGEND



Figure 2

-  - EXISTING SIGN PANEL
-  - EXISTING SIGN TO BE REPLACED/REMOVED
-  - PROPOSED SIGN PANEL
- - EXISTING SIGN PANEL
- - PROPOSED SIGN PANEL



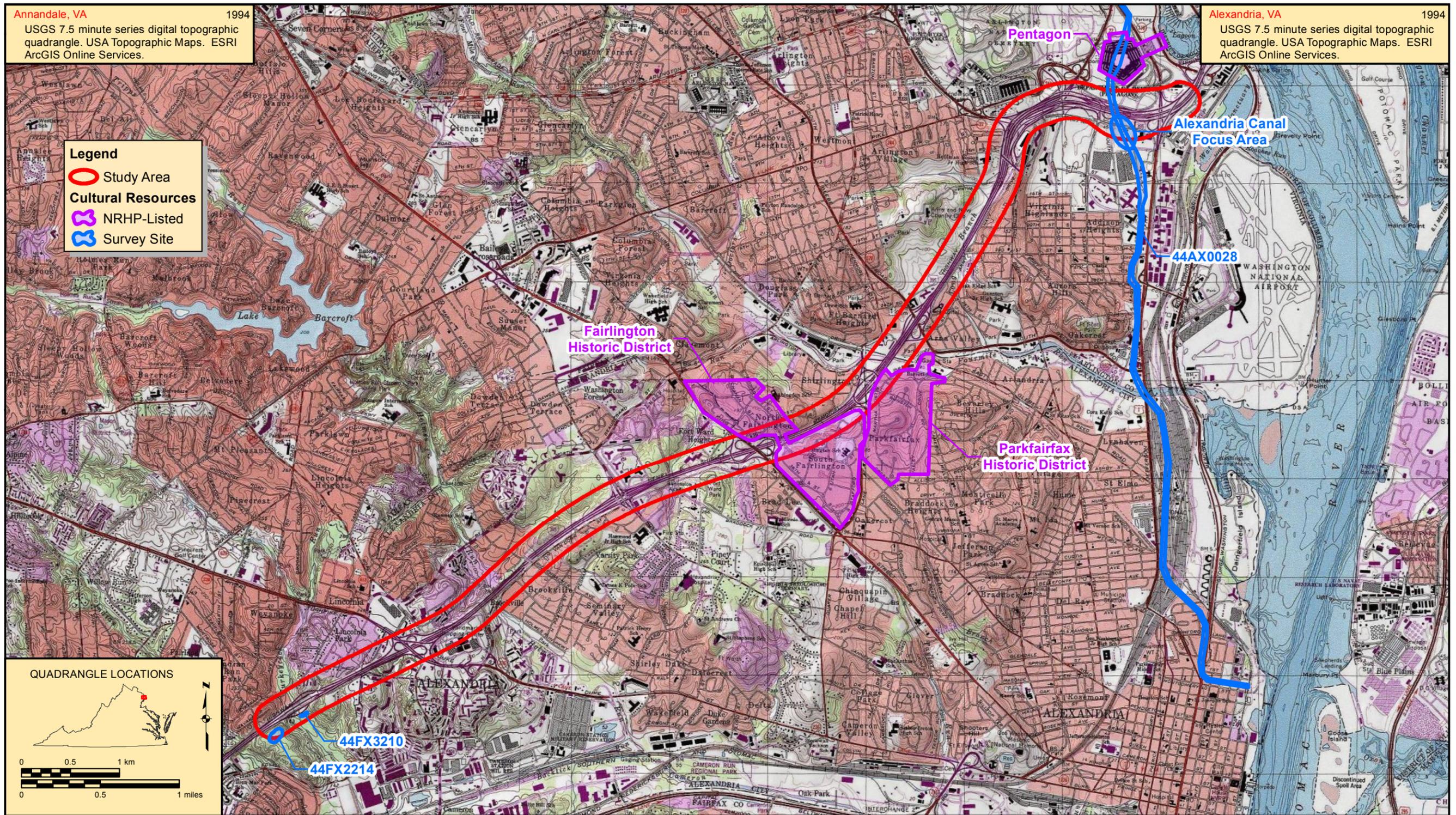


Figure 3. Previously recorded cultural resources in the vicinity of the current I-395 Express Lanes Study Area.



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

JULY 6, 2016

APPROVED JURISDICTIONAL DETERMINATION

Northern Virginia Regulatory Section
NAO-2007-03707 (95 Express Lanes)

Mr. Joseph Lachewitz
Fluor-Lane 95, LLC
6621 Electronic Drive, Suite U
Springfield, VA 22151

Dear Mr. Lachewitz:

This letter is in regard to your request for a re-verification of an approved jurisdictional determination for waters of the U.S. (including wetlands) to include all study areas on property known as 95 Express Lanes, located along the I-395 and I-95 corridor on the north- and southbound sides of I-395, extending from the Duke Street and Little River Turnpike (Route 236) Interchanges in the City of Alexandria, south to the I-495 Interchange in Fairfax County, and on the north- and southbound sides of I-95 from the I-495 Interchange south to Dumfries Road (Route 234) in Prince William County, north- and southbound sides of I-95 from Joplin Road in Prince William County to south of Garrisonville Road in Stafford County, Virginia.

An on-site jurisdictional determination has found waters and/or wetlands regulated under Section 10 of the Rivers and Harbors Act (33 U.S.C. 403) and/or Section 404 of the Clean Water Act (33 U.S.C. 1344) on property listed above. Nontidal wetlands and/or waters have been identified on the site. This letter shall serve to confirm the wetlands delineation by Wetland Studies and Solutions, Inc., as surveyed and shown on the maps titled "Additional Study Areas - 95 Express Lanes" dated October 2015, maps titled, "I-95 Express Lanes" dated December 14, 2012 and August 24, 2012, and maps titled "I-95 HOV/HOT Lanes" dated July 2011 and August 2011 (on file at the Corps).

Our basis for this determination is the application of the Corps' 1987 Wetland Delineation Manual *and Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region* and the positive indicators of wetland hydrology, hydric soils, and hydrophytic vegetation. The wetland is a water of the United States and is part of a tributary system to interstate waters (33 CFR 328.3(a)). These waters meet the Corps' definition of waters of the United States, are part of a tributary system to interstate waters (33 CFR 328.3 (a)) and have an ordinary high water mark.

Discharges of dredged or fill material, including those associated with mechanized landclearing, into jurisdictional waters and/or wetlands on this site will require a Department of the Army permit and may require authorization by state and local authorities, including a Virginia Water Protection Permit from the Virginia Department of Environmental Quality (DEQ), a permit from the Virginia Marine Resources Commission (VMRC) and/or a permit from your local wetlands board. This letter is a confirmation of the Corps jurisdiction for the waters and/or wetlands on the subject property and does not authorize any work in these jurisdictional areas. Please obtain all required permits before starting work in the delineated waters/wetland areas.

This letter contains an approved jurisdictional determination for your subject site. If you object to this determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) fact sheet and Request for Appeal (RFA) form. If you request to appeal this determination you must submit a completed RFA form to the North Atlantic Division Office at the following address:

ATTN: Mr. James W. Haggerty, Regulatory Program Manager
United States Army Corps of Engineers
CENAD-PD-OR
Fort Hamilton Military Community
301 General Lee Avenue
Brooklyn, NY 11252-6700

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 C.F.R. part 331.5, and that it has been received by the Division Office within 60 days of the date of the NAP. Should you decide to submit an RFA form, it must be received at the above address by ****September 6, 2016.**** It is not necessary to submit an RFA form to the Division office if you do not object to the determination in this letter.

This jurisdictional determination is valid for a period of five years from the date of this letter unless new information warrants revision prior to the expiration date. If you have any questions, please contact Ms. Theresita Crockett-Augustine in the Northern Virginia Field Office at 18139 Triangle Plaza, Suite 213, Dumfries, Virginia 22026, (703) 221-9736 or theresita.m.crockett-augustine@usace.army.mil.

Sincerely,



Theresita Crockett-Augustine
Environmental Scientist
Northern Virginia Regulatory Section

Enclosures

**NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND
REQUEST FOR APPEAL**

Applicant: Fluor-Lane 95, LLC		File Number: NAO-2007-03707	Date: 7/6/2016
Attached is:			See Section below
<input type="checkbox"/>	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)		A
<input type="checkbox"/>	PROFFERED PERMIT (Standard Permit or Letter of permission)		B
<input type="checkbox"/>	PERMIT DENIAL		C
<input checked="" type="checkbox"/>	APPROVED JURISDICTIONAL DETERMINATION		D
<input type="checkbox"/>	PRELIMINARY JURISDICTIONAL DETERMINATION		E

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/inet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the Norfolk District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations (JD) associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the Norfolk District Engineer. Your objections must be received by the Norfolk District Engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the Norfolk District Engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the Norfolk District Engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the Norfolk District Engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the North Atlantic Division Engineer, ATTN: CENAD-PD-PSD-O, Fort Hamilton Military Community, Building 301, General Lee Avenue, Brooklyn, NY 11252-6700. This form must be received by the North Atlantic Division Engineer within 60 days of the date of this notice with a copy furnished to the Norfolk District Engineer.

E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.

SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT

REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

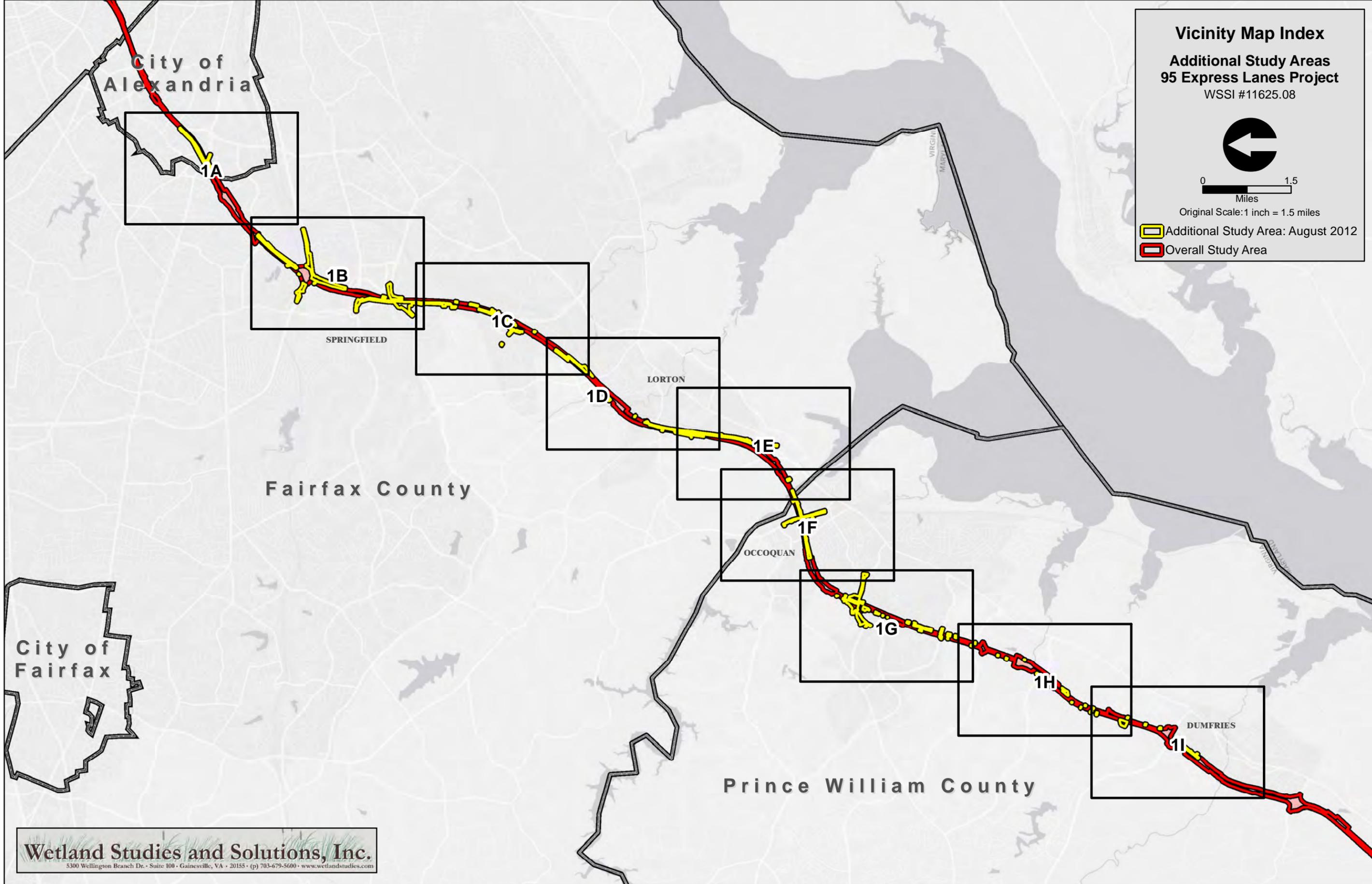
POINT OF CONTACT FOR QUESTIONS OR INFORMATION:

If you have questions regarding this decision and/or the appeal process you may contact:
U.S. Army Corps of Engineers, Norfolk District
ATTN: Ms. Theresita Crockett Augustine (CENAO-WR-R)
18139 Triangle Plaza, Suite 213
Dumfries, Virginia 22026
Phone: (703) 221-9736
Email: theresita.m.crockett-augustine@usace.army.mil

If you only have questions regarding the appeal process you may also contact:
Mr. James W. Haggerty
Regulatory Program Manager
U.S. Army Corps of Engineers
CENAD-PD-OR
Fort Hamilton Military Community
301 General Lee Avenue
Brooklyn, NY 11252-6700
Telephone: (347) 370-4650
Email: james.w.haggerty@usace.army.mil

RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

_____ Signature of appellant or agent.	Date:	Telephone number:
---	-------	-------------------



Wetland Studies and Solutions, Inc.
5300 Wellington Branch Dr. • Suite 100 • Gainesville, VA • 20155 • (p) 703-679-5600 • www.wetlandstudies.com

Vicinity Map Index
Additional Study Areas
95 Express Lanes Project
WSSI #11625.08

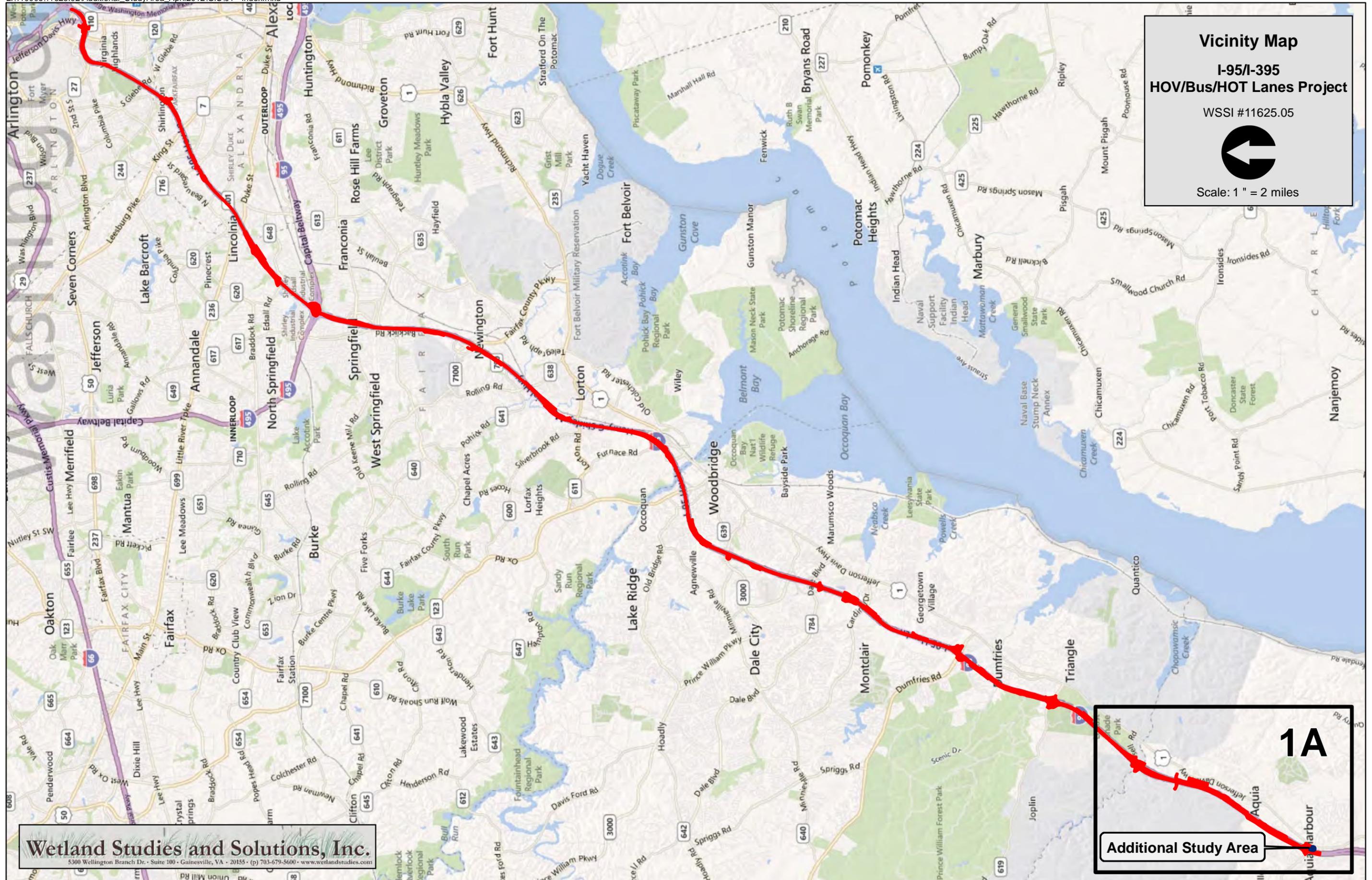


0 1.5
Miles
Original Scale: 1 inch = 1.5 miles

 Additional Study Area: December 2012
 Overall Study Area



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Vicinity Map
I-95/I-395
HOV/Bus/HOT Lanes Project
 WSSI #11625.05

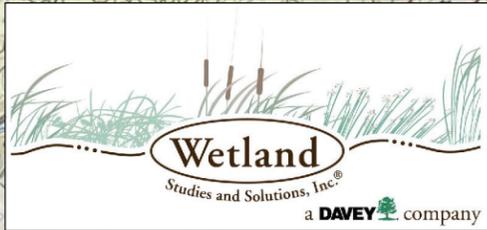
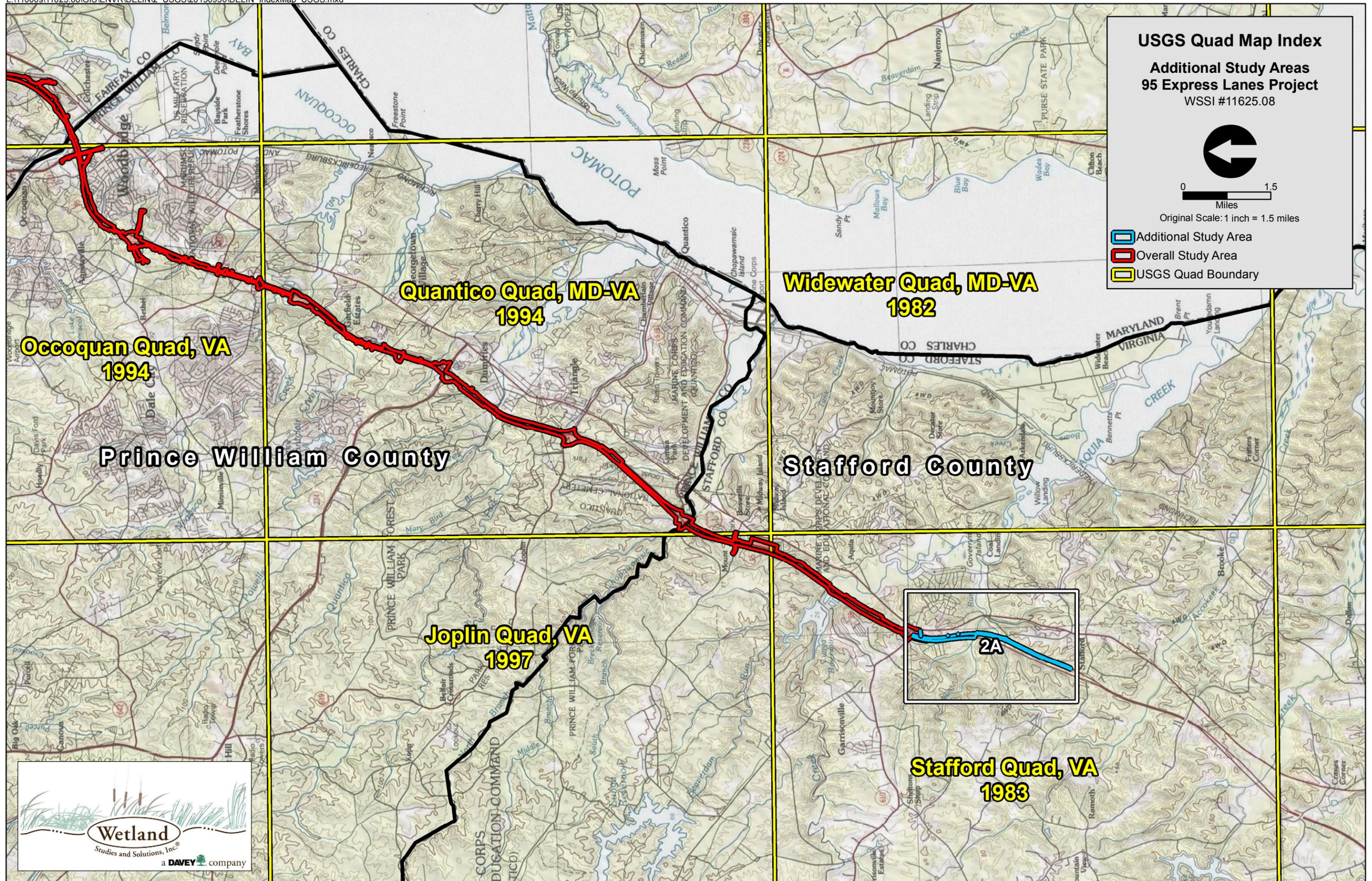


Scale: 1" = 2 miles

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 5300 Wellington Branch Dr. • Suite 100 • Gainesville, VA • 20155 • (p) 703-679-5600 • www.wetlandstudies.com

1A

Additional Study Area



From: Sundra, Ed (FHWA) [<mailto:Ed.Sundra@dot.gov>]
Sent: Wednesday, July 06, 2016 8:49 AM
To: Ponticello, James (VDOT)
Cc: Simkins, John (FHWA); Muchenje, Lovejoy 'LJ' P.E. (VDOT)
Subject: RE: I-395 Hotlanes project (Completing noise study qualitatively for the section south of Seminary Rd)

Jim,

I have reviewed the memorandum prepared by HMMH and do not have any questions. It demonstrates that the forecasted traffic for the I-395 Hot Lanes project will fall within the range of traffic used for the final design noise analyses recently prepared for other projects in the corridor (UPC 96261/102437 and UPC 70849). Therefore, the results of the final design noise analyses can be used for the I-395 HOT Lanes project for purposes of allowing FHWA to make an informed NEPA decision.

Ed

From: Ponticello, James (VDOT) [<mailto:Jim.Ponticello@VDOT.Virginia.gov>]
Sent: Tuesday, July 05, 2016 10:47 AM
To: Sundra, Ed (FHWA)
Cc: Simkins, John (FHWA); Muchenje, Lovejoy 'LJ' P.E. (VDOT)
Subject: RE: I-395 Hotlanes project (Completing noise study qualitatively for the section south of Seminary Rd)

Ed,

Attached is a qualitative analysis for the portion of the project south of Seminary Rd. Please take a look and advise if you have any questions or comments.

Thanks

Jim Ponticello
Air Quality & Noise Program Manager

Environmental Division | Virginia Department of Transportation | 1401 E. Broad Street, Richmond, VA 23219 | (804) 371-6769 phone
| jim.ponticello@vdot.virginia.gov

From: Ed.Sundra@dot.gov [<mailto:Ed.Sundra@dot.gov>]
Sent: Tuesday, October 06, 2015 9:27 AM
To: Muchenje, Lovejoy 'LJ' P.E. (VDOT)
Cc: Ponticello, James (VDOT); John.Simkins@dot.gov
Subject: RE: I-395 Hotlanes project (Completing noise study qualitatively for the section south of Seminary Rd)

L.J.,

I am fine with preparing a qualitative preliminary noise analysis for the I-395 HOT Lanes project NEPA document contingent upon VDOT doing the following:

1. Confirming that there are no new land uses in the corridor since the completion of the two noted noise studies (you noted below that there "likely" are no new land uses); and
2. Confirming that the I-395 traffic will not substantially increase as a result of the project by comparing it to the traffic from the previous noise studies.

The qualitative noise analysis should allow FHWA to make an informed NEPA decision in light of the anticipated environmental effects. It is my understanding that a final design noise analysis will be prepared at the appropriate time.

Ed

From: Muchenje, Lovejoy 'LJ' P.E. (VDOT) [<mailto:Lovejoy.Muchenje@VDOT.Virginia.gov>]
Sent: Monday, October 05, 2015 3:54 PM
To: Sundra, Ed (FHWA)
Cc: Ponticello, James (VDOT)
Subject: I-395 Hotlanes project (Completing noise study qualitatively for the section south of Seminary Rd)

Hi Ed-

As you may know, the Department will be completing a preliminary noise study for the I-395 Hotlanes project in the near future. The southern end of the project termini (Turkeycock to Seminary Road) is covered by two other projects, i.e. 1) HOV and Auxiliary Lanes project UPC 96261/102437, Project Number: 0395-100-722, B684 and 2) I-95 Express Lanes project-UPC 70849-Segment IV, Project Number: 0095-96A-107, P101.

- UPC 96261 covers the portion from Duke Street to Seminary Rd. The final noise report was completed in **September 2013**. Barriers were shown to be feasible and reasonable for the project.
- UPC 70849-Segment IV covers portion from Duke Street to Turkeycock. The final noise report was completed in **January 2013**. The corridor has feasible and reasonable barriers.

It is my understanding that barriers for both jobs are under construction or have been constructed.

VDOT is proposing to have the preliminary noise study for the portion between Turkeycock and Seminary Rd done qualitatively. The argument is that the ambient noise levels in the noted area have not changed significantly since the completion of the two mentioned projects. Also, the area is well developed, there likely is no new land uses since the completion of the two noted noise studies. In addition, it is not anticipated that the I-395 project would substantially change the ambient noise levels in this area since the project is not adding capacity.

NOTE-Traffic for the I-395 project is not yet available. Once the traffic is available, I'll be glad to do a traffic comparison to verify that the proposed I395 Hotlane project would not substantially add capacity.

Let me know of your thoughts.

Thanks,

LJ Muchenje, P.E.
(804)371-6768

****Please note: The Virginia Department of Transportation has recently updated the State Noise Abatement Policy and created a Guidance Manual (July 14, 2015). The policy and manual can be located at the following address: <http://www.virginiadot.org/projects/pr-noise-walls-about.asp>****

HMMH

77 South Bedford Street
Burlington, Massachusetts 01803
781.229.0707
www.hmmh.com

MEMORANDUM

To: Jim Ponticello, LJ Muchenje, VDOT
From: Chris Menge, Ruth Mazur, Zachary Weiss, HMMH
Subject: I-395 Express Lanes Noise Study – Loudest-Hour Comparison of Traffic for I-395
in Different Noise Studies - South of Seminary Road
Reference: UPC 99580; VDOT Contract No. 42511-7
HMMH No. 306780.008
Date: July 5, 2016



This memorandum describes a comparison of the loudest-hour traffic data used in previous noise studies for modeling the I-395 Build alternatives between Turkeycock Run and Seminary Road to traffic developed for the current study for the same section of I-395. The noise levels generated by the traffic used in the different noise studies is compared, and support is given for not conducting another detailed analysis of this portion of the study area, thereby revisiting the conclusions of the prior studies.

As you know, HMMH is currently conducting a preliminary, environmental document noise study for the I-395 Express Lanes Project between the interchange at Turkeycock Run and Eades Street near the Pentagon. However, two final design noise studies were conducted in 2013 in conjunction with roadway design projects that overlap with the current study area, between Turkeycock Run and Seminary Road. One project, the I-395 HOV Ramp and Auxiliary Lane Project, UPCs 96261 and 102437, covered the section from Duke Street to Seminary Road. The second project, the I-95 Express Lanes Project, Segment IV, UPC 70849, covered the section south of Duke Street. The two studies were separate, prepared by different firms, and used loudest-hour traffic data that was developed independently. Both studies projected future Build case noise impact in all noise-sensitive areas on both sides of I-395 along the entire length of the study areas, except in a few small areas where local terrain provided significant existing noise shielding. Also, both studies found noise abatement by barriers to be feasible and reasonable in all impacted areas along the corridor. As a result, many noise barriers have been through the final acoustical and engineering design. Further, the noise barriers designed for both projects have been presented to the affected property owners and residents, and the results of the community surveys indicate that all but one of the barriers has been approved by the homeowners for construction.

HMMH was charged with comparing the traffic used for the previous design studies with the traffic being developed for the current study, and determining the noise implications of the differences, since traffic would be the only change to the previous studies. The expectation was that the differences would be small enough such that detailed re-analysis of the study areas would not be necessary. To compare the noise levels generated by the loudest-hour traffic used in the three different noise studies, HMMH used the loudest-hour computation spreadsheet. This spreadsheet uses reference Leqs at 200 feet for each

HMMH

MEMORANDUM: I-395 Express Lanes Noise Study – Traffic Comparison
Jim Ponticello, LJ Muchenje, VDOT

July 5, 2016
Page 2

vehicle type calculated with TNM models using a simple roadway with the posted speed and typical width of one direction of I-395. The Leqs were then calculated using the reference Leqs and the hourly vehicle volumes for two sections of I-395, between Turkeycock Run and Duke Street, and between Duke Street and Seminary Road.

Table 1 below presents the results of the loudest-hour analysis for the three noise studies. The table shows the hours for which the traffic was developed and reported, and the hourly traffic volumes separately for the I-395 northbound and southbound general purpose lanes and the HOV lanes. On the right of the table, the computed reference Leqs for each of the roadways is shown separately along with a Total with all of them combined. As you can see, the two previous studies used notably different traffic volumes for their respective loudest-hour analyses. The I-395 HOV Ramp and Auxiliary Lane Project (UPC 96261 and 102437) used the 8:00 PM hour as the loudest, citing congestion in the other hours as reasoning for not using periods closer to peak. As a result, traffic volumes and noise levels are somewhat lower than those for the other study and the current study. The traffic developed for both sections of I-395 are shown for that study. The I-95 Express Lanes Project, Segment IV (UPC 70849) examined both AM and PM peak periods, so the traffic for both periods is shown for the section of I-395 between Turkeycock Run and Duke Street. Those traffic volumes and resulting noise levels are notably higher, up to approximately 3 decibels.

The traffic developed for the current project and the resultant noise levels fall between those for the two previous studies, approximately 2 decibels higher than the traffic for the UPC 96261 and 102437 study, and ½ to 1 decibel lower than that for the UPC 70849 study.

Having reviewed these traffic and noise results, as well as the results and conclusions of the previous noise abatement design studies, HMMH concludes that the results of both of the previous design studies are valid, in the context of revised traffic developed for the current study. A primary reason for this conclusion is that all of the noise-sensitive land uses adjacent to I-395 in both previous noise studies not behind significant terrain shielding (called “berm ridgeline” in the UPC 96261 and 102437 report graphic) were predicted to be impacted in the Build case. As a result, noise abatement was evaluated for all of the noise-sensitive areas. Therefore, even with somewhat higher (or lower) predicted noise levels in a new detailed study, if one were to be conducted, the same areas would be predicted to be impacted, and noise abatement barriers would be evaluated in the same areas. For further confirmation of this conclusion, we examined the predicted noise levels in the previous UPC 96261 and 102437 study in the two areas shielded by terrain where no impact was predicted and no barrier was proposed. We found that the predicted Build case noise levels in those areas were low enough such that even if they were increased by 2 decibels, the nearest noise receptors would still not be predicted to be impacted. Two decibels is what the approximate difference would be between the predicted sound levels using the traffic developed for the UPC 96261 and 102437 design study and that which has been developed for the current noise study.

As a result of this analysis, we recommend that a qualitative analysis is sufficient for the section of the I-395 Express Lanes project south of Seminary Road.

HMMH

MEMORANDUM I-395 Express Lanes Noise Study – Traffic Comparison
 Jim Ponticello, LJ Muchenje, VDOT

July 5, 2016
 Page 3

Table 1. Loudest-hour Comparison - Different Noise Studies - Turkeycock Run to Duke Street

Noise Study - Future Build Case	Roadway link	Loud Hr	Northbound GP lanes			Southbound GP lanes			HOV Lanes			Leq			
			Autos	MT	HT	Autos	MT	HT	Autos	MT	HT	NB	SB	HOV	Total
Previous Final Design Study UPC 96261, 102437	I-395 - Duke to Seminary	8:00 PM	3,350	31	108	4,201	39	136	1,470	27	0	68.8	69.8	64.3	72.9
Previous Final Design Study UPC 96261, 102437	I-395 - South of Duke St.	8:00 PM	3,099	29	100	4,444	45	149	1,470	27	0	68.4	70.1	64.3	73.0
Previous Final Design Study UPC 70849	Between Turkeycock Run & Duke St.	7 & 8 AM	4,294	465	775	3,347	163	105	2,171	115	66	73.5	69.3	67.4	75.6
Previous Final Design Study UPC 70849	Between Turkeycock Run & Duke St.	5 & 3 PM	4,355	292	482	5,314	268	126	3,248	92	191	72.2	71.1	69.6	75.9
Current Study UPC 99580	I-395_Duke St to_Seminary Rd	7:00 AM	5,871	133	84	5,028	190	112	4,647	126	0	70.9	70.6	69.4	75.1
Current Study UPC 99580	I-395_Turkeycock Run Int. to_Duke St	7:00 AM	5,559	147	119	4,783	158	103	4,647	126	0	70.9	70.3	69.4	75.0

I-395 HOT Lanes
Virginia Department of Transportation
Interim Improvements for South Parking Lot
Options 1-4 Comments, Coordination Efforts, South
Parking Events, and Conduct on the Pentagon Reservation



Washington Headquarters Services
in partnership with
Pentagon Force Protection Agency

June 2016

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1.0 Introduction

The following comments are provided in response to the I-395 South Parking Reconfiguration Schedule Meeting that was held on May 25, 2016.

This document contains the following sections and associated comments provided:

- Introduction
- Comments
 - Office of General Counsel (OGC)
 - Engineering and Architecture Division (EAD)
 - Pentagon Building Management Office (PBMO)
 - Pentagon Police Department (PPD)
 - Security Services Directorate (SSD)
 - Anti-Terrorism Force Protection (ATFP)
- Coordination Efforts
- Events that utilize South Parking Lot
- Conduct on the Pentagon Reservation
- Next Steps

2.0 Comments

2.1 Office of General Counsel (OGC) for Washington Headquarters Services (WHS) and Pentagon Force Protection Agency (PFPA)

The Office of General Counsel has no comments to add at this time, and reserves the right to add any comments in the future.

2.2 Engineering Construction Management (ECM) / Engineering and Architecture Division (EAD)

General Comments (Option 4)

1. A technical description/discussion is needed to discuss the Option 4 exhibit VDOT presented to FSD. Some of the 2-D geometries in the exhibit seem to follow the roadway geometries in our design, which is a good sign. However, without the technical commentary accompanying the exhibit, the information is incomplete. EAD would like to participate in a follow-on meeting with VDOT to discuss Option 4 features and determine how they align with the Pentagon civil engineering design. EAD requests a copy of the VDOT's RFP excerpts (text and exhibits) containing their proposed work on Pentagon Reservation.
2. In efforts to work in conjunction with VDOT, EAD stopped the 35% design effort of the

“Reconfigure South Parking Infrastructure” project in anticipation that VDOT and FSD would work in close partnership to bring the VDOT and FSD projects under a common denominator. If possible, the Pentagon Stakeholders would like to review the RFP sections pertaining to the work VDOT is planning to conduct on the Pentagon Reservation.

3. Due to technical, logistical, and traffic operations reasons, EAD does not support major temporary construction efforts anywhere at Pentagon South Parking. Knowing the complexities of the “Reconfigure South Parking Infrastructure” project, inserting the construction of temporary pavements into our project does not make sense in the grand scheme of the planned construction effort. Additionally, twelve months later those temporary pavements would need to be replaced with reinforced concrete per our design. We maintain that any rework of temporary roadways, sidewalks and parking areas at South Parking will immensely complicate the execution of our project, from project phasing to traffic operations. As for the joint expenditures, (VDOT’s and ours), paying for temporary work and follow-on rework is disadvantageous to Government funds.

General Comments (apply to first three Options)

1. Please confirm that HOV/HOT gates on S. Rotary will be installed in all Options, gates on S. Rotary will be deployed during AM peak / retracted PM peak, and that previous gate discussions indicated horizontal gates should be used for pedestrian safety reasons.
2. What level of congestion does the model show as the AM peak gate deployment impact to S. Rotary / Eads (block third S. Rotary lane)? How much back-up onto the Pentagon will be caused by the signalized intersections on Eads underpass during AM peak, how much will this impact circulation for Pentagon employees trying to get into the parking lots, how will this affect outbound Pentagon Metro buses and slug drivers trying to leave, and how much will this impact inbound employees, buses, and slug drivers coming from Army-Navy Drive especially with the additional reversed off-ramp volume?
3. During AM peak for the HOT proposal, I-395 SB HOV (coming from D.C.) Pentagon employees who currently exit onto Eads (destination S.P.) will be diverted to Boundary Channel Drive or exit 8A and then hairpin onto S. Rotary? How do these diverted volumes affect congestion on S. Rotary, Connector road, and or N. Rotary?
4. During PM peak gate retraction(s) will partially block one or more slug route curb waiting areas meaning slugs riders will have to run around the retracted gate in order to get to the slug driver vehicles which may lead to pedestrian injuries - how will this obstruction be mitigated?

5. Since the changes to the current HOV on-ramps / off-ramps at Eads, closure of the slip-ramp to the general purpose I-395 SB lanes will affect traffic volumes and circulation on Eads, Army-Navy Drive, and Fern, please provide over-view of how these off-reservation critical intersections will function during AM and PM peak and then drill down to the Pentagon south parking.
6. Is the intent for all three Options to create a safe pedestrian route from Army-Navy Drive to South Rotary Road along the south curb line with signalized intersections with cross-walk timers? Currently pedestrian traffic is prohibited due to present on-ramp / off-ramp limited controls but how will the pedestrian crosswalk interval(s) affect Eads inbound and outbound? Are you also proposing crosswalk timing Eads / S. Rotary?
7. How will the additional Eads underpass lane (make right turn onto HOV/HOT on-ramp or straight to Army-Navy Drive) affect congestion and weaving from the S. Rotary slug lines and the Pentagon outbound onto Eads during PM peak?

Option 1

1. Assume S. Rotary gate general comment applies.
2. Assume Eads pedestrian general comment applies.
3. Since this proposal only signalizes Eads and PTC apron, how effective does the traffic model show this if Fern is not signalized?
4. This option does not remove the modal conflicts especially at Eads / N. Rotary between pedestrians, buses, slug drivers, and pentagon employee vehicles.

Option 2

1. Assume S. Rotary gate general comment applies.
2. Assume Eads pedestrian general comment applies.
3. This option minimally attempts to remove the modal conflicts especially at Eads / N. Rotary between pedestrians, buses, slug drivers, and pentagon employee vehicles (Pentagon employee/slug pedestrians still have to cross PTC bus traffic).
4. This option displaces several slug routes but does not indicate where they will be re-located.
5. How was the model show the merging/intersection of the two S.P. pork chop lanes with the PTC inbound and outbound lanes? The outbound buses and cars will have limited visibility approaching the intersection what controls will be used to mitigate and how will this affect congestion?

Option 3

1. The geometric design of the bus loop (position, alignment and width of the loop) deviates from the WHS 35% design. The geometric design for the two-way loop must take into account the size of the leading bus, space needed to negotiate curves without brushing, and soil conditions. The purpose of the 3rd lane in the WHS 35% design is to provide enough room to bypass a stalled bus.
2. Bus and car traffic continue to comingle which is exactly what the WHS design avoids.
3. There is a very complex intersection inside the Pork Chop where buses and passenger cars are competing for right of way without the assistance of a policeman or a traffic signal.
4. The realignment of Eads makes no sense without building the permanent bus loop first - not just placing some asphalt overlay, but reinforced concrete per the WHS design. In fact, realigning Eads before being able to route buses around the Commuter Plaza/Pork Chop will create a construction scheduling nightmare.
5. Any temporary construction at South Parking will significantly push the permanent reconfiguration of South Parking (WHS 35% design) further and further in the future. The temporary construction will create months of traffic and construction chaos, followed by more months of demolition and traffic and construction chaos to build the permanent configuration. Adding both costs together is waste of money and time.
6. Asphalt pavement is not appropriate for both Eads intersections due to high water table and poor geotechnical conditions.
7. Construct a fourth lane between Fern and Eads on South Rotary Road to provide a dedicated right turn into the I-395 Hot Lane ramp when open. The WHS design shows three dedicated lanes to carry the morning peak traffic on South Rotary. The right lane is dedicated to right turns into Crystal City from Eads. The middle lane is dedicated to buses. The left lane is dedicated to left turn on Eads. The gated lane must be the added fourth lane.
8. Assume S. Rotary gate general comment applies.
9. Assume Eads pedestrian general comment applies.
10. What is the congestion for the existing pedestrian and vehicle counts, turning movements and projected pedestrian and vehicle counts particularly for the four intersections South and North Rotary / Fern / Eads, the inbound / outbound PTC lanes, the Eads under pass, and the detour route AM peak around to Army-Navy Drive?

11. How was sufficiency of the proposed "new slug" lines along Fern and curve of pork chop to handle the slug volumes displaced by the reconfiguration of PTC inbound/outbound? How did you calculate sufficiency of the slug driver queuing distances for the proposed "new slug" lines? Assuming for PM peak the South Rotary Road existing slug lines remain - South Rotary between Fern and Eads is already severely congested from the weaving and merging of the existing slug lines volumes and the queue backs up on South Rotary and Connector Road / North Rotary - how will the Fern "new slug" line vehicle volumes be accommodated without further congesting South Rotary, parking lot circulation, and North Rotary?

Option 4

1. The 4th lane is present but what is done with sluggers from the current location of the sluggers along South Rotary Road? Proposed dedicated 4th lane HOV/HOT renders curb line unsuitable for any rider pick-up due to gate deployment AM peak or gate retraction PM peak.
2. Are all sluggers currently on "pork chop" to be moved to the area shown in option 4? Is the proposed new slug area curb line smaller or about the same as existing? Slug routes have different "ridership" and want to make sure sufficient curb line / queuing is provided.
3. Does this plan include the dedicated bus lane? Confirm intent is to use new raised median (slug lines) and grass median to segregate bus lanes? "Buses only" signage required at bus lanes entrance at Eads / S. Rotary and right turn lane under I-395 overpass.
4. Need to accommodate PFPA security requirements on the bus lanes to and from the PTC either to install the vehicle arresting barriers (inbound and outbound) and officer booth as part of VDOT project or coordinate installation of conduits and concrete cut-outs in the concrete roadbed for installation at a later time.
5. Confirm bus lanes design criteria for turning radii and sufficient width to go around a disabled bus.
6. Confirm proposed bus lanes pavements will remove the existing asphalt / concrete roadbed and replace with new concrete with proper sub-base for bus loads and passes. Note soil conditions from boring logs from Reconfigure South Parking drawings.
7. Confirm proposed pedestrian crosswalk timers at signalized intersections on the reservation. Concur that Option 4 removes bus / pedestrian conflict at Eads and N. Rotary for sluggers but Pentagon employees need a protected crosswalk to / from employee parking.
8. Confirm if intent is to provide for pedestrian pathway along south curb line with crosswalk timers for signalized intersections along Eads under I-395 over-pass. If yes,

then pedestrian crosswalk and timers will be required at Eads / S. Rotary for pedestrian crossing in front of bus lanes.

9. Current taxi stand to remain – signage / barrier required to block any traffic proceeding beyond taxi stand toward PTC.
10. Confirm existing Fern Slug lines to remain as is.
11. Proposal may cause conflicts / short circuiting between slug drivers and Pentagon employee vehicles during PM peak.
12. Confirm two lane widths for proposed “pork chop” slug lines – curbside pick-up and by-pass lane.
13. What impact does the traffic model show with the proposed signalized intersections (on the Pentagon reservation and off the reservation) to circulation patterns and queuing?
14. Can Eads Street re-alignment shown on the previous Option 2 be included with a new concrete roadbed? Signalized intersection on N. Rotary needs to shift north. Eads from N. Rotary to S. Rotary would then be inbound and outbound. “Buses Only” sign left turn lane to bus lanes. Connector Rd grass median needs to be truncated to allow PTC outbound buses directly onto Connector Rd (only during peaks and if security stance allows). A permanent stop bar and sign at N. Rotary is needed, peak PTC buses to Connector Road will require PFPA officer control and mobile stop sign. Need metered pedestrian crosswalk at shifted signalized intersection. Taxi stand will need to be accommodated if Eads Street is re-aligned. Will proposed HOV/HOT lanes gates accommodate the two future outbound lanes (towards Army-Navy Drive)? During AM peak both lanes will have (including buses) to continue to Army-Navy Drive (HOV/HOT lane ramps reversed)? During PM peak will the outside lane be able to access the HOV/HOT lane ramp?
15. Standard Compliance Division (SCD) wants two (2) X 2" conduits stub-outs / mounting pedestal for installation of call boxes. VDOT Option 4 covers at least on proposed call box installation site but will need to drop in conduit pathway before laying permanent concrete towards Corridor 2 for power and IT / communications.

Notes: WHS will need to accommodate tour buses elsewhere on the reservation. Eads Street from S. Rotary road to N. Rotary will remain inbound only if Eads Street is not re-aligned. Reconfigure South Parking project will need to remove proposed grass median in order to consolidate remaining slug lines and develop storm water management structures elsewhere in the “pork chop”.

2.3 Pentagon Building Management Office (PBMO)

Option 1

1. Delete the sidewalk from Eads Street crossing Rotary Road-Reason is the traffic patterns under the bridge and on the Army Navy side of the bridge do not present safe pedestrian paths.
2. Other than traffic signals, I don't see that this option does anything to support traffic on the Pentagon, although it does allow for the Pentagon's proposed Pork Chop plan to be incorporated at a later date.

Option 2

1. Losses of parking in the Pork Chop, as well as in Lanes 24&25- Not sure if the total of all parking is being accounted for.
2. Pedestrian movement under this option is required to cross 2 different traffic areas, while they currently only have to cross only 1.
3. Bus and car traffic is still required to pass through North Rotary Road and East Street intersections.
4. Cars (both parking and slugs) exiting the Pork Chop will now have to mix with bus traffic. This will cause backups in the Pork Chop.
5. The traffic pattern inside the Pork Chop specifically by the slug area is likely not workable and does not appear to take into consideration traffic pattern inside the Pork Chop.
6. Visually, this option is confusing on paper which leads me to think it will be confusing in real life
7. Unsure if the significant grade issues are addressed.

Option 3

1. Losses parking in several areas, I don't recall the estimated total loss was provided for this option.
2. Unsure as to why the Fern St slug lane was moved.
3. Unsure why sidewalks have been added to landlocked portion of lanes 34-36 and 313-32. Also, pedestrian movement in the Pork Chop does not appear to have been fully addressed.
4. Unsure if the significant grade issues have been considered under this option.
5. Unsure if this option requires the elimination of curb parking that exists at the Pork Chop.

6. A cross walk at S Rotary Road and Eads St has been added. Currently pedestrians are prohibited from crossing S Rotary Rd in this area.

Option 4

1. Pedestrian pathways are not clearly defined on the drawing. There are areas marked as pedestrian pathways, (such as the area by the taxi stand) that need to be clarified before comment can be provided.
2. The roadway adjacent to the slug lane will not work as shown because traffic coming from the parking areas and trying to enter the driving lanes cannot make a left turn without entering (partially at least) the slug lane.
3. The large area in the pork chop between N Rotary and S Rotary marked for pedestrians forces cars to make a sharp right and then sharp left turn. This is not necessary. The reason the large pedestrian area exists now is to facilitate pedestrians coming off the tour buses. Since they are no longer going to be using this area, it no longer needs to be kept for pedestrians.
4. The areas set aside for green space are too small to maintain without irrigation. If the intent is to keep these for storm water management considerations, other means (permeable surfaces) should be considered.
5. Many of the islands located in the pork chop are oddly configured. This is likely do to parking space alignment. Consider curving these islands instead to make them more usable as sidewalks.
6. What is the total parking impact under this configuration?
7. Vehicle entrance and exiting into the pork chop might be confusing because it is located so close to each other.
8. Lanes 28 and 29 are dead ended which is not a desirable configuration.
9. How does this plan affect the fire hydrants in the south parking area?

2.4 Pentagon Police Department (PPD)

Options 1-3 General Comments on preferred elements:

1. The elimination of one intersection combining Eads with North / South Connector Rd.
2. Traffic Signals additions at two intersections.

Option 4

1. If cameras are associated with the traffic lights, PFPA would unquestionably need access to them.

2. PFPA would also need the ability to manually override the traffic lights, only for emergency and Mission purposes.
3. Ensure pedestrian safety is addressed around the Eads St. / South Rotary area, to include the vicinity of the planned traffic (gate) arms for the HOT Lanes ramp.
4. Is this (VDOT) project in coordination with the WMATA Safe Track? Since its implementation, PPD has experienced a noticeable increase in vehicular traffic, to include transit buses, on the nearby roadways (including I-395) and it has directly impacted the traffic flow into the Pentagon Reservation especially in the mornings. If both projects were simultaneous, the Pentagon Reservation would potentially be facing a greater negative impact.

2.5 Security Services Directorate (SSD) / Physical Security Division (PSD)

Option 4

At this time, SSD is willing to go with Option 4 if that is what WHS is leaning towards. Regarding security concerns at this point, SSD will wait for further development to address specific areas through discussion on a concept that is more mature.

2.6 Anti-Terrorism Force Protection (ATFP)

Option 4

1. Elements of the WHS South Parking Pedestrian Safety project / security for the Pork Chop area are not represented; specifically, final denial barriers and PFPA Guard Booth at the 110 exit.
2. Will infrastructure be considered - including these items or at least ensuring coordination takes place to allow future inclusion by others?

3.0 Coordination Efforts

The preceding comments will be used by Virginia Department of Transportation (VDOT) in conjunction with Transurban for the purposes of their Request for Proposal (RFP) to be submitted by June 15, 2016. Further coordination between DoD Stakeholders and VDOT/Transurban is scheduled, and will be conducted as the concept of South Parking Lot as the I-395 HOT Lanes Extension Project continues.

4.0 South Parking Lot Events

The events that utilize the South Parking Lot and may affect construction in this area are:

- Rolling Thunder (Memorial Day weekend) – Motorcycle rally
- Fourth of July Events
- America's 9/11 Ride (August) – Motorcycle rally
- 9/11 Events
- Ride-2-Recovery (September) - Bicycle Ride that will pass through South Parking near the 9/11 Memorial.
- Marine Corps Marathon (October 30, 2016)
- Army 10 Miler (October 9, 2016)
- Fall Season: Various smaller events that request parking concessions, such as, Army B-Day Ball, Army/Navy Football Game, etc.

5.0 Conduct on the Pentagon Reservation

5.1 Code of Conduct on PFPA website

Refer to Title 32 of the Code of Federal Regulations Part 234 – Conduct on the Pentagon Reservation.

5.2 Prohibited items

Sec. 234.1:

Weapons. Any loaded or unloaded pistol, rifle, shotgun, or other device which is designed to, or may be readily converted to, expel a projectile by the ignition of a propellant, by compressed gas, or by spring power; any bow and arrow, crossbow, blowgun, spear gun, hand-thrown spear, slingshot, irritant gas device, explosive device, or any other implement designed to discharge missiles; any other weapon, device, instrument, material, or substance, animate or inanimate that is used for or is readily capable of, causing death or serious bodily injury, including any weapon the possession of which is prohibited under the laws of the state in which the Pentagon Reservation or portion thereof is located; except that such term does not include a pocket knife with a blade of less than 2 1/2 inches in length.

Additional prohibited items: ammunition, mace, brass knuckles, any items that could readily be used as a weapon to cause harm.

Note: this may include tools such as concrete anchor shooters; a drill and epoxy may need to be used, unless otherwise approved.

5.3 Permits

Sec 234.3:

Admission to Property. Any person or organization desiring to conduct activities anywhere on the Pentagon Reservation shall file an application for permit with the applicable Building management Office or Installation Commander. Such application shall be made on a form provided by the Department of Defense and shall be submitted in a manner specified by the Department of Defense. Violation of the conditions of a permit issued in accordance with this section is prohibited and may result in the loss of access to the Pentagon Reservation.

6.0 Next Steps

VDOT and Transurban will be submitting their Request for Proposal (RFP) on June 15, 2016 using the DoD Stakeholders' feedback. The DoD Stakeholders provided initial comments. VDOT has stated that any changes and/or modification can be addressed as Addendums. It is requested for VDOT/Transurban to provide a copy of the pages in the RFP that pertain to the proposed work on the Pentagon Reservation. A copy of the sketches, cost estimate and scope are requested.

The next scheduled meeting is the I-395 HOT Lane Traffic Engineers Meeting #2 on June 30, 2016 (9AM).

**FARMLAND CONVERSION IMPACT RATING
FOR CORRIDOR TYPE PROJECTS**

PART I (To be completed by Federal Agency)		3. Date of Land Evaluation Request 5/4/16	4. Sheet 1 of <u>2</u>
1. Name of Project I-395 Express Lanes		5. Federal Agency Involved Federal Highway Administration	
2. Type of Project Transportation (Highway)		6. County and State Fairfax, Arlington, and Alexandria	
PART II (To be completed by NRCS)		1. Date Request Received by NRCS 7/20/16	2. Person Completing Form Don Flegel
3. Does the corridor contain prime, unique statewide or local important farmland? (If no, the FPPA does not apply - Do not complete additional parts of this form). YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		4. Acres Irrigated Average Farm Size	
5. Major Crop(s)	6. Farmable Land in Government Jurisdiction Acres: _____ % _____		7. Amount of Farmland As Defined in FPPA Acres: _____ % _____
8. Name Of Land Evaluation System Used	9. Name of Local Site Assessment System	10. Date Land Evaluation Returned by NRCS	

PART III (To be completed by Federal Agency)	Alternative Corridor For Segment _____			
	Corridor A	Corridor B	Corridor C	Corridor D
A. Total Acres To Be Converted Directly	27			
B. Total Acres To Be Converted Indirectly, Or To Receive Services	1,095			
C. Total Acres In Corridor	1,122	0	0	0

PART IV (To be completed by NRCS) Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland in County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland in Govt. Jurisdiction With Same Or Higher Relative Value				

PART V (To be completed by NRCS) Land Evaluation Information Criterion Relative value of Farmland to Be Serviced or Converted (Scale of 0 - 100 Points)

PART VI (To be completed by Federal Agency) Corridor Assessment Criteria (These criteria are explained in 7 CFR 658.5(c))	Maximum Points				
1. Area in Nonurban Use	15	0			
2. Perimeter in Nonurban Use	10	0			
3. Percent Of Corridor Being Farmed	20	0			
4. Protection Provided By State And Local Government	20	0			
5. Size of Present Farm Unit Compared To Average	10	0			
6. Creation Of Nonfarmable Farmland	25	0			
7. Availability Of Farm Support Services	5	1			
8. On-Farm Investments	20	0			
9. Effects Of Conversion On Farm Support Services	25	0			
10. Compatibility With Existing Agricultural Use	10	0			
TOTAL CORRIDOR ASSESSMENT POINTS	160	1	0	0	0

PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	0			
Total Corridor Assessment (From Part VI above or a local site assessment)	160	1	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	1	0	0	0

1. Corridor Selected:	2. Total Acres of Farmlands to be Converted by Project	3. Date Of Selection:	4. Was A Local Site Assessment Used? YES <input type="checkbox"/> NO <input type="checkbox"/>
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5. Reason For Selection:

Signature of Person Completing this Part: _____ DATE _____

NOTE: Complete a form for each segment with more than one Alternate Corridor



County of Fairfax, Virginia

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

June 6, 2016

Ms. Amanda Baxter
Special Projects Development Manager
VDOT Northern Virginia District
4975 Alliance Drive
Fairfax, Virginia 22030

RE: Request for Environmental Scoping Comments
Interstate 395 (I-395) Express Lanes
VDOT Project Number 0395-969-205; UPC 108313

Dear Ms. Baxter:

This letter is in response to your letter requesting information relating to potential environmental impacts associated with the proposed I-396 Express Lane project. Although the original request was for the County to provide comments to VDOT by February 23, 2016; the County received an extension of the due date.

The map that accompanied your letter indicates that the large majority of this project is proposed to be constructed within the limits of the City of Alexandria and Arlington County. Only approximately 0.6 mile of the project is located within Fairfax County. Your letter also contained three specific areas of inquiry which are addressed individually below. These comments are limited to only those portions of the project that are located within, or have an affect upon, Fairfax County.

Question 1

Based in the study area identified in Figure 1, please provide any informaiton you may have on tother recent or planned projects or activities in the area that might also affecdt the same environmental resources that would be affected by the proposed project. This information could be for projects that directly impact the the same resources or projects that may have indirect or cumulative impacts on the same resources. Additionally, please provide any data that your agency possesses regarding permitted impacts that should be considered when analyzing potential indirect and cumulative environmental impacts for the project.

Fairfax County Department of Transportation
4050 Legato Road, Suite 400
Fairfax, VA 22033-2895
Phone: (703) 877-5600 TTY: 711
Fax: (703) 877-5723
www.fairfaxcounty.gov/fcdot



Response(s)

Fairfax County Department of Transportation (FCDOT)

- The FCDOT is currently conducting a study of bicycle lanes on Route 236. We recommend that provisions be made for integration of bicycle lanes into ramps and crossings for the I-395 project.
- The Fairfax County Comprehensive Plan indicates that Route 236 should be widened to a six lane facility in the vicinity of I-395.
- Buses currently leaving the Pentagon Transfer Center at the Pentagon use the Connector Road and Boundary Channel Drive to access the I-395 general purpose lanes. It is recommended that the Pentagon continue to allow this movement, and the I-395 project not impact the ability of buses to access the general purpose lanes at the Boundary Channel Drive interchange.

Fairfax County Department of Planning and Zoning (FCDPZ)

- FCDPZ is beginning work on a study to determine whether or not the area just west of I-395 (Lincolnia) should become a Central Business Center. The answer to that question, which is several months off, will then influence how FCDPZ look at proposed land use changes
- The EA should, per standard NEPA procedures, address impacts to wetlands, streams, Resource Protection Area, floodplains, tree cover and rare, threatened or endangered species and/or rare vegetative communities. Given the existing width of right-of-way in the Fairfax County portion of the project area, efforts should be pursued to limit the extent of the project to the existing width of the right-of-way. A typical project section, as presented in a recent PowerPoint presentation from VDOT to a Stakeholder Technical Advisory Group, suggests that this approach will be pursued. This approach should serve to minimize or avoid natural resource impacts, at least within the Fairfax County portion of the project area.
- Coordination with the Stormwater Planning Division of the Department Public Works and Environmental Services (DPWES) is recommended in regard to stream/outfall stabilization associated with any stormwater discharges to Turkeycock Run or, if applicable, other discharges in the Fairfax County portion of the project area.
- If the project will extend significantly beyond the current right-of-way in Fairfax County, the EA should identify the extent of impacts to Environmental Quality Corridors (per the Comprehensive Plan) and efforts that will be taken to minimize those impacts.

- **The project falls within the Cameron Run watershed and crosses the Indian Run and Turkeycock Run tributaries or subwatersheds. The Cameron Run Watershed Management Plan documents the existing conditions within these affected subwatersheds and in some cases, recommends remedial measures to alleviate problems. The Stormwater Planning Division of DPWES should be contacted for information regarding any projects identified in the Cameron Run Watershed Management Plan that may relate to the proposed project and whether there may be opportunities to incorporate any of these projects within the project scope (e.g., for stormwater management or mitigation purposes).**
- **The EA documentation should identify the stormwater runoff impacts (both volume/quantity and quality) that would result from the proposed construction as well as the additional impervious cover, if any, that would result from the project. Efforts should be pursued to minimize additional impervious cover consistent with project goals. Stormwater management plans should be discussed within the documentation. Early coordination with the Stormwater Planning Division is recommended on stormwater management designs.**
- **Stormwater management best management practices should be used to manage and detain runoff as close to the source as possible. Low Impact Development (LID) techniques and practices should be pursued as much as possible to reduce stormwater runoff pollution and facilitate infiltration at the source. In areas where conventional stormwater management ponds are to be used, it is recommended that these be designed with enhanced pollutant removal features such as micro-pools and wetland vegetation to optimize water quality benefits. Again, coordination with the Stormwater Planning Division is recommended.**
- **It is assumed that the EA will address highway noise and air quality issues per standard FHWA/VDOT protocols and County staff looks forward to seeing the results of noise and air quality analyses.**

Fairfax County Park Authority (FCPA)

The study area contains or is near several Fairfax County parks. Within the study area is Turkeycock Run Stream Valley Park on both sides of 1-395. Under the County's Park Classification System (see the Parks and Recreation element of the Policy Plan, Fairfax County Comprehensive Plan) Turkeycock Run Stream Valley Park is classified as a resource-based park. Resource-based parks are selected for inclusion in the park system, because of their exemplary natural and/or cultural features and are acquired, identified, and preserved for stewardship and protection. The protection of Turkeycock Run provides ecosystem services and water quality benefits to the Cameron Run watershed,

Potomac River, and Chesapeake Bay. Other parks near the study area include Bren Mar Park to the south, and Lincolnia Park, a local neighborhood park serving the community north of 1-395.

ANALYSIS AND RECOMMENDATIONS

Natural Resources

- **Much of Turkeycock Run Stream Valley Park is designated as a Resource Protection Area (RPA) under the County's Chesapeake Bay Ordinance and state regulations. While there are no known sensitive natural resources within the park other than the RPA, the Park Authority would recommend mitigation for impacts to its natural resources. Project staff should consult with the Park Authority to determine appropriate locations for offsite mitigation, if needed. Cultural, Historic, and Archaeological Resources Park Authority staff reviewed the Fairfax County segment of the study area for cultural resource impacts. The project is federally funded; therefore compliance with Section 106 of the National Historic Preservation Act is required. Under Section 106, the project requires consultation from the Virginia Department of Historic Resources. The Park Authority recommends a Phase I archaeological survey on portions of the project not previously surveyed. If new sites are found and determined potentially significant, those and existing sites that the project may impact should be re-identified and, if applicable, undergo Phase II archaeological testing to determine County significance or eligibility for inclusion in the National Register of Historic Places. If found eligible or significant to the County, avoidance or Phase III data recovery is recommended.**

Trails and Connectivity

- **The Turkeycock Run stream valley plays an integral role in the County's multimodal trail network. The Countywide Trails Plan shows a future eight-foot wide paved trail along Turkeycock Run that would provide connectivity between the north and south sides of 1-395. The southern portion of Turkeycock RStream Valley Park contains existing paved and unpaved trails. Several large culverts allow the stream to pass underneath 1-395; area residents have requested the pedestrian connectivity specified in the Countywide Trails Plan. Potential impacts to the County's existing and planned trails should be considered in the project's design and construction.**

Noise

- **Highway noise could negatively affect visitors to Turkeycock Run Stream Valley and Lincolnia Parks. While the specific impacts of the Express Lanes project to the park system are not known, the Park Authority recommends additional analysis and expects that any related noise would be mitigated in accordance with all applicable federal, state, and local laws and regulations. Under federal highway Noise Abatement Criteria (NAC), the parks within and near the study area are classified under Activity Category C which includes parks, recreational areas, picnic areas, and similar public facilities (23 CFR 722).**

Park Facilities

- **The development of park facilities is guided by the County's Comprehensive Plan, Park Authority policy, and individual park master plans. Whereas the Comprehensive Plan and the Park Authority's policies provide broad guidance, park master planning establishes a long-range vision for the park system to guide future land use and development. Public input is a central element in the development of all park master plans and enables the Park Authority to address the needs and concerns of its park patrons. The Lincolnia Park Master Plan provides for a future southward expansion of the park onto Fairfax County parcel 72-3 ((1)) 40. The approximately 1.7-acre expansion area is adjacent to I-395 and is currently wooded. Possible future amenities include trails and a picnic area.**
- **The Park Authority is currently improving Lincolnia Park by installing outdoor gym equipment and associated facilities. Lincolnia Park has been designated a National Demonstration Site for outdoor fitness, one of the only such locations in the metro-DC region. The Park Authority expects an increase in visitors to the park; however the specific volume is unknown. Construction will be completed in summer 2016. Impacts to Lincolnia Park and the expansion area should be identified, analyzed, and appropriately mitigated during the project's design and construction.**

FCPA SUMMARY

- **If the Environmental Assessment identifies unavoidable impacts to the Park Authority's natural capital, onsite or offsite mitigation is recommended in consultation with Park Authority staff.**
- **Consultation with the Virginia Department of Historic Resources is recommended in accordance with Section 106 of the National Historic Preservation Act. The Park Authority recommends a Phase I archaeological survey and additional study as needed for areas not previously surveyed.**
- **Project staff should identify and mitigate unavoidable impacts to the County's existing and planned trail network in the Turkeycock Run Stream Valley.**
-

- **If the Environmental Assessment identifies unavoidable noise impacts to the Park Authority's parkland and facilities, appropriate mitigation is recommended.**
- **Project staff should consider the potential impacts to Lincolnia Park and its expansion onto parcel 72-3 ((!)) 40 in the project's design and construction.**

Question 2

Planning judgment is a structured process that will be used as part of this study to analyze and forecast potential indirect effects and cumulative impacts. Does your agency possess any reports, data sources, or expert input that you recommend be used to inform the use of planning judgment in this study? Additionally, any other tools or resources that your agency might be able to provide to aid in the identification of indirect and cumulative impacts would be appreciated and considered.

Response

We are not at this time aware of any particular information, beyond that which is normally available, that would affect the planning judgment process or would assist in identifying indirect and cumulative impacts. Fairfax County staff will be glad to work with VDOT or your consultant, if we can be of assistance in accessing such information

Question 3

The scoping package includes an enclosure with an overview of population data from the United States Census Bureau, as well as a map of environmental justice minority populations (Figure 2). Please confirm that this data reflects the current jurisdictional population profile within the project study area as well as any information you may have regarding localized minority or low-income populations that may exist that are not captured in the data aggregated by Census blocks. Finally, please provide contact information on agencies or non profit organizations that provide services to minority and low-income population in the area.

Response

We have attempted to recreate the Federal Highway Administration/VDOT methodology by calculating the Environmental Justice Minority Population for the Fairfax County's portion of the I-395 Express Lane project. We have also provided relevant economic and demographic information, such as percent minority population, percent of persons below 100% poverty, and percent of persons below 200% poverty. There are four maps that accompany this letter to graphically illustrate these issues.

- **Environmental Justice Minority Population:**

Minority population is the difference between total population and white non-Hispanics. Based on their methodology, minority population is "meaningfully greater" than the surrounding block groups, if its minority population is greater than the lowest percentage

of minority population plus an additional 10%. The lowest minority population in the surrounding block groups is 45.7%. When the additional 10% is added, it yields 55.7%. Three of the four block groups in the study area have a minority population that is greater than 55.7% indicating that they are considered “meaningfully greater” and an Environmental Justice Minority Population.

- **Percent Minority Population by Census Block Group:**

In this map, we provided the percent of minority population for all of the block groups surrounding the study area. The average countywide minority population is 45.4%. We divided the block groups into two categories, above and below the county average. All four block groups in the study area have a higher minority population than the countywide average.

- **Percent of Persons Below 100% and 200% Poverty by Census Block Group:**

The second piece of the Federal Highway Administration/VDOT methodology was median household income, specifically households below 2014 poverty guidelines for a family of four (\$23,850). No block groups in the study area have a median household income below \$23,850. However, using the Census’s Ratio of Income to Poverty Level, we can see the percent of persons at or below 100% and 200% poverty. We again divided the block groups into two categories, above and below the county average for both poverty levels. At the 100% poverty level, all four block groups in the study area are above the county average. At the 200% poverty level, three of the four block groups exceed the county average.

The table below indicates the population totals:

	Total Population	White Non-Hispanic Population	Minority Population	EJ Minority Population
Block Group 1, Census Tract, 4525.02, Fairfax County, Virginia	735	365	370	No
Block Group 2, Census Tract, 4525.02, Fairfax County, Virginia	1,942	312	1,630	Yes
Block Group 3, Census Tract, 4525.02, Fairfax County, Virginia	2,453	139	2,314	Yes
Block Group 2, Census Tract, 4526.00, Fairfax County, Virginia	2,214	917	1,297	Yes
County of Fairfax	1,081,726			

*US Census Bureau 2010 SF1

Ms. Amanda Baxter
June 6, 2016
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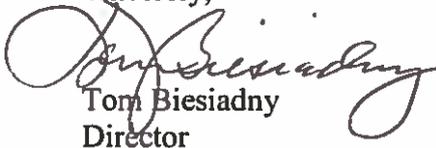
Study Area	Total Population
Block Group 1, Census Tract, 4525.02, Fairfax County, Virginia	714
Block Group 2, Census Tract, 4525.02, Fairfax County, Virginia	1,801
Block Group 3, Census Tract, 4525.02, Fairfax County, Virginia	2,434
Block Group 2, Census Tract, 4526.00, Fairfax County, Virginia	2,014
County of Fairfax	1,117,072

*2014 ACS 5-Year Total Population Estimates

The above data was provided by the Fairfax County Department of Economic, Demographic & Statistical Research, Neighborhood and Community Services.. Should you need to contact them directly, the section manager's contact information is Anne.Cahill@fairfaxcounty.gov; 703-324-4531.

I hope that the above information is useful to you in the preparation of the Environmental Assessment for the referenced project. Please do not hesitate to contact the appropriate County staff if we can be of further assistance.

Sincerely,



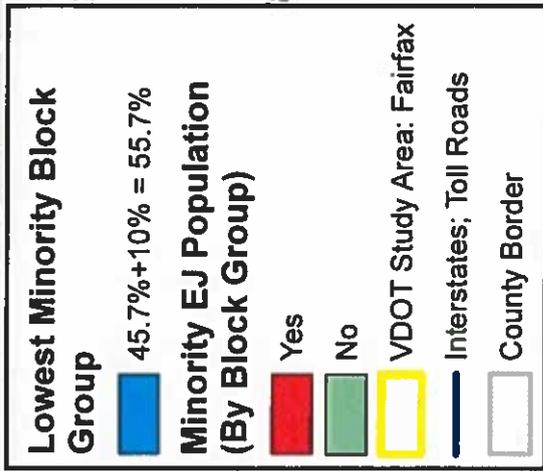
Tom Biesiadny
Director

Attachments: Color census maps (four pages)

cc: Members, Fairfax County Board of Supervisors
Edward L. Long, Jr, County Executive
Robert A. Stalzer, Deputy County Executive
Catherine Chianese, Assistant County Executive
Eric Teitelman, Chief, CEPTED Branch, FCDOT
Noel Kaplan, Sr. Environmental Planner, FCDPZ
Fred Rose, Chief, Watershed Planning & Assessment Branch, FCDPW
Sandra Stallman, Manager, P & D Park Planning Branch, FCPA
Anne Cahill, Manager, Economic, Demographic & Statistical Research, FCDNCS

Environmental Justice Minority Population* I-395 Express Lanes, Fairfax

2010 Fairfax County
Minority Population:
45.4%



66.1%

88.4%

94.3%

83.9%

50.3%

58.6%

55.7%

50.8%

45.9%

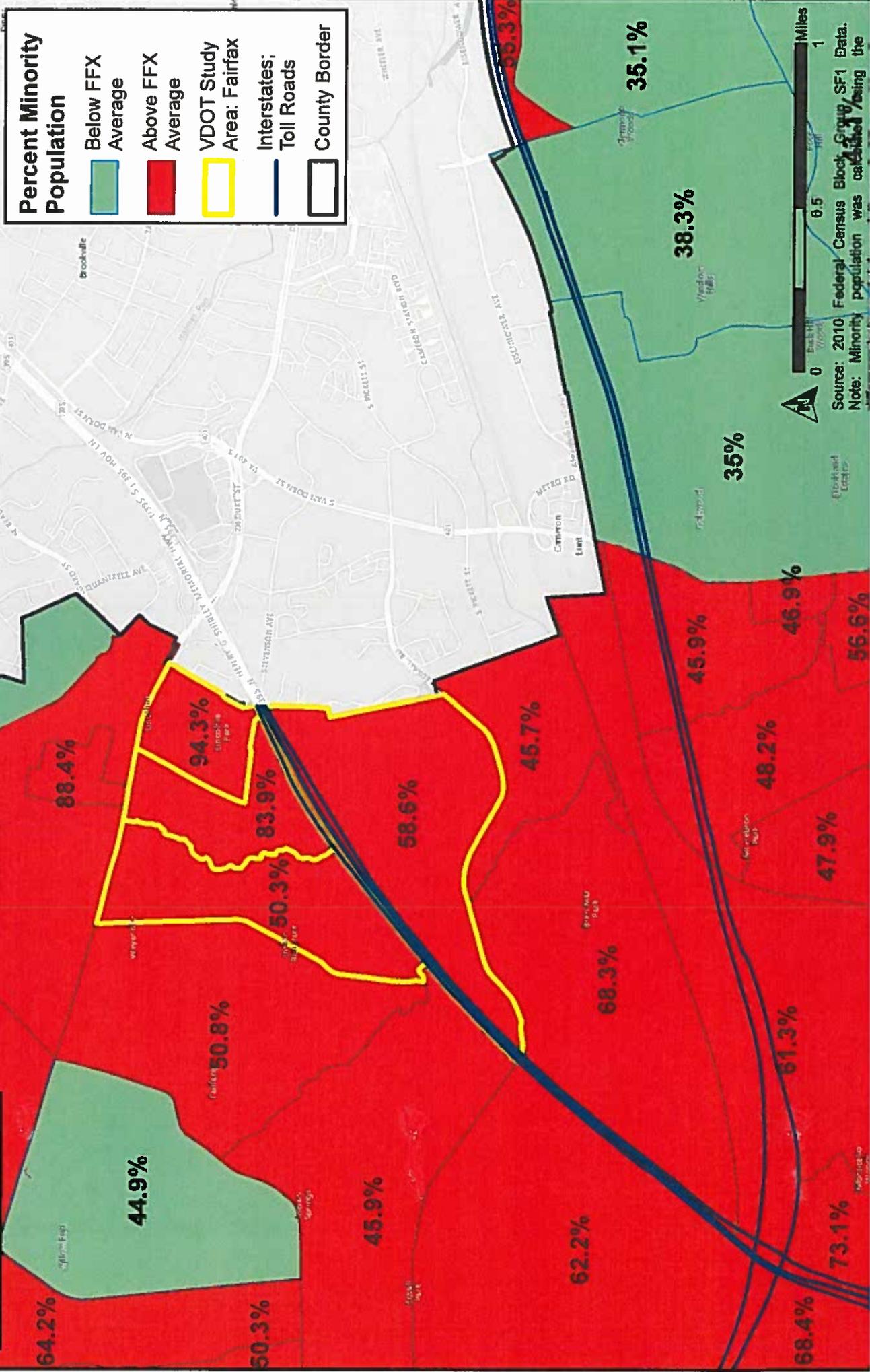
62.2%

68.3%

*Minority population was calculated using the difference between total population and white non-hispanics. The minority population of a Block Group will be found to be "meaningfully greater" than the surrounding Block Groups if its minority population is greater than the value of the Block Group with the lowest percentage of minority population, plus an additional 10 percent of that value. Since no Block Group has a median household income below the HHS 2014 poverty guidelines for a family of four

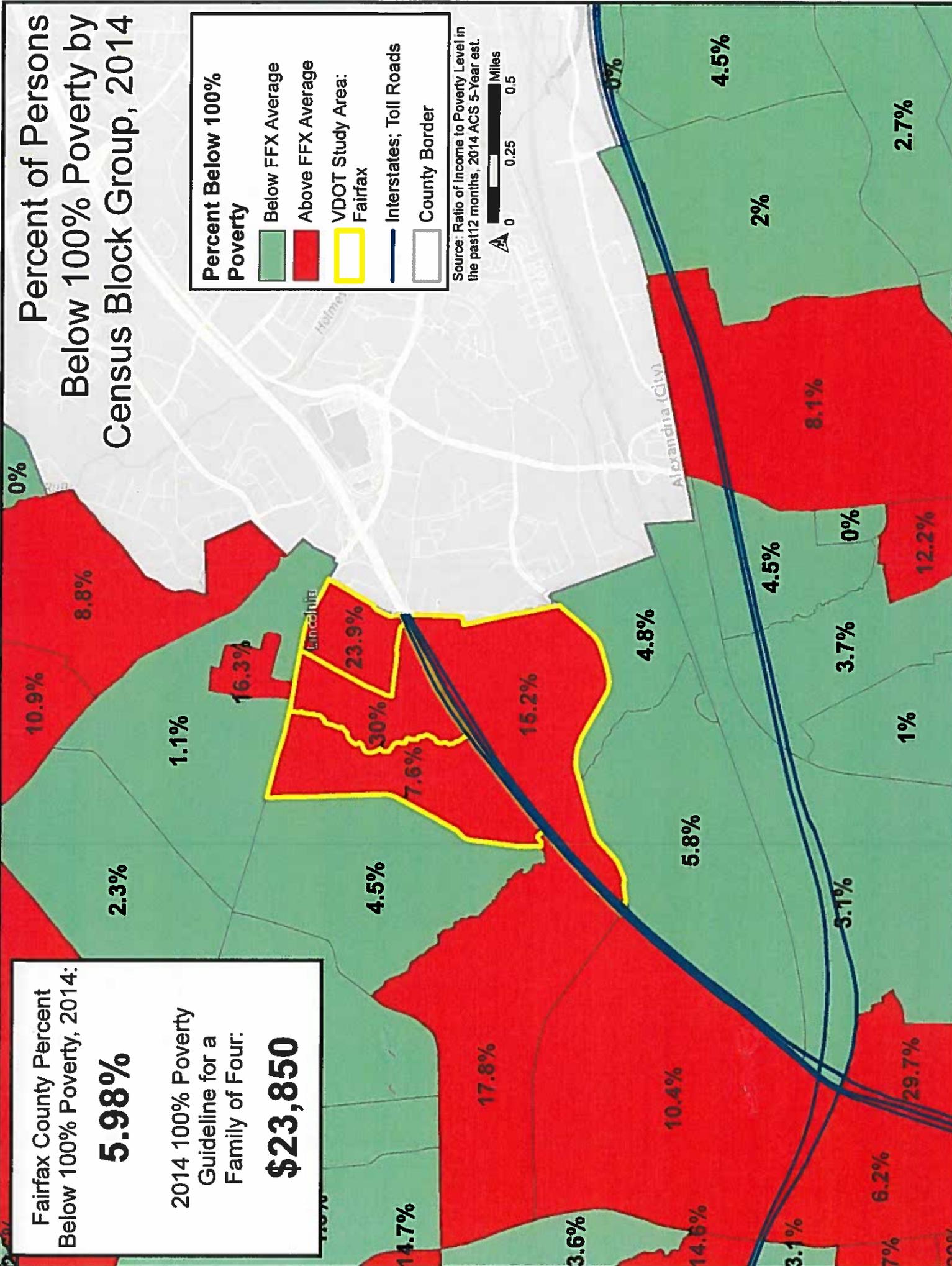
Percent Minority Population by Census Block Group, 2010

2010 Fairfax County
Minority Population:
45.4%



Source: 2010 Federal Census Block Group SF1 Data.
Note: Minority population was calculated using the map.

Percent of Persons Below 100% Poverty by Census Block Group, 2014



Percent Below 100% Poverty

- Below FFX Average
- Above FFX Average
- VDOT Study Area: Fairfax
- Interstates; Toll Roads
- County Border

Source: Ratio of Income to Poverty Level in the past 12 months, 2014 ACS 5-Year est.

0 0.25 0.5 Miles

Fairfax County Percent Below 100% Poverty, 2014:

5.98%

2014 100% Poverty Guideline for a Family of Four:

\$23,850

Percent of Persons Below 200% Poverty by Census Block Group, 2014

Percent Below 200% Poverty

- Below FFX Average
- Above FFX Average
- VDOT Study Area: Fairfax
- Interstates; Toll Roads
- County Border

Source: Ratio of Income to Poverty Level in the past 12 months, 2014 ACS 5-Year est.

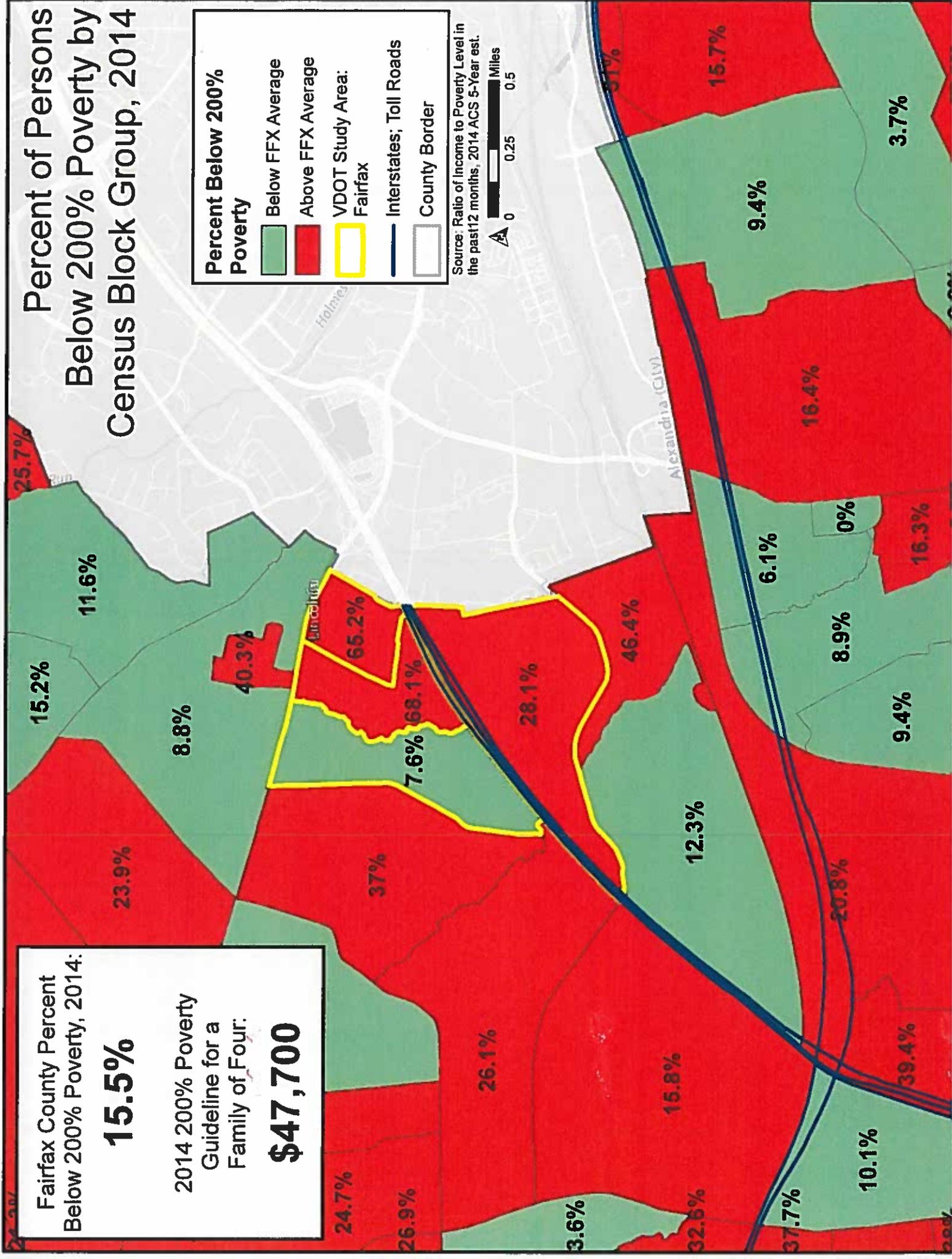


Fairfax County Percent Below 200% Poverty, 2014:

15.5%

2014 200% Poverty Guideline for a Family of Four:

\$47,700





OFFICE OF THE COUNTY MANAGER

2100 Clarendon Boulevard, Suite 302, Arlington, VA 22201
TEL 703-228-3120 FAX 703-228-3218 TTY 703-228-4611 www.arlingtonva.us

May 10, 2016

Amanda Baxter
VDOT Northern Virginia District
4975 Alliance Drive
Fairfax, VA 22030
Amanda.Baxter@vdot.virginia.gov

**Re: I-395 Express Lanes Extension, VDOT Project Number 0395-969-205,
UPC 108313**

Dear Ms. Baxter,

Thank you for the opportunity to comment on the scoping process for the Environmental Assessment (EA) of the I-395 Express Lanes Project to extend the I-95 Express Lanes in Alexandria, Arlington, and Fairfax Counties. We support the level of analysis conducted for this effort and will readily participate in the development of the EA.

As VDOT advances the EA, Arlington's primary concerns relate to the spillover impact of any additional traffic on arterials in the already-congested Pentagon City neighborhood, mainly as it relates to the functionality of transit service. Additionally, we feel strongly that the project should not undermine our regional investments in transit and local investments in transit-oriented development. Given the right-of-way constraints, this corridor is only as effective as the multimodal options available. We request that the highly successful transit and carpool culture along I-95/I-395 be supported and enhanced, particularly related to the Pentagon Transit Center adjacent to the Eads Street HOT on/off-ramps. Finally, we believe that the surrounding residential neighborhoods should not be adversely impacted by the project. We would appreciate the opportunity to continue working with VDOT and Transurban related to community outreach in this corridor.

As requested, we are providing initial comments on the discussion surrounding the Northern Toll Point. VDOT is soliciting feedback on the location of a potential gantry in the vicinity of the Pentagon to facilitate operations of the Express Lanes facility, with two options being a toll gantry on "Ramp G" or on the Express Lanes north of Eads Street. Our primary concerns, as outlined above, relate to supporting the carpool culture in the corridor by encouraging transit alternatives and minimizing single-occupant vehicle travel. To this end, we support a toll location that allows use of the facility for vehicles that qualify as HOV-eligible for some portion of the trip and dissuades free single-occupant use of the Express Lanes facility. Therefore, we support a toll gantry on "Ramp G" as the solution for a Northern Toll Point.

Staff will forward responses to the scoping document in the coming weeks. We look forward to continued close coordination with you on this important project.

If you have any questions, do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark J. Schwartz". The signature is fluid and cursive, with the first name "Mark" being the most prominent.

Mark J. Schwartz
Arlington County Manager

cc: Arlington County Board
Dennis Leach, Arlington Director of Transportation

Government of the District of Columbia

Department of Transportation



d. Office of the Director

MAR 31 2016

Ms. Amanda Baxter
Special Projects Development Manager
Virginia Department of Transportation
1401 East Broad Street
Richmond, VA 23219-2000

Dear Ms. Baxter:

Thank you for your January 26, 2016, letter to Mayor Muriel Bowser regarding the Virginia Department of Transportation's (VDOT) I-395 Express Lanes project.

The District Department of Transportation (DDOT) has explored the potential of managed highway lanes in moveDC, the agency's long range multi-modal transportation plan (www.wemovedc.org). The I-395 Express Lanes extension project appears to be consistent with DDOT's previous analysis of managed lanes on I-395 and I-295 and has the potential to reduce peak hour vehicle trips in the District while increasing the number of people traveling on our roadways.

With regard to the pending Environmental Assessment (EA), DDOT respectfully requests that the study area be expanded into the District. While DDOT understands that the project does not propose operational changes to DDOT facilities at this stage, we are concerned that the operational impacts of the High Occupancy Toll (HOT) lanes could extend to the Rochambeau Bridge and beyond. The introduction of HOT lanes on I-395 could change travel patterns and demand on DDOT facilities as vehicles seek to enter or avoid access points on DDOT facilities leading to the new HOT lanes in Virginia. Motorists may experience increased travel volumes on various segments of general purpose lanes of DDOT facilities, which may lead to additional delay for some drivers or cause safety concerns.

Additionally, new merge and weave patterns may emerge as a result of these changes, which could create potential safety concerns. DDOT is especially concerned with points of entry and exit on DDOT's general purpose lanes, which include the lanes on the Rochambeau Bridge. DDOT would appreciate if these, and similar concerns, are identified and appropriate measures to mitigate these issues—which consider operational, signage, and geometric changes—are proposed.

Based on discussions with VDOT staff, we understand that signage for the I-395 Express Lanes Project must be located in the District to alert drivers to the HOT lanes. Because these sign structures may impact the visual, cultural, or historic resources within the District, we also request that you include this matter in your evaluation. We are also eager to work with VDOT and the Department of Rail and Public Transportation (DRPT) on the DRPT-led Transit/TDM Study for the I-95/I-395 Corridor to identify projects that benefit corridor users with the toll revenue.

DDOT looks forward to working with VDOT to define the benefits, identify potential impacts, and advance mitigations for the identified impacts of this project. If you have any questions or concerns regarding this matter, please contact Sam Zimbabwe, Associate Director for the Policy, Planning and Sustainability Administration (PPSA), at 202-671-2542 or Sam.Zimbabwe@dc.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Leif A. Dormsjo". The signature is stylized and written in a cursive-like font.

Leif A. Dormsjo
Director

Bryant, Ana-Elisa

From: Williams, Heather (VDOT) <Heather.Williams@VDOT.Virginia.gov>
Sent: Monday, April 18, 2016 2:09 PM
To: Nies, Nicholas
Subject: FW: VDOT Project Number 0395-969-205; UPC: 108313 Interstate 395 (I-395) Express Lanes

HUD response

From: Johnson, Kerry [mailto:Kerry.Johnson@hud.gov]
Sent: Monday, April 18, 2016 2:07 PM
To: Baxter, Amanda (VDOT)
Cc: Johnson, Kerry; Williams, Heather (VDOT)
Subject: VDOT Project Number 0395-969-205; UPC: 108313 Interstate 395 (I-395) Express Lanes

Hi Ms. Baxter,

Thank you for your letter of January 26 relating to a proposed I-395 roadway upgrade and conversion to high occupancy toll lanes project, from Turkeycock Run in Fairfax County to the vicinity of Eads Street near the Pentagon in Arlington County. You requested comments to help determine if the proposed road improvement would affect any neighborhood programs under the jurisdiction of the HUD Richmond Field Office.

After review of the location with regards to HUD properties and activities in the area referenced above, the Richmond Field Office can find no impact as a result of Virginia Department of Transportation's project plans.

Thank you for your interest in the Department's programs. Members of your staff who may have further questions or require environmental technical assistance, may contact me at one of the addresses or numbers below.

Kerry Johnson
Virginia Environmental Officer
HUD District of Columbia Field Office
HUD Richmond Field Office
600 E. Broad Street
Richmond, VA 23219-1800
800 842 2610 4803
804 822 4803
Fax: 804 822 4984
kerry.johnson@hud.gov
<https://www.hudexchange.info/environmental-review/> HUD Exchange Environmental Page
<https://heros.hud.gov/> HUD Environmental Review Online System

Bryant, Ana-Elisa

From: Schmidt, Carrie S <Carrie.S.Schmidt@hud.gov>
Sent: Wednesday, March 09, 2016 12:03 PM
To: Williams, Heather (VDOT)
Cc: Johnson, Kerry
Subject: RE: I-395 Express Lanes Scoping Letter

Hi Heather ,

Our Environmental Officer is out of the office and returning on Monday. As soon as he returns we can provide a status. Sorry for the delay.

Carrie



Carrie S. Schmidt
Field Office Director
US Dept. of Housing & Urban Development
Richmond Field Office
600 E. Broad Street, Suite 300
Richmond, VA 23219
804-822-4807 (Voice)
804-822-4984 (Fax)



Please do not print this e-mail unless necessary

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Wednesday, March 09, 2016 11:50 AM
To: Schmidt, Carrie S
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from HUD. Can you please review the previously sent project information and scoping questionnaire (attached for your reference) and provide a response with pertinent information? Once again, the provided information will be used in the preparation of the I-395 Express Lanes environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Thursday, March 24, 2016 9:55 AM
To: Nies, Nicholas; Trone, Dana; Williams, Heather (VDOT)
Subject: Fwd: 395 Scoping Letter

FYI

Amanda J. Baxter, *Special Projects Development Mgr.*

Direct: [703-259-1996](tel:703-259-1996)

Mobile: [703-403-1655](tel:703-403-1655)

[4975 Alliance Drive](#)

[Fairfax, Virginia 22030](#)

Amanda.Baxter@VDOT.Virginia.gov

Begin forwarded message:

From: Allan Fye <nathaniel.fye@alexandriava.gov>
Date: March 24, 2016 at 9:35:32 AM EDT
To: "Baxter, Amanda (VDOT)" <Amanda.Baxter@vdot.virginia.gov>
Cc: Carrie Sanders <Carrie.Sanders@alexandriava.gov>, Bob Garbacz <bob.garbacz@alexandriava.gov>, Ramond Robinson <Ramond.Robinson@alexandriava.gov>
Subject: RE: 395 Scoping Letter

Hi Amanda,

Here are some additional questions to consider:

1. How will the south facing ramp at Seminary Road operate as HOV only? What enforcement will be done to ensure that this will be the case?
2. How will Express Lane access be managed for the north facing ramp at Seminary Road? What enforcement will be done to ensure that these lanes will be HOV and Express Lane only? How will Express Lane access at this ramp impact nearby intersections and surrounding streets, such as Seminary Road?
3. How will Express Lane access be managed for the north facing ramp at Shirlington Road? What enforcement will be done to ensure that these lanes will be HOV and Express Lane only? How will Express Lane access at this ramp impact nearby intersections and surrounding streets?
4. How will the project affect congestion at the South Eads Street ramp, as well as any potential cut-through traffic through Alexandria that may result from potential congestion?
5. How will the project affect the planned West End Transitway at the South Eads Street ramp?
6. How will the proposal enhance safety along the corridor, such as where existing shoulders may be affected or removed?

Allan Fye
Principal Planner
City of Alexandria

Transportation and Environmental Services (T & ES)
Transit Services

allan.fye@alexandriava.gov
703-746-4151

From: Allan Fye
Sent: Thursday, March 24, 2016 8:58 AM
To: 'Baxter, Amanda (VDOT)'
Cc: Carrie Sanders; Bob Garbacz; Ramond Robinson
Subject: RE: 395 Scoping Letter

Good morning Amanda,

General Comments

1. The impacts this project will have on cut through traffic between I-395 and I-495 along the Quaker Lane and Seminary Road corridors.
2. Improvement options to the NB Quaker Lane merge onto Shirlington Circle to eliminate the confusion with the current Yield sign.
3. The impacts to local traffic created by local residents who will no longer be able to use the HOV lanes during non HOV hours and must use other routes.

Questions on page 5 of the PDF:

- Question #1: The West End Transitway is the City's priority along the I-395 corridor. The project is in the closing stages of the Alternatives Analysis / Environmental Documentation phase. Please see the project website for more details:
<https://www.alexandriava.gov/WestEndTransitway>
- Question #3: The results are very similar to maps generated for the West End Transitway project.

If you need any additional details or data related to the West End Transitway, please do not hesitate to contact me.

Allan Fye
Principal Planner
City of Alexandria
Transportation and Environmental Services (T & ES)
Transit Services

allan.fye@alexandriava.gov
703-746-4151

From: Baxter, Amanda (VDOT) [<mailto:Amanda.Baxter@vdot.virginia.gov>]
Sent: Wednesday, March 23, 2016 1:29 PM
To: Allan Fye; Carrie Sanders
Subject: 395 Scoping Letter

Allan,

I wanted to check in with you to see if the City has had a chance to develop a response to this letter.

Your input is paramount as we continue to develop this project. Thank you for all the coordination you have provided.

Sincerely,

Amanda J. Baxter, *Special Projects Development Mgr.*

Direct: 703-259-1996

Mobile: 703-403-1655

4975 Alliance Drive

Fairfax, Virginia 22030

Amanda.Baxter@VDOT.Virginia.gov

Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Tuesday, March 15, 2016 11:12 AM
To: Williams, Heather (VDOT)
Cc: Nies, Nicholas
Subject: FW: Interstate 395 Express Lanes DEQ VWP Questionnaire Responses

See below

Amanda J. Baxter

VDOT NOVA District

Direct: 703-259-1996

Mobile: 703-403-1655

Amanda.Baxter@VDOT.Virginia.gov

From: Schul, Hannah (DEQ)
Sent: Tuesday, March 15, 2016 10:46 AM
To: Baxter, Amanda (VDOT)
Cc: OMalley, Nina (DEQ); Hardwick, Steven (DEQ)
Subject: Interstate 395 Express Lanes DEQ VWP Questionnaire Responses

Dear Ms. Baxter,

The Department of Environmental Quality (DEQ) has reviewed the information for the above-referenced project. VDOT proposes improvements to approximately 8 miles of Interstate 395 from Turkeycock Run to the vicinity of Eads Street near the Pentagon. Proposed improvements include the expansion and conversion of the two existing HOV lanes on I-395 to three lanes.

Based on the information provided, DEQ is unable to determine potential impacts to surface waters. It appears that the project will cross multiple streams; however, there is insufficient information to determine how the project will affect those resources. An onsite wetland delineation should be conducted to determine the absence or location, extent, and type of wetlands or other surface waters present. If wetlands, streams or other surface waters are located within the proposed project area, then those features should be delineated and their locations confirmed by the U. S. Army Corps of Engineers. The applicant should avoid and minimize impacts to surface waters to the greatest extent practicable.

Here are DEQ's responses to each of the four questions on the NEPA Evaluation Questionnaire:

1. DEQ-Virginia Water Protection's Central Office is unaware of any current or proposed projects that will have specific identifiable impacts to the proposed project. The DEQ VWP Northern Regional Office may have more specific information.
2. DEQ recognizes that the proposed improvements to I-395 will have positive indirect effects, e.g. improved safety and traffic flow. However, DEQ isn't qualified to identify road project benefits. DEQ recognizes the potential for the project to result in environmental impacts to streams and wetlands through the discharge of sediments and/or increased stormwater runoff. DEQ anticipates that such environmental impacts will be minimized if the work is conducted in accordance with all appropriate environmental permits.

3. DEQ doesn't possess aerial imagery or mapping beyond that available to all State agencies through the Virginia Base Mapping Program (VBMP). DEQ does maintain the Virginia Environmental GIS (VEGIS) viewer and the Coastal GEMS database which includes the NWI layers, among other resources. Those resources can be found here:

VEGIS: <http://www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx>

Coastal GEMS:

<http://www.deq.virginia.gov/Programs/CoastalZoneManagement/CoastalGEMSGeospatialData.aspx>

4. The DEQ resources listed above should help inform the planning judgment process of the project. DEQ has launched the WetCAT GIS database that also provides NWI mapping, DEQ permit locations as well as in depth information about wetland conditions.

WetCAT: http://cmap.vims.edu/WetlandViewer/Virginia/WetCAT_VA.html

Should you have any questions, please contact me at hannah.schul@deq.virginia.gov or at (804) 698-4074.

Hannah Schul
VWP Permitting Specialist

Office of Wetlands and Stream Protection
Department of Environmental Quality
629 E. Main Street
Richmond, VA 23219

804-698-4074

Hannah.Schul@deq.virginia.gov

Bryant, Ana-Elisa

From: Nies, Nicholas
Sent: Monday, March 14, 2016 3:13 PM
To: Drahos, Emily
Subject: FW: I-395 Express Lanes Scoping Letters

Nicholas Nies | *Associate*

Whitman, Requardt & Associates, LLP

9030 Stony Point Parkway
Suite 220
Richmond, VA 23235
(Main) 804.272.8700
(Direct) 804.327.5224
(Mobile) 804.314.4068

nnies@wrallp.com

www.wrallp.com

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Thursday, March 10, 2016 10:46 AM
To: Nies, Nicholas <nnies@wrallp.com>
Subject: FW: I-395 Express Lanes Scoping Letters

DMME response

From: Warren, John (DMME)
Sent: Thursday, March 10, 2016 9:45 AM
To: Williams, Heather (VDOT)
Cc: Spears, David (DMME); Christopher, Evie (DMME)
Subject: RE: I-395 Express Lanes Scoping Letters

Heather-the position we had dedicated to environmental reviews was eliminated some time ago. While our DGMR staff may get involved in environmentally sensitive projects, they are not able to provide in depth reviews. Project submittals will get a cursory check to see if they are located in areas of geologic hazards, but if not, the process typically stops there. David Spears did check your project and based on the location, did not see conditions that would require further review.

There is a possibility we may be staffing up and be able to offer additional review support in the near future. In the meantime, if you have any concern about a particular project, you can check with David Spears (copied). Sorry for the confusion.

John W. Warren
Director
Department of Mines, Minerals and Energy

1100 Bank Street, 8th Floor
Richmond, VA 23219
(804) 692-3206
john.warren@dmme.virginia.gov

From: Williams, Heather (VDOT)
Sent: Wednesday, March 09, 2016 1:07 PM
To: Warren, John (DMME)
Cc: Spears, David (DMME)
Subject: I-395 Express Lanes Scoping Letters

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lanes project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from DMME. Can you please review the previously sent project information (attached for your reference) and provide a response with pertinent information? Once again, the provided information will be used in the preparation of the I-395 Express Lanes environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

Bryant, Ana-Elisa

From: Nies, Nicholas
Sent: Monday, March 14, 2016 3:13 PM
To: Drahos, Emily
Subject: FW: I-395 Express Lanes Scoping Letter

Nicholas Nies | *Associate*

Whitman, Requardt & Associates, LLP

9030 Stony Point Parkway
Suite 220
Richmond, VA 23235
(Main) 804.272.8700
(Direct) 804.327.5224
(Mobile) 804.314.4068

nnies@wrallp.com

www.wrallp.com

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Thursday, March 10, 2016 10:45 AM
To: Nies, Nicholas <nnies@wrallp.com>
Subject: FW: I-395 Express Lanes Scoping Letter

FRA response

From: david.valenstein@dot.gov [mailto:david.valenstein@dot.gov]
Sent: Thursday, March 10, 2016 9:39 AM
To: Williams, Heather (VDOT); Baxter, Amanda (VDOT)
Subject: RE: I-395 Express Lanes Scoping Letter

Heather and Amanda,

The Federal Railroad Administration (FRA) has no direct involvement in the scope of this proposal and no interest in the NEPA process for the I-395 Express Lanes Project. As far as we know there is not connection of this proposal to any existing or proposed railroad.

In future, VDOT may write to me directly for routine correspondence regarding any NEPA process and not address such correspondence to the FRA administrator.

Thank You,

David Valenstein

Division Chief
Environmental and Corridor Planning
Office of Program Delivery

USDOT Federal Railroad Administration
1200 New Jersey Avenue SE, MS-20, W38-314
Washington, DC 20590

Office: (202) 493-6368

Rail –Moving America Forward

The Federal Railroad Administration enables the safe, reliable, and efficient movement of people and goods for a strong America, now and in the future.

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From: Williams, Heather (VDOT) [<mailto:Heather.Williams@VDOT.Virginia.gov>]
Sent: Wednesday, March 09, 2016 11:33 AM
To: Feinberg, Sarah (FRA)
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from FRA. Can you please review the previously sent project information (attached for your reference) and provide a response with any pertinent information? Once again, the provided information will be used in the preparation of the I-395 environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

Bryant, Ana-Elisa

From: sarah.feinberg@dot.gov
Sent: Wednesday, March 09, 2016 3:14 PM
To: Williams, Heather (VDOT)
Cc: michael.murray@dot.gov
Subject: RE: I-395 Express Lanes Scoping Letter

Heather, I am not the appropriate contact for this communication but have forwarded on to the right people here. Someone will follow up. thanks

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Wednesday, March 09, 2016 11:33 AM
To: Feinberg, Sarah (FRA)
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from FRA. Can you please review the previously sent project information (attached for your reference) and provide a response with any pertinent information? Once again, the provided information will be used in the preparation of the I-395 environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

Bryant, Ana-Elisa

From: Mitchell, Jennifer (DRPT) <Jennifer.Mitchell2@drpt.virginia.gov>
Sent: Wednesday, March 09, 2016 1:00 PM
To: Williams, Heather (VDOT)
Cc: Baxter, Amanda (VDOT); Shaw, Susan, P.E. (VDOT); Horsley, Todd (DRPT); Roseboom, Tim (DRPT)
Subject: RE: I-395 Express Lanes Scoping Letter

Heather: I know that Todd Horsley and Tim Roseboom of DRPT have been working directly with Amanda and Susan on the 395 project so I assume they have been exchanging information about transit needs in the corridor. We have also just initiated the parallel transit and TDM Study. Your letter is not very specific about the “pertinent information” needed for the scoping effort, so please provide Todd and/or Tim with a list of any data that VDOT needs.

Thanks.

Jennifer Mitchell
Director
Virginia Department of Rail and Public Transportation
tel: 804-371-4866

From: Williams, Heather (VDOT)
Sent: Wednesday, March 09, 2016 12:50 PM
To: DRPT Jennifer Public
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lanes project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from DRPT. Can you please review the previously sent project information (attached for your reference) and provide a response with pertinent information? Once again, the provided information will be used in the preparation of the I-395 Express Lanes environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams
Location Studies Project Manager
Office: 804-786-1872
Cell: 804-912-3406

Bryant, Ana-Elisa

From: Hays, Frank <frank_hays@nps.gov>
Sent: Wednesday, March 09, 2016 11:46 AM
To: Williams, Heather (VDOT)
Cc: mike_caldwell@nps.gov
Subject: Re: I-395 Express Lanes Scoping Letter

hi

At that time, I forwarded the letter to my counterpart in the National Capitol Region-as the sites potentially impacted by this project are in that region. I will forward your current email to NCR so they can follow up directly with you.

best regards,
Frank

On Wed, Mar 9, 2016 at 11:00 AM, Williams, Heather (VDOT) <Heather.Williams@vdot.virginia.gov> wrote:

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from the National Park Service. Can you please review the previously sent project information (attached for your reference) and provide a response with any pertinent information? Once again, the provided information will be used in the preparation of the I-395 environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

--

Frank Hays
Associate Regional Director
Resource Stewardship and Science
Northeast Regional Office
200 Chestnut
Philadelphia, PA 19107

215-597-7985 (Office phone)
907-412-2190 (Cell phone)

Bryant, Ana-Elisa

From: Tillman, James - NRCS, Washington, DC <James.Tillman@wdc.usda.gov>
Sent: Wednesday, March 09, 2016 11:17 AM
To: Williams, Heather (VDOT)
Subject: Fwd: I-395 Express Lanes Scoping Letter

FYI.

Sent from my iPhone

Begin forwarded message:

From: "Smith, David - NRCS, Washington, DC" <David.Smith@wdc.usda.gov>
Date: March 9, 2016 at 9:09:13 AM MST
To: "Tillman, James - NRCS, Washington, DC" <James.Tillman@wdc.usda.gov>
Cc: "Jordan, Leonard - NRCS, Washington, DC" <Leonard.Jordan@wdc.usda.gov>
Subject: Re: I-395 Express Lanes Scoping Letter

This is NEPA under S&T. I'll forward it there way

Sent from my iPhone

On Mar 9, 2016, at 11:05 AM, Tillman, James - NRCS, Washington, DC <James.Tillman@wdc.usda.gov> wrote:

Your shop.

Sent from my iPhone

Begin forwarded message:

From: "Williams, Heather (VDOT)" <Heather.Williams@VDOT.Virginia.gov>
Date: March 9, 2016 at 8:52:19 AM MST
To: "james.tillman@wdc.usda.gov" <james.tillman@wdc.usda.gov>
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from USDA. Can you please review the previously sent project information (attached for your reference) and provide a response with any pertinent information? Once again, the provided information will be used in the preparation of the I-395 environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

<Tillman.pdf>

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United States Department of Agriculture

TO: Amanda Baxter
VDOT Special Projects Development Manager
4975 Alliance Drive
Fairfax, Virginia 22030

March 9, 2016

SUBJECT: Interstate 395 (I-395) Express Lanes
Counties of Alexandria, Arlington and Fairfax, Virginia
VDOT Project Number: 0395-969-205; UPC: 108313

Ms. Baxter,

In preparation of the EA for the subject project the Natural Resources Conservation Service would be responsible for determining if prime, unique, statewide or local important farmland would be impacted by the project in accordance with the Farmland Protection Policy Act. After review of Figure 1 it is determined that the project area is committed to urban use and thus would not contain the above mentioned farmland. The Farmland Conversion Impact Rating for Corridor Type Projects (Form NRCS-CPA-106) would still need to be completed.

Sincerely,

Don Flegel
Area 1 Soil Resource Specialist

NATURAL RESOURCES CONSERVATION SERVICE
1934 Deyerle Ave. Harrisonburg, VA 22801
Phone: (540) 434-1404 ♦ Fax: (540) 434-1519

An Equal Opportunity Provider and Employer

Bryant, Ana-Elisa

From: Carbone, Joseph -FS <jcarbone@fs.fed.us>
Sent: Wednesday, March 09, 2016 11:42 AM
To: Williams, Heather (VDOT)
Subject: RE: I-395 Express Lanes Scoping Letter

Hi Heather. I just opened that letter yesterday. It was post marked 1/26, but must have gone through all of the screening and such that took up February☺ Anyway, I am not sure why the Forest Service was sent this information. Unless you anticipate impacting National Forest System lands or are seeking an area of expertise that the Forest Service can provide you, I don't anticipate any comments from the Forest Service for this project.

Joe Carbone
Assistant Director for NEPA
202-205-0884

From: Williams, Heather (VDOT) [mailto:Heather.Williams@VDOT.Virginia.gov]
Sent: Wednesday, March 09, 2016 11:12 AM
To: Carbone, Joseph -FS <jcarbone@fs.fed.us>
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from USFS. Can you please review the previously sent project information (attached for your reference) and provide a response with any pertinent information? Once again, the provided information will be used in the preparation of the I-395 environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.
-Heather

Heather Williams

Location Studies Project Manager
Office: 804-786-1872
Cell: 804-912-3406

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Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Wednesday, March 09, 2016 2:27 PM
To: De Ford Sr., James (VSP); Williams, Heather (VDOT)
Cc: Kincaid, R. Greg, Lt. (VSP); Sripathi, Hari K. (VDOT)
Subject: RE: I-395 Express Lanes Scoping Letter

Captain De Ford,

I am writing this to confirm that we have all the information necessary from VSP. I will relay this to the project team.

Thank you,

Amanda J. Baxter
VDOT NOVA District
Direct: 703-259-1996
Mobile: 703-403-1655
Amanda.Baxter@VDOT.Virginia.gov

From: De Ford, Sr., James E., Captain [mailto:James.DeFord@vsp.virginia.gov]
Sent: Wednesday, March 09, 2016 2:28 PM
To: Williams, Heather (VDOT)
Cc: Kincaid, R. Greg, Lt. (VSP); Baxter, Amanda (VDOT); Sripathi, Hari K. (VDOT)
Subject: FW: I-395 Express Lanes Scoping Letter

Ms. Williams,

On the day I received this request, I met for an hour with Ms. Baxter in the NOVA District Headquarters and discussed this project in detail. I was not aware an additional written response would be required. I will be out of town beginning tomorrow, but will be happy to reduce my thoughts to writing at that time, but do not have anything to add beyond my discussions with Ms. Baxter. In addition, I met with Mr. Sripathi and Ms. Baxter on February 29 as well and this project was one of the topics of discussion.

Captain James E. De Ford, Sr.
Division VII Commander
Department of State Police
4977 Alliance Drive
Fairfax, VA 22030
James.DeFord@vsp.virginia.gov
(703) 803-2617 Office
(703) 803-2607 Fax
(571) 238-3177 Cell

The information in this email and any attachments may be confidential and privileged. Access to this email by anyone other than the intended addressee is unauthorized. If you are not the intended recipient (or the employee or agent responsible for delivering this information to the intended recipient) please notify the sender by reply email and immediately delete this email and any copies from your computer and/or storage system. The sender does not authorize the use, distribution, disclosure or reproduction of this email (or any part of its contents) by anyone other than the intended

recipient(s). No representation is made that this email and any attachments are free of viruses. Virus scanning is recommended and is the responsibility of the recipient.

From: Kincaid, R. Greg, Captain
Sent: Wednesday, March 09, 2016 1:51 PM
To: Williams, Heather (VDOT)
Cc: De Ford, Sr., James E., Captain
Subject: RE: I-395 Express Lanes Scoping Letter

Ms. Williams,

The letter sent to me in January was forwarded to Captain Jim De Ford , my counterpart in the Bureau of Field Operations (Uniformed Personnel for VSP). I am the Captain for the Bureau of Criminal Investigations (Non Uniformed Special Agents). To my understanding, I do not have a responsibility in addressing interstate lane projects as that would be handled by Captain De Ford. If I am mistaken, I can discuss with Captain De Ford further. I think there may have been some miscommunication as to who is or was responsible for the requested information. If you have any questions, please give me or Captain De Ford a call.

Thanks,
Greg

*Captain R. Greg Kincaid
Division Commander
Bureau of Criminal Investigation
Fairfax Field Office
Office # 703-803-2632
Cell # 571-749-7890
Greg.Kincaid@vsp.virginia.gov*

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From: Williams, Heather (VDOT)
Sent: Wednesday, March 09, 2016 12:48 PM
To: Daniels, Jr., George L., Lt. Colonel
Cc: Kincaid, R. Greg, Captain
Subject: I-395 Express Lanes Scoping Letter

At the end of January a scoping letter was sent requesting pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia. The previous letter requested responses by February 23rd, at this time we still have not received a response from VSP. Can you please review the previously sent project information (attached for your reference) and provide a response with pertinent information? Once again, the provided information will be used in the preparation of the I-395 Express Lanes environmental document.

Thank you once again for your assistance and please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

Bryant, Ana-Elisa

From: Williams, Heather (VDOT) <Heather.Williams@VDOT.Virginia.gov>
Sent: Wednesday, March 02, 2016 1:14 PM
To: Nies, Nicholas
Subject: FW: I-395 Express Lanes Scoping Letter

FYI... I do not see that I sent this to you.

From: Williams, Heather (VDOT)
Sent: Thursday, February 11, 2016 8:17 AM
To: Baxter, Amanda (VDOT)
Subject: FW: I-395 Express Lanes Scoping Letter

FYI...

From: Narasimhan, Kotur (DEQ)
Sent: Thursday, February 11, 2016 8:03 AM
To: Williams, Heather (VDOT)
Subject: RE: I-395 Express Lanes Scoping Letter

During the execution of the project, the following Virginia Air regulations may be kept in view:

1. **9 VAC 5-40-5600 et seq. – Open Burning**
2. **9 VAC 5-50-60 et seq. Fugitive Dust Emissions**

Also, during construction all precautions are to be taken to restrict emissions of volatile organic compounds (VOC) and oxides of nitrogen (NOX).

Kotur S. Narasimhan
Environmental Specialist
Office of Data Analysis
Department of Environmental Quality
629 East main Street 8th Floor
Richmond VA 23219
Ph: 804-698-4415

From: Williams, Heather (VDOT)
Sent: Thursday, February 04, 2016 11:53 AM
To: Sullivan, Bettina (DEQ); Narasimhan, Kotur (DEQ); Davis, Dave (DEQ); Davenport, Melanie (DEQ)
Subject: I-395 Express Lanes Scoping Letter

The scoping letter to gather pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia is attached. Please review the attached information and provide a response to the requested information no later than **Tuesday, February 23, 2016**. Please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

Thank you once again for your cooperation and participation in this process.

-Heather

Heather Williams

Location Studies Project Manager

Office: 804-786-1872

Cell: 804-912-3406

Bryant, Ana-Elisa

From: Williams, Heather (VDOT) <Heather.Williams@VDOT.Virginia.gov>
Sent: Wednesday, February 24, 2016 12:32 PM
To: Baxter, Amanda (VDOT); Nies, Nicholas
Subject: FW: I-395 Express Lanes Scoping Letter

[VMRC Scoping comments.](#)

From: Owen, Randy (MRC)
Sent: Tuesday, February 23, 2016 6:51 PM
To: Williams, Heather (VDOT)
Subject: RE: I-395 Express Lanes Scoping Letter

Please be advised that the Commission, pursuant to Section 28.2-1200 et seq of the Code of Virginia, has jurisdiction over any encroachments in, on, or over the beds of the bays, ocean, rivers, streams, or creeks which are the property of the Commonwealth. Accordingly, if any portion of the subject project involves any encroachments channelward of ordinary high water along natural rivers and streams above the fall line or mean low water below the fall line, a permit may be required from our agency. Any jurisdictional impacts will be reviewed by VMRC during the monthly IACM (Interagency Coordination Meeting) or via the Joint Permit Application process.

Additionally, we support VDOT's typical requirement to work behind cofferdams to insure work-in-the-dry conditions. Thank you for the opportunity to comment.

From: Williams, Heather (VDOT)
Sent: Thursday, February 04, 2016 11:21 AM
To: Owen, Randy (MRC); Watkinson, Tony (MRC)
Subject: I-395 Express Lanes Scoping Letter

Randy and Tony,

The scoping letter to gather pertinent information related or indirectly related to the proposed I-395 Express Lane project located in Alexandria, Arlington, and Fairfax Virginia is attached. Please review the attached information and provide a response to the requested information no later than **Tuesday, February 23, 2016**. Please do not hesitate to contact me if you have any questions or you may contact Amanda Baxter as identified in the attached letter.

Thank you once again for your cooperation and participation in this process.
-Heather

Heather Williams

Location Studies Project Manager
Office: 804-786-1872
Cell: 804-912-3406

Molly Joseph Ward
Secretary of Natural Resources

Clyde E. Cristman
Director



Joe Elton
Deputy Director of Operations

Rochelle Altholz
Deputy Director of
Administration and Finance

David Dowling
Deputy Director of
Soil and Water and Dam Safety

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

MEMORANDUM

DATE: February 23, 2016
TO: Amanda Baxter, VDOT
FROM: Roberta Rhur, Environmental Impact Review Coordinator
SUBJECT: DCR 16- 002, VDOT 0395-969-205, Interstate 395 Express Lanes

Division of Natural Heritage

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

According to the information currently in our files, there is the potential for the Dwarf wedgemussel (*Alasmidonta heterodon*, G1G2/S1/LE/LE) to occur in Holmes Run. This mussel grows to a length of approximately 30 mm. This species inhabits creeks of varying sizes, residing in muddy sand, sand, and gravel bottoms, in areas of slow to moderate current and little silt deposition (USFWS, 1993). Currently, this species exists in widely scattered, small populations in the Chowan, James, York, Rappahannock, and Potomac River drainages. Its native host fishes include Mottled sculpin (*Cottus bairdi*), Johnny darters (*Etheostoma nigrum*), Tessellated darters (*Etheostoma olmstedi*) and Sculpins (*Cottus* sp.) (Michaelson and Neves, 1995). Please note that this species is currently classified as endangered by the United States Fish and Wildlife Service (USFWS) and the Virginia Department of Game and Inland Fisheries (VDGIF).

Considered good indicators of the health of aquatic ecosystems, freshwater mussels are dependent on good water quality, good physical habitat conditions, and an environment that will support populations of host fish species (Williams et al., 1993). Because mussels are sedentary organisms, they are sensitive to water quality degradation related to increased sedimentation and pollution. They are also sensitive to habitat destruction through dam construction, channelization, and dredging, and the invasion of exotic mollusk species.

To minimize adverse impacts to the aquatic ecosystem as a result of the proposed activities, DCR recommends the implementation of and strict adherence to applicable state and local erosion and sediment control/storm water management laws and regulations. Due to the legal status of the Dwarf wedgemussel, DCR recommends coordination with USFWS and VDGIF, to ensure compliance with protected species legislation.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Many invasive plant species are adapted to take advantage of soil disturbances and poor soil conditions. These adaptations are part of what enable certain species to be invasive. Non-native invasive plants are found through Virginia. Therefore, the potential exists for some VDOT projects to further the establishment of invasive species. To minimize the potential for invasive species infestation, projects should be conducted to minimize the area of disturbance, and disturbed sites should be revegetated with desirable species at the earliest opportunity following disturbance. Equally as important, species used for revegetation should not include the highly invasive species that have traditionally been used for revegetating disturbed sites. We recommend VDOT avoid using crown vetch, tall fescue, and autumn olive if at all possible.

For more information on invasive alien plants and native plants, see the DCR-Division of Natural Heritage website <http://www.dcr.virginia.gov/natural-heritage/invspinfo.shtml>. For sources of native plant material, see the Virginia Native Plant Society's website (<http://vnps.org>) or the U.S. Fish and Wildlife Service nursery list for Virginia (<http://www.fws.gov/ChesapeakeBay/BayScapes/bsresources/bs-nurseries.html>).

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit project information and map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

All VDOT projects on state-owned lands must comply with the Virginia Erosion & Sediment Control (ESC) Law and Regulations, the Virginia Stormwater Management (SWM) Law and Regulations, the most current version of the DCR approved VDOT Annual ESC and SWM Specifications and Standards, and the project-specific ESC and SWM plans. [Reference: VESCL §10.1-560, §10.1-564; VESCR §4VAC50-30 et al; VSWML §10.1-603 et al; VSWMR §4VAC-3-20 et al].

The VDGIF maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from <http://vafwis.org/fwis/> or contact Ernie Aschenbach at 804-367-2733 or Ernie.Aschenbach@dgif.virginia.gov. This project is located within 2 miles of a documented occurrence of a state listed animal. Therefore, DCR recommends coordination with VDGIF, Virginia's regulatory authority for the management and protection of this species to ensure compliance with the Virginia Endangered Species Act (VA ST §§ 29.1-563 – 570).

The remaining DCR divisions have no comments regarding the scope of this project. Thank you for the opportunity to comment.

Cc: Troy Andersen, USFWS

Amy Ewing, VDGIF

Literature Cited

Michaelson, D.L. and R.J. Neves. 1995. Life history and habitat of the endangered Dwarf wedgemussel *Alasmidonta heterodon* (Bivalvia:Unionidae). *Journal of the North American Benthological Society* 14(2): 324-340.

NatureServe, 2014. NatureServe Explorer: An online encyclopedia of life [web application]. Version 7.1. NatureServe. Arlington, Virginia. Available <http://explorer.natureserve.org> (Accessed: December 22, 2014).

U.S. Fish and Wildlife Service. 1993. Dwarf Wedge Mussel (*Alasmidonta heterodon*) Recovery Plan. Hadley, Massachusetts. p. 52.

Williams, J.D., M.L. Warren, Jr., K.S. Cummings, J.L. Harris, and R.J. Neves. 1993. Conservation status of freshwater mussels of the United States and Canada. *Fisheries* 18: 6-9.



FOUNDATION

February 22, 2016

Ms. Amanda Baxter
VDOT Northern Virginia District
4975 Alliance Drive
Fairfax, VA 22030

Dear Ms. Baxter,

Thank you for your letter, which detailed the new VDOT study of possible express lane expansions for the I-395 corridor in Alexandria, Arlington and Fairfax counties in Virginia. We appreciate you allowing the Air Force Memorial to provide input regarding the study for the I-395 Express Lanes project. The Air Force Memorial has enjoyed wonderful support from VDOT to provide adequate signage directing patrons to our Memorial, and we are very grateful for the partnership.

As to the express lane expansion, we have only one request at this time. Currently, there are signs on I-395 North bound directing patrons to exits 8A or 8B to get to the Memorial and on I-395 South bound directing patrons to use exit 8A for VA-27/Washington Blvd. toward Pentagon South Parking/South Arlington Ridge Rd. and Columbia Pike to get to the Memorial. In any future transportation improvements we ask for free access points via these exits to be made available to patrons who would like to visit the Air Force Memorial.

We appreciate the consideration and the partnership. Feel free to call the Air Force Memorial Director, Barbara Taylor, should you need more detailed information or if you have any questions. She can be reached at 703-979-0674 or at btaylor@airforcememorial.org.

Sincerely,

Mark A. Barrett
Executive Vice President
Air Force Association



COMMONWEALTH of VIRGINIA

Department of Agriculture and Consumer Services

PO Box 1163, Richmond, Virginia 23218

Phone: 804/786-3501 • fax: 804/371-2945 • Hearing Impaired: 800/828-1120

www.vdacs.virginia.gov

Sandra J. Adams
Commissioner

February 22, 2016

Ms. Amanda Baxter
VDOT Special Projects Development Manager
VDOT Northern Virginia District
4975 Alliance Drive
Fairfax, Virginia 22030

Subject: Interstate 395 (I-395) Express Lanes
Counties of Alexandria, Arlington, and Fairfax, Virginia
VDOT Project Number: 0395-969-205; UPC 108313

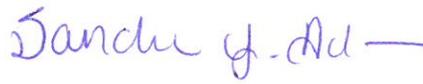
Dear Ms. Baxter:

This is in response to your letter to this agency dated January 26, 2016, inviting comments concerning potential issues or concerns related to the study for the I-395 Express Lanes Project to extend the I-95 Express Lanes in Alexandria, Arlington, and Fairfax Counties. We appreciate the opportunity to provide feedback on this project.

The Virginia Department of Agriculture and Consumer Services (VDACS) is responsible for the preservation of farmland and the protection of endangered and threatened plant and insect species. While VDACS does not have any input to contribute to the first, third or fourth question on the I-395 Express Lanes Study NEPA Evaluation Questionnaire, in response to the second question, we would recommend that the several issues be considered while developing this study. Concerning farmland preservation, § 3.2-204 of the Code of Virginia requires that in preparing reports on major state projects, each state agency shall demonstrate that it considered the impact of the projects on farm and forest lands as required in § 3.2-205 and that it adequately considered alternatives and mitigating measures. Therefore, VDACS encourages the Virginia Department of Transportation (VDOT) and others involved with this project to minimize the loss of farm and forest land to the highest degree possible. Also, VDACS asks that you be mindful of any actions that could result in altering the water flow within surrounding agricultural lands and, to the greatest extent possible, minimize any adverse drainage or erosion issues that may result. In addition, VDACS suggests that VDOT determine whether the Counties of Alexandria, Arlington and Fairfax have any established agricultural and forestal districts that may be impacted by this project. Should such districts exist, additional project review is required per § 15.2-4313 of the Code of Virginia.

Additionally, VDACS works closely with the Department of Conservation and Recreation (DCR) in determining the potential impact of proposed projects on state endangered and threatened plant and insect species. Through a Memorandum of Agreement between our agencies, DCR reviews these projects and submits comments on our behalf. Consequently, any inquiries relating to state protected plant and insect species should be directed to DCR for response. If after researching its database of natural resources, critical habitats, and species locations DCR finds that a project poses a potential adverse impact on an endangered or threatened plant or insect species, the appropriate information will be referred to VDACS for further review and possible mitigation. Please note that requests of this nature should be sent to Rene Hypes at the DCR Division of Natural Heritage Project Review Program. Ms. Hypes can be reached at (804) 371-2708 or rene.hypes@dcr.virginia.gov.

Sincerely,



Sandra J. Adams
Commissioner

cc: Larry Nichols, Director, Division of Consumer Protection
Kevin Schmidt, Director, Office of Policy, Planning and Research



DEPARTMENT OF THE ARMY
US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

February 18, 2016

Northern Virginia Regulatory Section
NAO-2016-00264 (Turkeycock Run)
VDOT Number 0395-969-205; UPC: 108313

Ms. Irene Rico
Division Administrator
Federal Highway Administration
Post Office Box 10249
Richmond, Virginia 23240-0249

Dear Ms. Rico:

Many projects proposed by the Virginia Department of Transportation (VDOT) and funded by Federal-Aid Highway Funds managed by the Federal Highway Administration (FHWA) require permits from the Corps of Engineers. These projects are subject to compliance with Section 106 of the National Historic Preservation Act of 1966.

According to 36 CFR 800.2(a)(2):

“...If more than one Federal agency is involved in an undertaking, some or all [of] the agencies may designate a lead Federal agency, which shall identify the appropriate official to serve as the agency official who shall act on their behalf, fulfilling their collective responsibilities under section 106. Those Federal agencies that do not designate a lead Federal agency remain individually responsible for their compliance with this part.”

Pursuant to the above provision, the FHWA (Virginia Division) is hereby designated as the lead federal agency to fulfill the collective Federal responsibilities under Section 106 for the following undertaking, which FHWA has determined will have an adverse effect on historic resources:

8-mile improvement for Interstate 395 Northern High Occupancy Toll (HOT) Lanes in
Alexandria, Arlington and Fairfax Counties, Virginia
VDOT 0395-969-205; UPC 108313

The Corps authorizes FHWA to conduct Section 106 coordination on its behalf. Any Memorandum of Agreement prepared by FHWA under 36 CFR 800.6 should include the following clause in the introductory text:

“WHEREAS, pursuant to Section 10 and/or Section 404 of the Clean Water Act, a Department of the Army permit will likely be required from the Corps of Engineers for

this project, and the Corps has designated FHWA as the lead federal agency to fulfill federal responsibilities under Section 106; and

The proposed project may impact waters and/or wetlands regulated by the Norfolk District Army Corps of Engineers (Norfolk District) under Section 404 of the Clean Water Act (33 U.S.C. 1344) and Section 10 of the Rivers and Harbors Act (33 U.S.C 403), and a permit or permits may be required for the improvements. We recommend coordination with the appropriate state and Federal agencies prior to making any decisions regarding the range and elimination of alternatives. We further encourage the use of a collaborative process for the study of this project, documenting concurrence of the pertinent Federal agencies at important steps, to provide the local governments and the public with a more dependable framework for planning decisions.

Our regulations require that we consider a full range of public interest factors and conduct an alternatives analysis in order to identify the least environmentally damaging practicable alternative (LEDPA), which is the only alternative we can authorize. In addition to wetland and waters impacts, we must consider factors such as land use (including displacements of homes and businesses), floodplain hazards and values, water supply and conservation, water quality, safety, cost, economics, threatened and endangered species, historic and cultural resources, and environmental justice. In addition, for this corridor, navigation will be a primary consideration.

In addition, the Corps hereby authorizes FHWA to conduct coordination on its behalf for the 8-mile improvement for Interstate 395 Northern High Occupancy Toll (HOT) Lanes in Alexandria, Arlington and Fairfax Counties in accordance with Section 7 of the Endangered Species Act.

Should you have any questions, you may contact Regena Bronson at 540-548-2838 or regena.d.bronson@usace.army.mil.

Sincerely,

Tucker Smith
Chief, Northern Virginia
Regulatory Section

Copies Furnished:
Virginia Department of Historic Resources, Richmond
Virginia Department of Transportation, Northern Virginia



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 1105, Richmond, Virginia 23218

www.deq.virginia.gov

Molly Joseph Ward
Secretary of Natural Resources

David K. Paylor
Director

(804) 698-4000
1-800-592-5482

February 5, 2016

Amanda Baxter
VDOT Northern District
4975 Alliance Drive
Fairfax, Virginia 22030

RE: I-395 Express Lanes
VDOT Project No. 0395-969-205; UPC 108313

Dear MS. Baxter:

This letter is in response to the scoping request for the above-referenced project.

As you may know, the Department of Environmental Quality, through its Office of Environmental Impact Review (DEQ-OEIR), is responsible for coordinating many of Virginia's review of federal environmental documents prepared pursuant to the National Environmental Policy Act (NEPA) and responding to appropriate federal officials on behalf of the Commonwealth. Similarly, DEQ-OEIR coordinates Virginia's review of federal consistency documents prepared pursuant to the Coastal Zone Management Act which applies to all federal activities which are reasonably likely to affect any land or water use or natural resources of Virginia's designated coastal resources management area must be consistent with the enforceable policies Virginia Coastal Zone Management (CZM) Program.

DOCUMENT SUBMISSIONS

In order to ensure an effective coordinated review of the federal consistency documentation, notification of the federal consistency documentation should be sent directly to OEIR. We request one electronic copy and two hard copies (CD, preferred, or paper) for our files and for small localities. Electronic copies may be sent to eir@deq.virginia.gov (10 MB maximum) or made available for download at a website, file transfer protocol (ftp) site or the VITAShare file transfer system (<https://vitashare.vita.virginia.gov>).

The federal consistency documentation (if applicable) should include U.S. Geological Survey topographic maps as part of their information. In addition, project details should be adequately described for the benefit of the reviewers.

FEDERAL CONSISTENCY UNDER THE COASTAL ZONE MANAGEMENT ACT

Pursuant to the federal Coastal Zone Management Act of 1972, as amended, and its implementing regulations in Title 15, *Code of Federal Regulations*, Part 930, federal activities, including permits, licenses, and federally funded projects, located in Virginia's Coastal Management Zone or those that can have reasonably foreseeable effects on Virginia's coastal uses or coastal resources must be conducted in a

manner which is consistent, to the maximum extent practicable, with the Virginia CZM Program. Should this project require an Individual Permit under Section 404 or Section 10 of the Clean Water Act, a federal consistency certification will be required.

Additional information on the Virginia's review for federal consistency documents can be found online at <http://www.deq.virginia.gov/Programs/EnvironmentalImpactReview/FederalConsistencyReviews.aspx>

DATA BASE ASSISTANCE

Below is a list of databases that may assist you in the preparation of a federal consistency document:

- DEQ Online Database: Virginia Environmental Geographic Information Systems

Information on Permitted Solid Waste Management Facilities, Impaired Waters, Petroleum Releases, Registered Petroleum Facilities, Permitted Discharge (Virginia Pollution Discharge Elimination System Permits) Facilities, Resource Conservation and Recovery Act (RCRA) Sites, Water Monitoring Stations, National Wetlands Inventory:

- www.deq.virginia.gov/ConnectWithDEQ/VEGIS.aspx

- DEQ Virginia Coastal Geospatial and Educational Mapping System (GEMS)

Virginia's coastal resource data and maps; coastal laws and policies; facts on coastal resource values; and direct links to collaborating agencies responsible for current data:

- <http://128.172.160.131/gems2/>

- DHR Data Sharing System

Survey records in the DHR inventory:

- www.dhr.virginia.gov/archives/data_sharing_sys.htm

- DCR Natural Heritage Search

Produces lists of resources that occur in specific counties, watersheds or physiographic regions:

- www.dcr.virginia.gov/natural_heritage/dbsearchtool.shtml

- DGIF Fish and Wildlife Information Service

Information about Virginia's Wildlife resources:

- <http://vafwis.org/fwis/>

- Environmental Protection Agency (EPA) Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Database: Superfund Information Systems

Information on hazardous waste sites, potentially hazardous waste sites and remedial activities across the nation, including sites that are on the National Priorities List (NPL) or being considered for the NPL:

- www.epa.gov/superfund/sites/cursites/index.htm
- EPA RCRAInfo Search
Information on hazardous waste facilities:
 - www.epa.gov/enviro/facts/rcrainfo/search.html
- EPA Envirofacts Database
EPA Environmental Information, including EPA-Regulated Facilities and Toxics Release Inventory Reports:
 - www.epa.gov/enviro/index.html
- EPA NEPAassist Database
Facilitates the environmental review process and project planning:
<http://nepaassisttool.epa.gov/nepaassist/entry.aspx>

If you have questions about the environmental review process and/or the federal consistency review process, please feel free to contact me (telephone (804) 698-4204 or e-mail bettina.sullivan@deq.virginia.gov).

I hope this information is helpful to you.

Sincerely,

A handwritten signature in cursive script that reads "Bettina Sullivan".

Bettina Sullivan, Program Manager
Environmental Impact Review and
Long-Range Priorities

Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Thursday, February 04, 2016 3:56 PM
To: Williams, Heather (VDOT)
Cc: Nies, Nicholas
Subject: FW: Interstate 395 (I-395) Express Lanes - VDOT Project Number: 0395-969-205; UPC: 108313
Attachments: 20151030_Letter_Service to Interested Parties_Online Project Reviews SIGNED.pdf

Amanda J. Baxter

VDOT NOVA District

Direct: 703-259-1996

Mobile: 703-403-1655

Amanda.Baxter@VDOT.Virginia.gov

From: Troy Andersen [mailto:troy_andersen@fws.gov]
Sent: Thursday, February 04, 2016 1:41 PM
To: Baxter, Amanda (VDOT)
Subject: Interstate 395 (I-395) Express Lanes - VDOT Project Number: 0395-969-205; UPC: 108313

Amanda:

We recently received a letter regarding the subject project. We do not provide individual responses to requests for environmental reviews. Instead, we utilize an online project review system to handle most reviews. The attached letter provides a brief overview as well as a link to our project review website. If after completing the online steps you still have questions on how to minimize impacts to any trust resources present, give me call at any of the numbers listed below in my signature block.

V/R
Troy

Troy M. Andersen

Endangered Species/Conservation Planning Assistance Supervisor

USFWS – Virginia Field Office

Phone: 804-824-2428

Mobile: 804-654-9235



United States Department of the Interior



FISH AND WILDLIFE SERVICE

Virginia Field Office
6669 Short Lane
Gloucester, VA 23061

October 30, 2015

Greetings:

Due to increased workload and refinement of our priorities in Virginia, this office will no longer provide individual responses to requests for environmental reviews. However, we want to ensure that U.S. Fish and Wildlife Service trust resources continue to be conserved. When that is not possible, we want to ensure that impacts to these important natural resources are minimized and appropriate permits are applied for and received. We have developed a website that provides the steps and information necessary to allow any individual or entity requiring review/approval of their project to complete a review and come to the appropriate conclusion. This site can be accessed at: <http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html>.

The website is frequently updated to provide new species/trust resource information and methods to review projects. Refer to the website for each project review to ensure that current information and methods are utilized.

If you have any questions about project reviews or need assistance, please contact Troy Andersen of this office at (804) 824-2428 or troy_andersen@fws.gov.

Sincerely,

Cindy Schulz
Field Supervisor
Virginia Ecological Services

Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Thursday, February 04, 2016 3:18 PM
To: Williams, Heather (VDOT)
Cc: Nies, Nicholas
Subject: FW: I-395 Express Lanes Scoping Request

Amanda J. Baxter

VDOT NOVA District

Direct: 703-259-1996

Mobile: 703-403-1655

Amanda.Baxter@VDOT.Virginia.gov

From: Kojan, Kyle (VDH)
Sent: Thursday, February 04, 2016 2:32 PM
To: Baxter, Amanda (VDOT)
Cc: Soto, Roy (VDH); Williams, Heather (VDOT)
Subject: I-395 Express Lanes Scoping Request

Project Name: I-395 Express Lanes Scoping Request

Project #: N/A

UPC #: N/A

Location: Alexandria, Arlington, and Fairfax Co.

VDH – Office of Drinking Water has reviewed the above project. Below are our comments as they relate to proximity to **public drinking water sources** (groundwater wells, springs and surface water intakes). Potential impacts to public water distribution systems or sanitary sewage collection systems **must be verified by the local utility.**

There are no public groundwater wells within a 1 mile radius of the project site.

There are no surface water intakes located within a 5 mile radius of the project site.

The project is not within the watershed of any public surface water intakes.

There are no apparent impacts to public drinking water sources due to this project.

Regards,

Kyle Kojan

Program Support Technician

Office of Drinking Water
Virginia Department of Health
109 Governor Street
Richmond, VA 23220
(804) 864-7201



COMMONWEALTH of VIRGINIA

Department of Historic Resources

Molly Joseph Ward
Secretary of Natural Resources

2801 Kensington Avenue, Richmond, Virginia 23221

Julie V. Langan
Director

4 February 2016

Tel: (804) 367-2323
Fax: (804) 367-2391
www.dhr.virginia.gov

Ms Amanda Baxter
Virginia Department of Transportation
1401 East Broad Street
Richmond, Virginia 23219-2000

RE: I-395 Express Lanes
City of Alexandria, Arlington and Fairfax counties
VDOT Project No. 0395-969-205; UPC 108313
VDHR File No. 2016-0089

Dear Ms Baxter:

The Department of Historic Resources (DHR) has received notification that the Virginia Department of Transportation, in cooperation with the Federal Highway Administration, has initiated a study for the Interstate 395 (I-395) Express Lanes Project (Northern High Occupancy Toll (HOT) Lanes) to extend the I-95 Express Lanes in the City of Alexandria, Arlington and Fairfax counties. The study extends for approximately eight (8) miles along I-395 from Turkeycock Run to the vicinity of Eads Street near the Pentagon Building.

The I-395 Express Lane project has the potential to affect historic properties listed in and eligible for the National Register of Historic Places. Please continue to consult with DHR once a draft of the Environmental Assessment is complete.

If you have any questions about our comments, please contact me at (804) 482-6090.

Sincerely,

A handwritten signature in black ink, appearing to read "Marc Holma".

Marc Holma, Architectural Historian
Division of Review and Compliance

Administrative Services
10 Courthouse Ave.
Petersburg, VA 23803
Tel: (804) 862-6408
Fax: (804) 862-6196

Eastern Region Office
2801 Kensington Avenue
Richmond, VA 23221
Tel: (804) 367-2323
Fax: (804) 367-2391

Western Region Office
962 Kime Lane
Salem, VA 24153
Tel: (540) 387-5443
Fax: (540) 387-5446

Northern Region Office
5357 Main Street
PO Box 519
Stephens City, VA 22655
Tel: (540) 868-7029
Fax: (540) 868-7033



Molly J. Ward
Secretary of Natural Resources

COMMONWEALTH of VIRGINIA

Department of Game and Inland Fisheries

Bob Duncan
Executive Director

February 2, 2016

Ms. Amanda Baxter
VDOT Northern VA District
4975 Alliance Drive
Fairfax, VA 22030

Re: Request for Determination of Impact upon Wildlife Resources: I-395 Express Lanes – VDOT Project Number: 0395-969-205; UPC: 108313

Dear Ms. Baxter:

We appreciate that you submitted your project(s) for review by VDGIF to ensure the protection of sensitive wildlife resources during project development. Due to current staffing limitations within our Fish and Wildlife Information Services (FWIS) and Environmental Services sections, we are unable to review and provide comments on projects that are not currently involved in one of the regulatory review processes for which we are a consultatory agency (see <http://www.dgif.virginia.gov/environmental-programs/environmental-services-section.asp>). Please note that no response from VDGIF does not constitute “no comment” nor does it imply support of the project or associated activities. It simply means VDGIF has not been able to respond to your request.

To assist you in determining which, if any, wildlife resources under our jurisdiction, including threatened and endangered wildlife, may be present on or near your project site, we recommend that you access the Virginia Fish and Wildlife Information System (VAFWIS) at <http://vafwis.org/fwis/>.

If you should have further questions or need additional information about VDGIF's Environmental Programs, please visit: <http://www.dgif.virginia.gov/environmental-programs/>.

Please feel free to attach a copy of this correspondence and any reports from VAFWIS with your project paper work to document your correspondence with us regarding this project.

Thank you,

A handwritten signature in black ink, appearing to read "Shirl Dressler", with a long horizontal line extending to the right.

Shirl Dressler, Program Support Technician
Acting Environmental Services Admin.

Bryant, Ana-Elisa

From: Baxter, Amanda (VDOT) <Amanda.Baxter@vdot.virginia.gov>
Sent: Tuesday, February 02, 2016 1:54 PM
To: Williams, Heather (VDOT); Nies, Nicholas
Subject: Fwd: I-395 Express Lanes
Attachments: VDOT 395.pdf; ATT00001.htm

Amanda J. Baxter, *Special Projects Development Mgr.*

Direct: [703-259-1996](tel:703-259-1996)

Mobile: [703-403-1655](tel:703-403-1655)

[4975 Alliance Drive](#)

[Fairfax, Virginia 22030](#)

Amanda.Baxter@VDOT.Virginia.gov

Begin forwarded message:

From: "ImpactReview (VOF)" <ImpactReview@vofonline.org>
Date: February 2, 2016 at 11:55:11 AM EST
To: "Baxter, Amanda (VDOT)" <Amanda.Baxter@vdot.virginia.gov>
Subject: I-395 Express Lanes

Ms. Baxter,

The Virginia Outdoors Foundation has reviewed the project referenced above and described in the attached document. As of 2 February 2016, there are not any existing nor proposed VOF open-space easements within the immediate vicinity of the project.

Please contact VOF again for further review if the project area changes or if this project does not begin within 24 months. Thank you for considering conservation easements.

Thanks,
Mike Hallock-Solomon
Virginia Outdoors Foundation



HOPE HALLECK
CLERK TO THE
COUNTY BOARD

ARLINGTON COUNTY, VIRGINIA
OFFICE OF THE COUNTY BOARD

2100 CLARENDON BOULEVARD, SUITE 300
ARLINGTON, VIRGINIA 22201-5406
(703) 228-3130 • FAX (703) 228-7430
E-MAIL: countyboard@arlingtonva.us



MEMBERS

MARY HYNES
CHAIR
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VICE CHAIRMAN

JAY FISETTE
LIBBY GARVEY
JOHN E. VIHSTADT

December 4, 2015

The Honorable Aubrey Layne
Secretary of Transportation
Office of the Secretary of Transportation
PO Box 1475
Richmond, VA 23218

Re: I-395 Express lanes.

Dear Secretary Layne,

On behalf of the Arlington County Board, thank you for your November 20, 2015 letter to Fairfax County Chairman Bulova, Alexandria Mayor Euille, and me regarding the Commonwealth's intention to initiate an environmental assessment to study the extension of the I-395 Express lanes north through Arlington to the District of Columbia, and a transportation demand management study to identify multimodal strategies to improve travel in the corridor. Your hard work and willingness to partner with us are very much appreciated.

Having worked with you and your staff to plan what we hope will be a successful I-66 inside the Beltway multimodal project, we're optimistic that a mutually beneficial outcome is possible on I-395.

Although past efforts to bring dynamic tolling to I-395 in Arlington were divisive, our concerns in the past were due to the lack of a detailed impact analysis and to specific implementation details, as opposed to the general concept. Arlington has in the past been receptive to the potential benefits of dynamic tolling as a way to manage highway facilities and improve transit, but only as part of a broad package that legitimately and significantly enhances multimodal services and facilities, over the entire lifetime of the facility.

In many ways, I-395 is a successful corridor now. The corridor carries a tremendous number of people on a variety of modes, both within the I-395 right-of-way and on parallel facilities. Unfortunately, I-395's multimodal nature has degraded over the years, first as the center reversible lanes were converted from bus-only to HOV, and now, potentially, as HOV is converted to allow single-occupant cars. Any successful HOT project on I-395 must ensure that transit service is capable of operating effectively, and is enhanced rather than degraded further.

This is a serious concern. During the planning for now-existing express lane facilities elsewhere in Northern Virginia, previous administrations promised multimodal improvements that never materialized. That cannot be allowed to happen again.

Given the tumultuous history of I-395 planning, and the unique demands of multimodal travel inside the Beltway, the following issues are of particular concern to Arlington as this conversation moves forward:

1. Transit and Transportation Demand Management (TDM)

Transit and TDM must be an integral part of the project, well-planned and funded with ongoing, stable, and sufficient revenues. The Commonwealth should undertake a comprehensive transit/TDM study, including a detailed transit operations analysis, and commit to using the majority of toll revenue, beyond what is necessary to maintain and operate the facility, to finance multimodal projects. Significant up-front funding should be provided so that transit and other multimodal projects are implemented contemporaneously with the start of tolling.

2. Third party concessionaire

The involvement of the third party concessionaire raises concerns. The concessionaire's involvement must be strictly defined, and include enforceable protections that ensure the project retains its multimodal focus, its obligation to mitigate unintended consequences on local streets, and funding both during the implementation of tolling and over the long-term.

3. Do not harm transit oriented communities

This project must not undermine Arlington's successful investment in congestion-reducing transit-oriented development in Pentagon City, Crystal City, or Shirlington. These important mixed-use neighborhoods reduce congestion by focusing on walkable, transit-oriented land uses. The addition of highway-oriented infrastructure and increased traffic into these communities would have the unintended consequence of making it more difficult to walk, bike, and access transit, resulting in more traffic congestion, not less. Providing and maintaining balanced multimodal access to these neighborhoods is essential.

Specifically, we appreciate the call-out of no changes to the off-ramp at Shirlington Circle. Special attention will need to be paid to traffic management and context-sensitive road design at the Eads Street exit, with a particular focus on preserving and enhancing bus access to the Pentagon, where over 1,000 buses connect every weekday, with still other transit connecting at Pentagon City.

4. Impact studies

Comprehensive traffic and environmental studies are necessary to fully understand the proposed project, including a robust NEPA process that includes a study area extending at least one mile out from the I-395 right-of-way, to include parallel and connecting facilities such as Metro, VRE, Route 1, and Columbia Pike.

5. Remain within existing right-of-way

Any changes to the I-395 facility should take place fully within the existing I-395 right-of-way only, and must not negatively impact multimodal infrastructure or service.

6. Coordinate with DC

Given the profile of traffic using I-395, we strongly recommend coordination and, if possible, partnership with the District of Columbia, to extend the HOT facility across the Potomac River and to make needed improvements to transit, pedestrian, and bicycle accessibility in the 14th Bridge / Long Bridge corridor.

Gaining Arlington's ultimate support for this project will depend, as always, on implementation details such as these. We are heartened to see many of the same issues raised in your November 20th letter, and look forward to coordinating with you on them over the coming months.

Once again, thank you for your diligent work on behalf of the Commonwealth, and your commitment to producing the best possible transportation network for Northern Virginia.

Sincerely,

A handwritten signature in black ink that reads "Mary Hynes". The signature is written in a cursive style with a large initial "M" and a long, sweeping underline.

Mary Hynes
Chair, Arlington County Board

cc Members, Arlington County Board
William Euille, Mayor of Alexandria
Sharon Bulova, Chair, Fairfax County Board of Supervisors

From: Okorn, Barbara [<mailto:Okorn.Barbara@epa.gov>]

Sent: Wednesday, February 24, 2016 8:12 AM

To: Baxter, Amanda (VDOT)

Subject: Scoping for proposed I-395 Express Lanes

Amanda,

EPA offers the following comments based on our review of VDOT's March 26, 2016 scoping request for the proposed I-395 Express Lanes in Alexandria, Arlington and Fairfax, VA.

- Information regarding the purpose and need, alternatives analyzed, avoidance and minimization of resources, and cumulative effects for the proposed project should be included in the environmental assessment (EA).
- The EA should include a clear and robust justification of the underlying purpose and need for the proposed action. The purpose and need statement is important because it helps explain why the proposed action is being undertaken and what objectives the project intends to achieve. The purpose of the proposed action is typically the specific objective of the activity. The need should explain the underlying problem for why the project is necessary.
- Alternatives analysis should include the suite of other activities or solutions that were considered and the rationale for not carrying these alternatives forward for detailed study.
- The document should describe potential impacts to the natural and human environment. Existing resources should be identified and EPA encourages that adverse impacts to natural resources, especially wetlands and other aquatic resources, be avoided and minimized.
- Stormwater ponds, best management practices (BMPs) and construction staging areas should not be located in wetlands and streams. Stormwater management alternatives that address the existing and new construction should be considered.
- EPA suggests coordinating with other appropriate federal, state and local resource agencies on possible impacts to wetlands, streams, historic and/or rare, threatened and endangered species.
- An evaluation of air quality and community impacts, including noise, light and possible traffic impacts, should be included in the document.
- Potential air impacts and general conformity should be included in the EA.
- The EA should also include an analysis of any hazardous sites or materials, and the status of any ongoing or past remediation efforts in the project area.
- The EA should include a discussion and analysis of greenhouse gas emissions, climate change, and extreme weather events.
- Environmental justice (EJ) should also be evaluated, including the identification of potential communities of concern, and meaningful and timely community involvement, public outreach, and access to information.
- Consideration should also be given to all potential impacts to at-risk populations, as well as consideration to sensitive subpopulations, possibly including elderly, children and others. Community impacts should also be avoided, minimized and mitigated.

- The document should address potential indirect and cumulative effects in the project areas, and analysis may aid in the identification of resources that are likely to be adversely affected by multiple projects, and sensitive resources that could require additional measures. It is suggested that a secondary and cumulative effects analysis begin with defining the geographic and temporal limits of the study; this is generally broader than the study area of the project. The cumulative impact analysis should evaluate impacts to environmental resources that have the potential to be impacted by the project (i.e. wetlands, surface water, etc)

Thank you for coordinating with EPA on this project. We look forward to working with you on this project as more information becomes available. Please provide a copy of the EA to EPA when it is available for review. Please let me know if you have any questions.

Barb

Barbara Okorn
USEPA Region III (3EA30)
1650 Arch Street
Phila, PA 19103
Phone (215) 814-3330

Appendix C: Framework Agreement

**Development Framework
395 Project in Northern Virginia**

Background

In 2012, the Virginia Department of Transportation (the "Department") and 95 Express Lanes LLC ("95 Express") (collectively the "Parties") entered into a Comprehensive Agreement (the "I-95 Comprehensive Agreement") for the development of the 95 Express Lanes.

The I-95 Comprehensive Agreement contemplates the potential future development of the Northern HOT Lanes along the I-395 corridor (the "395 Project"). The Department has expressed an interest in pursuing the 395 Project at this time and has had preliminary discussions with 95 Express with regard to the 395 Project.

This development framework agreement is intended to outline the Parties shared understanding of 95 Express and the Department's initial roles and responsibilities in connection with development of the 395 Project. The Parties agree that the intent of this Development Framework is to advance the 395 Project as a Concessionaire Project Enhancement under the structure of Section 12.06(a) of the I-95 Comprehensive Agreement.

Any terms not defined herein will have the same meaning as in the I-95 Comprehensive Agreement.

Scope of the 395 Project

The 395 Project would expand the two (2) existing HOV lanes to three (3) HOT Lanes along the I-395 corridor for approximately eight (8) miles from Turkeycock Run near Duke Street to the vicinity of Eads Street near the Pentagon. The 395 Project would pass through the City of Alexandria as well as Arlington and Fairfax Counties and would connect to the 95 Express Lanes.

Subject to the 395 Project satisfying parent-company investment criteria and the Department's approval, 95 Express would commit to design, build, finance, operate, and maintain the currently contemplated scope of the 395 Project (the "Project Cost"). Final funding of the Project Cost would be subject to 95 Express parent-company Board and lender approval.

The Parties agree that the scope of the 395 Project would include the following:

- Rehabilitation of two existing HOV travel lanes and construction of one additional HOV travel lane;
- Installation of a Tolling and Traffic Management System to enable active traffic management and dynamic tolling;
- Installation of directional, regulatory and dynamic messaging signs;
- Construction of soundwalls consistent with minimum Federal and State requirements; and
- Construction of an improved connection to the 395 Project at Eads Street.

All existing HOV ramps along I-395 would be converted to HOT ramps, with the exception of the south-facing bus/HOV ramp at Seminary Road.

Exclusions

The Parties agree that the scope of the 395 Project would not include the following:

- Construction of additional entrance/exit ramps in the Shirlington area;
- Construction of additional pedestrian/bike facilities along the I-395 corridor; and
- Surrounding network or community enhancements along the I-395 corridor, such as soundwall improvements that exceed the existing minimum Federal or State requirements, reforestation or landscaping enhancements or other amenities, or upgrades to adjacent or arterial roadways (collectively, the "Surrounding Enhancements"), unless planned and funded by the Department (including use of funds in the Community Enhancement Fund, below).

Development Framework
395 Project in Northern Virginia

The Concept of Operations, Technical Requirements and Joint Operating and Maintenance Protocols for the 395 Project would be consistent with the practices, principles and procedures already agreed for the 95 Express Lanes, as may be updated by the Parties for lessons learned from the 95 Express Lanes project.

Long-Term Transit Investment

95 Express will fund an annual transit payment amount as agreed by the Parties (adjusted each year based on an escalation methodology to be agreed by the Parties) until contract termination (the "Annual Transit Investment"). The Annual Transit Investment will be administered solely by the Department.

Notwithstanding Section 12.06(a) of the I-95 Comprehensive Agreement, the parties agree to update any applicable project documentation to permit the use of public funds or other financial support or credit as deemed necessary by the Department to advance its interests related to the transit investment or Surrounding Enhancements by the Department.

95 Express Responsibilities

95 Express would be responsible, as part of the overall Project Cost, for the following initial actions (collectively the "95 Express Development Activities") and deliverables to support development of the 395 Project:

- Preparation of engineering designs and associated bid documents necessary to support a competitive design-build procurement process for the 395 Project, including project performance requirements, preliminary design plans and/or contract drawings and specifications and special provisions (the "Preliminary Engineering and Design Work");
- Development of estimates for design-build, operations, routine maintenance, major maintenance, and special purpose vehicle costs (the "Cost Estimating Efforts");
- Development of a financing plan to support the 395 Project, with full flexibility in the composition of equity and debt financing, including development of draft and final applications and agreements for TIFIA, PABs, and/or other equity and debt financing facilities (the "Financing Plan Efforts");
- Management of bid process and public procurement efforts for the 395 Project, while collaborating with the Department as necessary (the "Procurement Efforts");
- Completion of traffic and revenue studies to support the financial and operational modeling of the 395 Project (the "Modeling Work");
- Community outreach and public information efforts in consultation with the Department (the "Community Outreach Efforts");
- Support the Department through the preparation of the materials, designs, data and other supporting documentation required for the Environmental Approvals and the Stormwater Approvals (both as defined below);
- Per the I-95 Comprehensive Agreement, seek all Approvals as described below ;
- Prepare the draft version of the 95 Express proposal (the "Draft Proposal"); and
- Prepare the final 95 Express proposal (the "Final Proposal") as required under Section 12.06 (a)(ii) of the I-95 Comprehensive Agreement.

Department Responsibilities

The Department would be responsible for the following initial actions and deliverables required to support the development of the 395 Project, and which are not included in the overall Project Cost:

- Completing all necessary environmental studies and approvals, including the inclusion of the 395 Project in the Transportation Planning Board's Financially Constrained Long-Range Transportation Plan and Transportation Improvement Plan (the "Environmental Approvals");

Development Framework
395 Project in Northern Virginia

- Obtaining written determinations from the Department of Environmental Quality and/or any other applicable Federal, state or local agencies that the 395 Project would be subject to the Part II-C stormwater management requirements contemplated by the grandfathering provisions of Virginia Stormwater Management Program (VSMP) Regulation (9VAC25-870 et seq.), or funding or providing for alternative arrangements (the "Stormwater Approvals");
- Managing formal soundwall public engagement and approval processes (the "Preliminary Soundwall Work");
- Setting up the process and administering any available transit investment monies (the "Transit Funding Efforts");
- Providing assistance in good faith to 95 Express in their obtaining of approvals from local jurisdictions, the District of Columbia, and all Federal agencies and departments (other than the Environmental Approvals and the Stormwater Approvals described above) (the "Approvals");
- Making available any current Department rights-of-way necessary for the 395 Project (the "ROW Work");
- Supporting any efforts on 95 Express' part to obtain TIFIA funding and/or PABs treatment for any bond issuances related to the 395 Project; and
- Drafting any required amendments to the I-95 Comprehensive Agreement associated with the 395 Project.

The Department would be responsible, at its sole cost, for any Surrounding Enhancements not already included in the scope of the Project, while collaborating with 95 Express as necessary to the extent any such Surrounding Enhancements have an impact upon the 395 Project.

95 Express and Department Coordination

95 Express will share all available data requested by the Department on the 95 Express Lanes and 395 Project. Consistent with the I-95 Comprehensive Agreement, the Department will safeguard 95 Express' proprietary and confidential information

The Department and its advisors will be entitled to review requested material associated with the 395 Project in an "open book" manner, including, but not limited to, the following 95 Express Responsibilities:

- The financial model developed by 95 Express to support the plan to design, build, finance, operate and maintain the 395 Project (the "Financial Model");
- Development costs;
- Traffic and revenue assumptions and forecast
- Preliminary engineering and design work;
- Financing plan efforts;
- The design-build procurement efforts;
- Modeling work; and
- Community outreach efforts.

Key Milestones

Within 30 days of signing this agreement, the Parties will agree on a more detailed development schedule for implementation of the development work. 95 Express and the Department recognize that improvements are needed to the I-395 corridor and will make a good-faith effort to reach the following milestones to ensure the success of the 395 Project:

- Provision of traffic and revenue data and assumptions as soon as they become available;
- Provision of a preliminary cost estimate as soon as it becomes available;

**Development Framework
395 Project in Northern Virginia**

- Preliminary Engineering and Design Work to be commenced by November 30, 2015;
- Community Outreach Efforts to be commenced by November 30, 2015;
- Approvals to be commenced by November 30, 2015;
- Modeling Work to be commenced by November 30, 2015;
- EA Approvals to be commenced by November 30, 2015;
- Preliminary Soundwall Work to be commenced by December 31, 2015;
- ROW Work to be commenced by December 31, 2015;
- Agreement on the technical requirements, construction scope, and design-build summary of key terms by March 31, 2016;
- Submission of the Draft Proposal by 95 Express to the Department by April 30, 2016 (the Department will provide 95 Express the Draft Proposal submission requirements 60 days prior to the due date);
- Procurement Efforts to be commenced by April 30, 2016;
- Selection of Design Build Contractor(s) by December 31, 2016; and
- Submission of the Final Proposal 30 days following selection of Design Build Contractor(s); and
- Final Financial Model, Execution of Concessionaire Project Enhancement and Financial Close by March 31, 2017.

These milestones are based on the timely completion of the Environmental Approvals.

Financing Considerations

Notwithstanding Section 4(g) of Exhibit J to the I-95 Comprehensive Agreement, the Parties agree that the Committed Investment required to support the 395 Project shall be included in the calculation of the Actual Equity IRR.

Exclusivity

After the Parties reach agreement on this framework and before the earlier of (i) the Parties enter into an agreement for the Concessionaire Project Enhancement pursuant to the terms of the I-95 Comprehensive Agreement, (ii) the Parties mutually agree to not continue development work for the 395 Project, (iii) 95 Express fails to submit the Final Proposal pursuant to the terms of Section 12.06(a)(ii) of the I-95 Comprehensive Agreement, or (iv) the Department reviews and doesn't approve the Final Proposal, the Department agrees to negotiate exclusively with 95 Express with respect to the 395 Project. If the 395 Project does not proceed due to circumstances unrelated to deficiencies in the Final Proposal, the exclusivity rights afforded to 95 Express pursuant to Article 12 of the I-95 Comprehensive Agreement shall be retained.

**Development Framework
395 Project in Northern Virginia**

Existing Development Rights for the Northern HOT Lanes

Prior to undertaking the initial actions and deliverables described in this document, 95 Express and the Department agree that this framework and the scope of work and deliverables described herein and contemplated in connection therewith does not constitute an offer or proposal by 95 Express to develop the Northern HOT Lanes within the meaning of Section 12.06 of the I-95 Comprehensive Agreement, nor does it constitute a waiver or relinquishment of any rights afforded to 95 Express (or the Department) pursuant to Article 12 of the I-95 Comprehensive Agreement.

Work Product

Treatment of any Work Product is to be consistent with existing treatment and protection of Work Product under the I-95 Comprehensive Agreement. However, if the Department determines not to proceed with the 395 Project, any Work Product prepared and paid for by 95 Express (on its behalf or at its request) shall belong to and remain with 95 Express.

Other Items

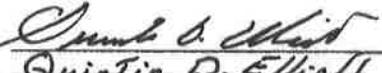
The Parties agree to address any issues not addressed in this framework relating to the preliminary development work for the 395 Project in good faith and in an expeditious manner.

Agreed and Confirmed:

95 Express Lanes LLC

By: 
Name: Jennifer Aument
Title: President
Date: November 21, 2015

Virginia Department of Transportation

By: 
Name: Quintin D. Elliott
Title: Chief Deputy Commissioner
Date: 11/24/15

INTERSTATE 395 EXPRESS LANES NORTHERN EXTENSION

