February 5, 2018

Mr. John Simkins
Federal Highway Administration
400 North 8th Street, Suite 750
Richmond, Virginia 23219-4825

SUBJECT:  I-95 HOT Lanes Project Revised Environmental Assessment
State Project No.: 0095-969-739
UPC No.: 110527
Federal Project No.: NHPP-000S (345)

Dear Mr. Simkins:

In 2011, the Federal Highway Administration (FHWA) and the Virginia Department of Transportation (VDOT) issued an Environmental Assessment (EA) for the I-95 HOT Lanes Project that extended from approximately 1.10 miles south of U.S. Route 17 (Mills Drive) to Interstate 495 (Capital Beltway). Later that year, FHWA issued a Finding of No Significant Impact (FONSI) for the project. Since that time, construction of the High Occupancy/Toll (HOT) lanes along I-95 has commenced and the initial segment between Interstate 495 in Fairfax County and north of Exit 143 in Prince William County has been opened to traffic. In 2016, FHWA and VDOT revisited plans to complete construction of the preferred alternative identified in the 2011 documents, extending the HOT lanes from their current southern terminus through Exit 133 in Spotsylvania County.

To document changes that may have occurred in the study area and to update access options considered in the 2011 FONSI, FHWA and VDOT agreed to complete a Revised EA. The development of this Revised EA was supported with new technical reports.

FHWA and VDOT’s federal partners were kept informed of the development and publication of the Revised EA through regular Federal Partnering Meetings. On August 31, 2017, FHWA approved the Revised EA for public availability. A public comment period extended from September 8, 2017 until October 10, 2017 (15 days after) the public hearing. Copies of the Revised EA were made available at a combined Location and Design Public Hearing and at the Fredericksburg District office. The public hearing was held on September 25, 2017 at Stafford High School in Stafford County, Virginia. The public hearing and document availability were advertised on the VDOT web site and in local and regional newspapers. The EA and public hearing materials also were made available on the VDOT web site: www.virginiadot.org/projects/fredericksburg/i-95_express_lanes_fredericksburg_extension.asp
A total of 20 comments were received. These comments and VDOT’s responses are attached to this letter. Copies of the original comments have been provided to FHWA under a separate heading.

Since your office’s approval of the Revised EA for public availability some limited updates have occurred. Following the release of the preliminary Noise Analysis Technical report and Revised Environmental Assessment in August 2017, the noise analysis was updated. The status of three barriers has changed:

- Barrier UU2, which was originally considered feasible but not reasonable, is now considered both feasible and reasonable.
- Barrier QQ, which was originally considered feasible but not reasonable, is now considered not feasible.
- Barrier OO, which was originally considered feasible but not reasonable, is now considered both feasible and reasonable.

Previously, only one barrier system was found to be warranted, feasible, and reasonable (Barrier PP). After the updated noise analysis, there are three. The Noise Technical Report has been updated to account for this change and made available to the public on the web site noted above.

VDOT also has received concurrence from the Virginia Department of Historic Resources (DHR) on our proposed eligibility and effect determinations. VDOT published their preliminary determinations in the Revised EA and did not receive any public comment to inform or change these determinations before submitting them to DHR. See attached for correspondence between VDOT and DHR.

Finally, on November 13, 2017, the U.S. Army Corps of Engineers (USACE) issued a preliminary Jurisdictional Determination (pre-JD) for a corridor that includes the Revised EA study area. The pre-JD was informed by the information included in the Revised EA and Natural Resources Technical Report. USACE’s pre-JD did not measurably alter the findings of these documents. Therefore, no updates to the wetland and stream data in the Revised EA are recommended.

The content of the Revised EA, as well as the comments received during the public comment period, does not change the conclusion that the project would cause no significant impact. Therefore, VDOT requests and recommends that FHWA issue a FONSI for the portion of the I-95 HOT Lanes Project documented in the Revised EA.

Per the letter between our agencies dated February 1, 2018, the project has been identified as a public-private partnership (P3). Given these unique circumstances, our agencies have previously agreed that a NEPA decision can be issued for such a project without updating the regional planning documents. Therefore, this documentation is not included in this request; however, the air quality conformity determination has been completed and is attached.
Please send me a signed original of your finding for use in reproducing the necessary copies for distribution. If you have any questions or need any further information, please contact Scott Smizik at (804) 371-4082 or scott.smizik@vdot.virginia.gov.

Sincerely,

Angel N. Deem
VDOT Environmental Division Director

cc: Michelle Shropshire, P.E., VDOT
Krishna Potturi, P.E., VDOT
Scott Smizik, VDOT
Leo Snead, VDOT

ATTACHMENTS:

1) Public Hearing Summary and Response to Comments
2) DHR Effect Determination
3) Air Quality Conformity Determination
Attachment 1: Public Hearing Summary and Response to Comments

A combined Location and Design Public Hearing was held for the I-95 Express Lanes Fredericksburg Extension project on September 25, 2017, between 6:00 p.m. and 8:00 p.m., at Stafford High School in Stafford County. Prior to and following the meeting, the Revised EA was made available for review on VDOT web sites and at the VDOT Fredericksburg District Office.

Citizens were provided the following information and materials at the Location and Design Public Hearing for the I-95 Express Lanes Fredericksburg Extension project:

- A detailed brochure
- A comment form
- One live presentation at 7:00 p.m.
- Meeting boards were displayed and included information on the following topics:
  - Welcome
  - Purpose and Need
  - Environmental Analysis
  - Noise Analysis
  - Typical Section
  - Access Points
  - Design: Focus on Fred Ex connection at the Route 17 interchange
  - Design: Focus on improvements at Route 17 and I-95 interchange
  - Design: Focus on Route 630 (Courthouse Road) interchange
  - Design: Focus on Russell Road interchange
  - Design: Corridor maps 1 - 7
  - How Express Lanes Work
  - Schedule and Next Steps
  - Detour
- Environmental Documents were on hand to reference at the hearing and included:
  - Revised EA
  - Air Quality Technical Report
  - Alternatives Analysis Technical Report
  - Cultural Resources Technical Report
  - Indirect and Cumulative Effects Technical Report
  - Natural Resources Technical Report
  - Noise Analysis Technical Report
  - Socioeconomics, Land Use and Right of Way Technical Report
  - Traffic and Transportation Technical Report
- A 30% Design Plan set

Seventy-three (73) citizens signed in at the Location and Design Public Hearing. During and following the meeting, there were thirteen (13) written and five (5) oral comments received for the record. In addition, two (2) emails were received following the Location and Design Public Hearing. The following summarizes the substantive comments received as a result of the public hearing and includes a VDOT response. Comments not included in the summary below include those expressing general support for the project or those comments that addressed locations outside of the project area.
**Project Length**

**Major points/concerns:**

- The ability to take Express Lanes all the way to I-95 / US 17 Interchange at Warrenton Road (Exit 133) would be most helpful.
- Ending Express Lanes at the I-95 / US 17 Interchange at Warrenton Road (Exit 133) moves the bottleneck further south to Fredericksburg that is already congested.
- Improvements should be extended to Spotsylvania County and Thornburg.

**Response** –

Following issuance of the FONSI in 2011, the selected Alternative was divided into northern and southern construction sections for implementation. The northern section extended from VA 610 / Garrisonville Road (exit 143) to VA 289 / Franconia-Springfield Parkway (Exit 169) and was advanced to construction. The southern section of the Express Lanes, which extended from the I-95 / US 17 South Interchange (Exit 126) north to VA 610 / Garrisonville Road (Exit 143), was proposed to be constructed in the future. Following a National Environmental Policy Act (NEPA) reevaluation of the 2011 EA in March 2016, the Express Lanes were extended approximately two miles south from the previous southern terminus near VA 610 / Garrisonville Road (Exit 143). This project, called the I-95 Express Lanes Southern Extension, opened in November 2017, and included a reversible, single lane in the median of I-95 which is split into NB and SB merge ramps.

The Build Alternative presented in the Revised EA is a distinct portion of the 2011 FONSI-selected Alternative from the Interstate 95 HOT Lanes Project EA. The Build Alternative was prepared to account for new transportation projects constructed in the study area and vicinity since the FONSI was issued, to re-consider access options documented in 2011, and to update environmental information and data. The 2011 FONSI-selected Alternative consisted of constructing new HOT lanes from one mile south of the I-95 / US 17 South interchange (Exit 126) to VA 234 / Dumfries Road, and converting existing High Occupancy Vehicle (HOV) lanes to HOT (Express) lanes between VA 234 / Dumfries Road (Exit 152) to just north of Turkeycock Run.

The Revised EA focuses on refining a portion of the 2011 FONSI-selected Alternative south of the I-95 Express Lanes Southern Extension that was not constructed: mainline improvements and Express Lane access points from the I-95 / US 17 North Interchange at Warrenton Road (Exit 133) to the I-95 / Russell Road Interchange (Exit 148). The Revised EA reviewed only this portion of the 2011 FONSI-selected Alternative; it was not a new study, and it did not propose new alternatives.

**Access and Exits**

**Major points/concerns:**

- The distance of the proposed Express Lane access and exits between the I-95 / VA 630 Courthouse Road (Exit 140) Interchange and I-95 / US 17 Warrenton Road (Exit 133) Interchange is too long.
- Request flyover exits at VA 627 / Enon Road, VA 652 / Truslow Road, and VA / 628 American Legion Road.
- Request new exit at the I-95 southbound Virginia Welcome Center near Milepost 132 south of the Rappahannock River in Fredericksburg to alleviate traffic at the I-95 / VA 3 Plank Road (Exit 130) Interchange.
- Add more exit lanes on southbound I-95 at the Cowan Boulevard and VA 639 / Fall Hill Avenue overpasses in Fredericksburg to improve local traffic flow.
- Request clearer signage between the proposed improvements and into the new VA 3 section.
Proposed access points address driver demand on I-95 only.
Concern regarding commuter bus access to Express Lanes, specifically at certain times of the day.
Addition of gated bus-only slip ramps advised.
Pleased with new access point at Marine Corps Base Quantico.

Response –
The location and types of access points were selected based on traffic modeling, distance between entrances and exits, and minimizing impacts on private property and environmental resources. All of these items needed to be balanced (or minimized, in the case of property and environmental impacts) in order to arrive at the proposed access points.

The southern terminus of the study is at Exit 133 (US 17 N). Access and other improvements south of this point may be considered in future studies. Access and other improvements outside of the I-95 corridor or improvements aside from Express Lanes and Express Lane access points are outside the scope of this study.

The Express Lanes and access points assessed in this study are intended for use by all vehicles that typically use I-95, and are free for cars with three or more passengers, buses, and motorcycles. While the access points were not designed for buses only, buses will be able to use them. There will be no changes to the Express Lane access points at VA 610 / Garrisonville Road as a result of this study. Express Lane access will be added to VA 630 / Courthouse Road (via a roundabout with access to the new commuter lot at that location), north of the I-95 / US 17 N interchange, and south of the I-95 / Russell Road interchange. The development of the proposed Russell Road Express Lane access point was the result of coordination between VDOT and Marine Corps Base Quantico. Roadway and interchange signage is still being developed by VDOT. Comments on signage will be addressed during more advanced design.

Project Schedule

Major points/concerns:

- The estimated year of completing the improvements is too far in the future.
- Suggest phasing construction in smaller lengths to provide incremental improvements sooner.
- Concern about the time it will take to complete the work at Courthouse Road.
- Would like to see a timeline of how this project fits into other local projects to ensure that the projects are coordinated.

Response –

With an FHWA FONSI anticipated in early 2018, the project development process can advance with procurement and more detailed engineering. Specific details on the timing of construction can be developed as these processes advance. Construction is estimated to begin in 2019, with an estimated completion date of 2022. Transurban, the public-private partnership concessionaire for this project, is administering the project construction. Information about this project and other nearby projects can be found on the VDOT project website at:

Cost of Tolls

Major points/concerns:
- Concerned about the potential cost of Express Lane tolls.
- Cost of Express Lane tolls to go the last few miles between the I-95 / Russell Road (Exit 148) Interchange at Marine Corps Base Quantico and I-95 / VA 630 Courthouse Road (Exit 140) Interchange Courthouse exits and to I-95 / VA 610 Garrisonville Road (Exit 143) are too high.
- Anticipate that the proposed Express Lanes would lower tolls to I-95 / VA 610 Garrisonville Road (Exit 143) Interchange.

Response –
The Revised EA did not evaluate the value of tolls; rather, it focused on the planned construction of the Express Lanes and the location of Express Lane access points. Questions related to tolling would be decided as the project advances to procurement and will be refined as more detailed design and traffic modeling is completed.

Noise

Major points/concerns:
- Request for noise wall on the southeast side of the I-95/Truslow Bridge intersection
- Request for noise wall at Chichester Park

Response –
The preliminary evaluation of a sound barrier at Chichester Park (UU2) has been updated, and has been identified as feasible and reasonable. The updated analysis has been posted on VDOT’s project website. A sound barrier at the southeast corner of the I-95/Truslow Bridge intersection (WW2) was evaluated in the preliminary noise analysis and was found to be feasible but not reasonable for cost effectiveness. All noise barriers will be evaluated again in the final design phase of the project using detailed construction plans, refined traffic data, and detailed existing/proposed surface information. Noise barriers that were 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. Conversely, noise barriers that were not considered feasible and reasonable may meet the established criteria and be recommended for construction.

Alternatives

Major points/concerns:
- Should construct four lanes instead of two
- Consider monorail in I-95 median from Richmond, Virginia to Washington, D.C.
- I-95 northbound Rappahannock River crossing needs improvement too.
- Project should address issues at Rt. 3.

Response –
The Revised EA focuses on refining a portion of the 2011 FONSI-selected Alternative that was not constructed: mainline improvements and Express Lane access points from the I-95 / US 17 North Interchange at Warrenton Road (Exit 133) to the I-95 / Russell Road Interchange (Exit 148). The Revised EA reviewed only this portion of the 2011 FONSI-selected Alternative; it was not a new study, and it did not propose new alternatives. Opportunities to change automotive traffic to other modes of travel are beyond the scope of this study. Improvements to the Rappahannock River Crossing and the I-95 / Route 3 Interchange (Exit 130) are being assessed under separate studies focused on areas south of the study area for the Revised E.
Bicycle/Pedestrian Facilities

Major points/concerns:

- Request shared-use path be included in the proposed reconstruction of VA 652 / Truslow Road overpass.

Response –

The potential for a shared-use path to be incorporated during the reconstruction of the VA 652 / Truslow Road overpass is not precluded by this project, but is beyond the scope of this study.
Attachment 2: Coordination with the Virginia Department of Historic Resources
October 16, 2017

ROUTE: I-95
PROJECT: 0095-969-739, P101; UPC: 110527
COUNTY/CITY: Stafford and Prince William Counties
FUNDING: Federal
VDHR FILE: 2015-033
ACTION REQUIRED: Determinations of Eligibility

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

Dear Mr. Holma:

The Virginia Department of Transportation (VDOT) has begun an improvement study at between Exit 133/Route 17 trending to the north, terminating at Exit 148 in Quantico along the I-95 corridor. The VDOT is coordinating this federally-funded project with the Virginia Department of Historic Resources (VDHR) in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations, 36 CFR Part 800. Previous correspondence on this project includes VDOT’s letter of March 23, 2017, which coordinated the project Area of Potential Effect (APE) and a list of potential consulting parties, and your department’s response of April 20, 2017. The purpose of this letter is to coordinate the National Register eligibility of architectural and archaeological resources located within the APE for the project.

Project Description
The VDOT, in coordination with the Federal Highway Administration (FHWA) as the lead federal agency, is preparing a Revised Environmental Assessment (Revised EA) for the Interstate 95 (I-95) Hot Lanes Project, for which a Finding of No Significant Impact (FONSI) was issued by FHWA in 2011. The Revised EA, which is being completed for the I-95 Express Lanes Fredericksburg Extension Study (or the “Fredericksburg Extension Study”), presents improvements identified in a portion of the 2011 FONSI-
COMMONWEALTH of VIRGINIA

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

Charles A. Kilpatrick, P.E.
Commissioner

November 29, 2017

ROUTE: I-95
PROJECT: 0095-969-739, P101; UPC: 110527
COUNTY/CITY: Stafford and Prince William Counties
FUNDING: Federal
VDHR FILE: 2015-0333
ACTION REQUIRED: Determination of Effect

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

Dear Mr. Holma:

The Virginia Department of Transportation (VDOT) has begun an improvement study between Exit 133/Route 17 trending to the north, terminating at Exit 148 in Quantico along the I-95 corridor. The VDOT is coordinating this federally-funded project with the Virginia Department of Historic Resources (VDHR) in accordance with Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulations, 36 CFR Part 800.

Previous correspondence on this project includes VDOT’s letter of March 23, 2017, which coordinated the project Area of Potential Effect (APE) and a list of potential consulting parties, and your department’s response of April 20, 2017. In an October 16, 2017 letter, the VDOT coordinated the eligibility of cultural resources within the project APE. The DHR concurred with the VDOT’s recommendations in a response dated November 16, 2017. The purpose of this letter is to coordinate an effect determination for the project.

Project Description
The VDOT, in coordination with the Federal Highway Administration (FHWA) as the lead federal agency, is preparing a Revised Environmental Assessment (Revised EA) for the Interstate 95 (I-95) Hot Lanes Project, for which a Finding of No Significant Impact
(FONSI) was issued by FHWA in 2011. The Revised EA, which is being completed for the I-95 Express Lanes Fredericksburg Extension Study (or the “Fredericksburg Extension Study”), presents improvements identified in a portion of the 2011 FONSI-selected Alternative, from the I-95/US 17 North interchange at Warrenton Road (Exit 133) to south of the I-95/Russell Road interchange (Exit 148). The Revised EA also includes new access points along this portion of the 2011 FONSI-selected Alternative. As part of the current study, environmental resources along the corridor were updated according to the latest available data and information.

The purpose of the Fredericksburg Extension Study is to reduce daily congestion and accommodate travel demands more efficiently. In addition, the project will provide higher reliability of travel times and expanded travel choices.

Both a Build and No-Build alternative shall be considered for this project. The No-Build Alternative means that the Express Lanes will not extend beyond the southern terminus of the Southern Extension project, which is currently under construction south of VA610/Garrisonville Road (Exit 143). The Build Alternative would extend two reversible Express Lanes in the median of I-95 from the vicinity of the I-95/US 17 North Interchange at Warrenton Road (Exit 133) to south of the I-95/VA 610 Interchange at Garrisonville Road (Exit 143) to tie into the Southern Extension Project. It would also provide Express Lane access in the vicinity of the I-95/US 17 North Interchange at Warrenton Road (Exit 133), the I-95/VA 630 Interchange at Courthouse Road (Exit 140), and the I-95/Russell Road Interchange (Exit 148). The Build Alternative is consistent with the 2011 FONSI-selected alternative.

Area of Potential Effects
The Area of Potential Effects (APE) for direct effects for architectural resources is the proposed Limits of Disturbance (LOD) and the indirect APE includes all parcels immediately adjacent to the LOD not already impacted by modern development and sound walls. The indirect APE includes all parcels immediately adjacent to the project area not already impacted by modern development and sound walls. See Figures 7 and 8a through 8e in the enclosed report for mapping of both the architectural direct and indirect APE for the project. For archaeological resources, the APE includes the proposed LOD as well as the median between the north- and southbound lanes of I-95. The median was included so that, if necessary, the potential effects of construction traffic, stockpiling, or staging during construction within the median could be assessed.

Identification of Historic Properties
The architectural and archaeological fieldwork conducted for the purpose of identifying historic properties within the direct and indirect APE for this project was completed by Cultural Resources Analysts, Inc. (CRA) in May and June of 2017. VDOT conveyed the results of the survey by letter dated October 16, 2017, to DHR and other consulting parties along with a technical report, Cultural Resources Survey Associated with the Fredericksburg Expansion Lanes Project, Stafford and Prince William Counties,

**Assessment of Effects**
Under the regulations implementing Section 106, an “effect” is an “alteration to the characteristics of a historic property qualifying it for the National Register” [36 CFR §800.16(i)]. An effect is adverse when it alters a qualifying characteristic of the property “in a manner that would diminish the integrity of the property’s location, design, setting, materials, workmanship, feeling, or association” [36 CFR §800.5(a)(1)]. VDOT has applied the criteria of adverse effect as follows to the Build Alternative for the Fredericksburg Extension project and determined that the project will have no adverse effect on historic properties.

**Architectural Resources**
The VDHR concurred that there is only one architectural resource that is individually eligible for the NRHP, the Aquia Church (VDHR No. 089-0008), that falls within the APE for this project. The Limits of Disturbance (LOD) are approximately 0.14 miles from the edge of the Aquia Church property. The Aquia Church sits approximately 500 feet to the east of Route 1 and 1238 feet to the east of the LOD. The property between the church building and Route 1 is heavily wooded, which creates a barrier between the property and roadway. Just beyond Route 1 is the I-95 corridor (Figure 1).

![Figure 1. Aerial view of Aquia Church and I-95 Corridor.](image-url)
The VDOT has determined that the project as proposed will have no adverse effect on the Aquia Church property. While the project may have the potential to alter the setting and feeling of the Aquia Church, the project will not diminish any of those aspects of integrity that contribute to the resource’s eligibility to the NRHP under Criterion C for architecture. The project as proposed will not use any property that is part of the National Register-boundaries of the Aquia Church. Further, the viewshed from the Aquia Church property, particularly to the west, primarily consists of Route 1 and I-95, will remain for the most part unchanged (Figures 2 and 3). A photograph taken from the entrance gate demonstrates that the interstate and Route 1 are currently visible from the Aquia Church property. Based on current plans, the Build Alternative will have no adverse effect on the Aquia Church property.

Figure 2. View from entrance to the north.
Archaeological Resources
In its letter of November 16, 2017, the DHR concurred with VDOT’s finding that there is only one archaeological site within the project APE for archaeological resources that has been listed on or determined eligible or potentially eligible for listing on the NRHP. That site, 44ST0909, is located between the existing north- and southbound lanes of I-95 near the northern end of the project (Figure 4) and is a Native American temporary camp potentially dating to the Early Woodland period. DHR determined site 44ST0909 potentially eligible for the NRHP in July 2007, and recent field investigations conducted by VDOT for the Fredericksburg Extension project confirmed the site’s boundaries.

Although site 44ST0909 lies outside of the proposed LOD for the Fredericksburg Extension project (Figure 4), VDOT will further ensure that the site is not harmed by potential construction-related activities such as the staging or stockpiling of equipment or materials that could occur within the interstate median during project construction. VDOT will require the construction contractor for the I-95 Hot Lanes Project to erect safety fence along the perimeter of the site and maintain the fence throughout the construction period, and will allow no construction activities, such as clearing and grubbing, vehicle traffic, stockpiling, staging, etc., to take place within the fenced area. Provided these protective measures are implemented, VDOT believes the Build Alternative for the Fredericksburg Extension project will not diminish the integrity any of
the characteristics of site 44ST0909 that potentially make it eligible for listing on the NRHP.

![Figure 4. Archaeological Site 44ST0909](image)

The VDOT invites the DHR to concur with VDOT's findings by completing the signature block below, and returning the original signature to my attention within 30 days of the receipt of this letter. Please contact Sarah at (804) 371-6710, Sarah.Clarke@VDOT.virginia.gov, if you have questions about this project.

Sincerely,

Sarah M. Clarke
Environmental Program Planner
Cultural Resources

c. Stafford County Administrator
Scott Smizik
The Virginia Department of Historic Resources (DHR) concurs with the Virginia Department of Transportation that:

- The Build Alternative for the Fredericksburg Extension project as proposed will have no adverse effect on historic properties, provided the protection measures described above are implemented during construction at 44ST0909.

For VDOT Project No. 0095-969-739, P101; UPC: 110527; VDHR File No.: 2007-0006).

Julie V. Langan
Director, Virginia Department of Historic Resources
Virginia State Historic Preservation Officer
Mr. Marc Holma  
Oct. 16, 2017  
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selected Alternative, from the I-95/US 17 North interchange at Warrenton Road (Exit 133) to south of the I-95/Russell Road interchange (Exit 148). The Revised EA also includes new access points along this portion of the 2011 FONSI-selected Alternative. As part of the current study, environmental resources along the corridor were updated according to the latest available data and information.

The purpose of the Fredericksburg Extension Study is to reduce daily congestions and accommodate travel demands more efficiently. In addition, the project will provide higher reliability of travel times and expanded travel choices.

Both a Build and No-Build alternative shall be considered for this project. The No-Build Alternative means that the Express Lanes will not extend beyond the southern terminus of the Southern Extension project, which is currently under construction south of VA610/Garrisonville Road (Exit 143). The Build Alternative would extend two reversible Express Lanes in the median of I-95 from the vicinity of the I-95/US 17 North Interchange at Warrenton Road (Exit 133) to south of the I-95/VA 610 Interchange at Garrisonville Road (Exit 143) to tie into the Southern Extension Project. It would also provide Express Lane access in the vicinity of the I-95/US 17 North Interchange at Warrenton Road (Exit 133), the I-95/VA 630 Interchange at Courthouse Road (Exit 140), and the I-95/Russell Road Interchange (Exit 148). The Build Alternative is consistent with the 2011 FONSI-selected alternative.

Consulting Parties

In March 2017, VDOT reached out by letter to the following parties to determine whether they wished to participate in Section 106 consultation on the I-95 Express Lanes Fredericksburg Extension Study:

- Department of Community Planning, City of Fredericksburg
- Stafford County Historical Society
- Patawomeck Indians of Virginia
- Historic Fredericksburg Foundation, Inc.
- Friends of the Rappahannock
- Stafford County Administrator
- Department of Planning, Spotsylvania County
- Fredericksburg-Spotsylvania National Military Park
- American Battlefield Protection Program
- Aquia Episcopal Church
- Delaware Nation

Of these parties, only the Stafford County Administrator responded to confirm its interest in participating in consultation. In July 2017, the VDOT wrote to one federally-recognized tribe, the Delaware Nation (the Delaware Nation previously expressed their potential interest in federal transportation projects in the geographic region of the project), to ask whether they wished to participate in Section 106 consultation. The tribe did not respond.
Area of Potential Effects
The Area of Potential Effects (APE) for direct effects for architectural resources is the proposed Limits of Disturbance (LOD) and the indirect APE includes all parcels immediately adjacent to the LOD not already impacted by modern development and sound walls. The indirect APE includes all parcels immediately adjacent to the project area not already impacted by modern development and sound walls. See Figures 7 and 8a through 8e in the enclosed report for mapping of both the architectural direct and indirect APE for the project. For archaeological resources, the APE includes the proposed LOD as well as the median between the north- and southbound lanes of I-95. The median was included so that, if necessary, the potential effects of construction traffic, stockpiling, or staging during construction within the median could be assessed. The APE for archaeological resources is depicted in Figures 4a-4n in the enclosed report.

Identification of Architectural Historic Properties
The architectural and archaeological fieldwork for this project was completed by Cultural Resources Analysts, Inc. (CRA) in May and June of 2017. The results of the survey may be found in the enclosed report Cultural Resources Survey Associated with the Fredericksburg Expansion Lanes Project, Stafford and Prince William Counties, Virginia, VDOT Project No.: 0095-969-739, P101; UPC: 110527; VDHR File No.: 2007-0006. Included with this report are completed Virginia Cultural Resources Inventory System (V-CRIS) forms, site plans, and photos for each architectural resource surveyed during the course of this project. The work completed for this project meets the standards set forth in the Virginia Department of Historic Resources (DHR)'s Guidelines for Conducting Historic Resources Survey in Virginia (2011) and the Programmatic Agreement among the Federal Highway Administration, the U.S. Army Corps of Engineers, Norfolk District, the Tennessee Valley Authority, the Advisory Council on Historic Preservation, the Virginia State Historic Preservation Officer, and the Virginia Department of Transportation Regarding Transportation Undertakings Subject to Section 106 of the National Historic Preservation Act of 1966, executed August 2, 2016 ("2016 Federal PA").

Previously Recorded Architectural Resources
The indirect APE for the project contains a total of 26 previously recorded architectural resources. Of these, five were not re-surveyed during the course of the fieldwork for this project. The five resources include the Aquia Church (VDHR No. 089-0008) which is listed on the National Register of Historic Places (NRHP) and the Chancellorsville Battlefield (VDHR No. 088-5180) which was determined eligible for the NRHP, the proposed project is located within the study area of the battlefield. The third resource is the Battle of Fredericksburg I (VDHR No. 111-5295), the battlefield was last evaluated for eligibility earlier in 2017 and therefore did not require additional survey. The APE includes portions of the Study Areas defined by the American Battlefield Protection Program (ABPP) for the Chancellorsville and Fredericksburg I battlefields, but the boundaries for these two battlefields that have been identified by the ABPP as potentially eligible for the NRHP (PotNR) lie outside of the APE. Finally, two buildings located within the Quantico facility (VDHR No. 287-5005 and 287-5006) were not surveyed as
part of this project because the consultant was denied access to the properties due to security concerns.

The remaining 21 resources included Fleury, also known as the Anne Moncure House (VDHR No. 089-0071) which was moved to the Aquia Church property from its original location. In addition, there are four demolished architectural resources; the house at 29 Rehoboth Drive (VDHR No.: 089-0324), a house on Gateway Drive (VDHR No.: 089-0365), the house at 267 Bells Hill Lane (VDHR No.: 089-5246), and a dwelling on Gateway Drive (VDHR No.: 089-5426). One former residence that is now part of Quantico, building no. 1303 Caddy Road (VDHR No. 287-5004), a residence converted to the business Stafford Nursery, Inc. (VDHR No. 089-5295), and a single commercial building, a now closed Shell Station (VDHR No. 089-5396). The remaining resources are all residential dwellings that date from the early- to mid-twentieth century.

The VDOT concurs with the previous eligibility recommendations for the Aquia Church, the Chancellorsville Battlefield, and the Battle of Fredericksburg I. The remaining resources are recommended not individually eligible for the NRHP under Criteria A, B, C, or D. There is no known association with important people or events. The property resource type is common, the design and workmanship undistinguished, and the materials stock. The resource does not have the potential to yield information (please see Table 1).

<table>
<thead>
<tr>
<th>VDHR No.</th>
<th>Resource Name</th>
<th>Date</th>
<th>Eligibility Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>089-0008</td>
<td>Aquia Church</td>
<td>c. 1751</td>
<td>NRHP Listed</td>
</tr>
<tr>
<td>089-0071</td>
<td>Fleury</td>
<td>c. 1769</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0324</td>
<td>House, 29 Rehoboth Drive</td>
<td>c. 1924</td>
<td>Demolished/Not Eligible</td>
</tr>
<tr>
<td>089-0325</td>
<td>Jiggins House, 76 Buttercup Lane</td>
<td>c. 1940</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0327</td>
<td>Evans House, 38 Nats Court</td>
<td>c. 1930</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0328</td>
<td>Sturgill House, 23 Ravenwood Drive</td>
<td>c. 1920</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0330</td>
<td>Bailey House, 44 Ravenwood Drive</td>
<td>c. 1900</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0364</td>
<td>House, 247 Riverside Parkway</td>
<td>c. 1920</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-0365</td>
<td>House, Gateway Drive</td>
<td>c. 1930</td>
<td>Demolished/Not Eligible</td>
</tr>
<tr>
<td>088-5180</td>
<td>Chancellorsville Battlefield</td>
<td>c. 1863</td>
<td>Eligible, but ABPP PotNR not within APE</td>
</tr>
<tr>
<td>089-5246</td>
<td>House, 267 Bells Hill Lane</td>
<td>c. 1930</td>
<td>Demolished/Not Eligible</td>
</tr>
<tr>
<td>089-5294</td>
<td>House, 536 Truslow Road</td>
<td>c. 1950</td>
<td>Not Eligible</td>
</tr>
</tbody>
</table>
Table 1. Previously Identified Architectural Resources with the Interchange APE (cont.)

<table>
<thead>
<tr>
<th>VDHR No.</th>
<th>Resource Name</th>
<th>Date</th>
<th>Eligibility Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>089-5295</td>
<td>Stafford Nursery Inc., 544 Truslow Road</td>
<td>c. 1930</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5331</td>
<td>House, 15 Krieger Lane</td>
<td>c. 1958</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5332</td>
<td>House, 100 Musselman Road</td>
<td>c. 1948</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5333</td>
<td>House, 106 Musselman Road</td>
<td>c. 1952</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5334</td>
<td>House, 110 Musselman Road</td>
<td>c. 1950</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5339</td>
<td>House, 16 Krieger Land</td>
<td>c. 1969</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5373</td>
<td>House, 74 Simpson Road</td>
<td>c. 1967</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5396</td>
<td>Former Shell Station, 1118 Courthouse Road</td>
<td>c. 1965</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5426</td>
<td>House, Gateway Drive</td>
<td>c. 1955</td>
<td>Demolished/Not Eligible</td>
</tr>
<tr>
<td>089-5470</td>
<td>House, 8 Krieger Lane</td>
<td>c. 1961</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>111-5295</td>
<td>Battle of Fredericksburg I</td>
<td>c. 1862</td>
<td>Eligible, but ABPP PotNR not within APE</td>
</tr>
<tr>
<td>287-5004</td>
<td>Building No. 1301, Caddy Road</td>
<td>c. 1918</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>287-5005</td>
<td>Building No. 1304, Caddy Road</td>
<td>c. 1918</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>287-5006</td>
<td>Building No. 1314, Caddy Road</td>
<td>c. 1953</td>
<td>Not Eligible</td>
</tr>
</tbody>
</table>

*Newly Identified Architectural Resources*

A total of 13 newly identified architectural resources were identified within the APE of the project. Of these resources one is the Aqua Pines Camp Resort (VDHR No. 089-5610), an RV and camper park established in 1975. The newly identified resources also includes one church, the Shiloh New Site Baptist Church (VDHR No. 089-5611) was constructed 1948 and includes a graveyard that contains approximately 30-50 burials. There are two abandoned commercial buildings, a McDonalds (VDHR No. 089-5614) and a Shell Station (VDHR No. 089-5615), as well as two currently operating businesses Sam’s Pizza and Subs (VDHR No. 089-5620) constructed c. 1970 and a Quality Inn (VDHR No. 089-5620). One American Legion Post (VDHR No. 089-5616) which is frame building clad in vinyl siding constructed c. 1946. Finally, there is a metal, double-legged ellipsoidal water tower (VDHR No. 287-5148) constructed c. 1966. The remaining resources are single dwellings that date from the early-mid twentieth century,
including examples of an American Foursquare (VDHR No. 089-5613) and the Minimal Traditional style (VDHR Nos. 089-5617, 089-5618, and 089-5619). The 12 newly identified architectural resources within the project APE are recommended not individually eligible for the NRHP under Criteria A, B, C or D. There is no known association with important people or events. The property resource type is common, the design and workmanship undistinguished, and the materials stock. The resource does not have the potential to yield future information (please see Table 2).

<table>
<thead>
<tr>
<th>VDHR No.</th>
<th>Resource Name</th>
<th>Date</th>
<th>Eligibility Recommendation</th>
</tr>
</thead>
<tbody>
<tr>
<td>089-5610</td>
<td>Aquia Pines Camp Resort</td>
<td>c. 1975</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5611</td>
<td>Shiloh New Site Baptist Church</td>
<td>1948</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5612</td>
<td>Building, 2980 Jefferson Davis Highway</td>
<td>c. 1965</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5613</td>
<td>House, 2976 Jefferson Davis Highway</td>
<td>c. 1910</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5614</td>
<td>McDonalds</td>
<td>c. 1985</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5615</td>
<td>Shell Station</td>
<td>c. 1970</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5616</td>
<td>American Legion Post</td>
<td>c. 1946</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5617</td>
<td>House, 2 Beagle Road</td>
<td>c. 1966</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5618</td>
<td>House, 15 Iras Lane</td>
<td>c. 1960</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5619</td>
<td>House, 22 Iras Road</td>
<td>c. 1960</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5620</td>
<td>Sam’s Pizza and Subs</td>
<td>c. 1970</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>089-5621</td>
<td>Quality Inn</td>
<td>c. 1970</td>
<td>Not Eligible</td>
</tr>
<tr>
<td>287-5148</td>
<td>Water Tower</td>
<td>c. 1966</td>
<td>Not Eligible</td>
</tr>
</tbody>
</table>
Previously Recorded Archaeological Resources
As discussed in detail in the enclosed report, the vast majority of the Fredericksburg Extension Study’s APE for archaeological resources was previously intensively surveyed for archaeological resources in relation to the I-95/I-395 HOV/Bus/HOT Lanes (DHR File No. 2007-006), the Rappahannock River Crossing (DHR File No. 2014-0252), and other smaller projects. As a result of these surveys, sixteen archaeological sites previously have been recorded within the APE (Table 3). All but one (44ST0909) of those sixteen sites previously have been determined by your department not eligible for listing on the NRHP.

Table 3. Previously Identified Archaeological Resource within the APE

<table>
<thead>
<tr>
<th>DHR Site Number</th>
<th>NRHP Eligibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>44ST0309</td>
<td>DHR Staff: Not Eligible, 2009</td>
</tr>
<tr>
<td>44ST0311</td>
<td>DHR Staff: Not Eligible, 2009</td>
</tr>
<tr>
<td>44ST0610</td>
<td>DHR Staff: Not Eligible, 2003</td>
</tr>
<tr>
<td>44ST0908</td>
<td>DHR Staff: Not Eligible, 2007*</td>
</tr>
<tr>
<td>44ST0909</td>
<td>DHR Staff: Potentially Eligible, 2007*</td>
</tr>
<tr>
<td>44ST0958</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0959</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0960</td>
<td>DHR Staff: Not Eligible, 2009</td>
</tr>
<tr>
<td>44ST0962</td>
<td>DHR Staff: Not Eligible, 2009</td>
</tr>
<tr>
<td>44ST0963</td>
<td>DHR Staff: Not Eligible, 2009</td>
</tr>
<tr>
<td>44ST0964</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0965</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0966</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0967</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0969</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
<tr>
<td>44ST0971</td>
<td>DHR Staff: Not Eligible, 2008</td>
</tr>
</tbody>
</table>

*The V-CRIS records for 44ST0908 and 44ST0909 do not document a NRHP eligibility determination by DHR staff, but records on file at VDOT include a copy of DHR’s signed concurrence (dated August 2, 2007) with the determinations noted above in response to a letter from Dovetail Cultural Resources Group I, Inc. to DHR dated July 9, 2007, for the I-95/I-395 HOV/Bus/HOT Lanes Project (DHR File No. 2007-0006).

As part of the present efforts to identify archaeological historic properties within the APE for the Fredericksburg Extension project, VDOT’s consultant, CRA, re-visited site 44ST0909, a Native American temporary camp potentially dating to the Early Woodland period, to verify its location and boundaries and assess the site’s significance. Your department found the site potentially eligible for listing on the NRHP in 2007. Based on CRA’s recent findings, VDOT continues to believe that site 44ST0909 is potentially eligible for listing on the NRHP under Criterion D. The site is not eligible under Criteria A and B, and Criterion C is not applicable to the resource. Further field investigations would be necessary to definitively establish the site’s eligibility. If the site were determined significant, VDOT believes the site likely would meet the regulatory exception to the requirements of Section 4(f) approval: it likely would be important
chiefly for the information it contains, which could be retrieved through data recovery, and would have minimal value for preservation in place [23 CFR §774.13(b)(1)].

At VDOT’s request, CRA also re-visited another previously recorded site, 44ST0622, that is described in the enclosed archaeological survey report but not listed in Table 3. When archaeological fieldwork was initiated for the Fredericksburg Extension project earlier this year, the GIS component of V-CRIS showed site 44ST0622 located immediately east of the I-95 highway right of way near the north end of the project. At the time, VDOT was giving preliminary consideration to an alternative design for the Fredericksburg Extension project in this area and asked CRA to confirm the boundaries of site 44ST0622. CRA’s field and archival research ultimately indicated that site 44ST0622 had been mapped incorrectly in V-CRIS and is actually located roughly 500 feet to the southeast. The V-CRIS map location for the site has since been corrected.

Newly Identified Archaeological Resources

Comparison of the direct effects APE for the Fredericksburg Extension project to the mapped extent of previous Phase I archaeological survey efforts in V-CRIS indicated there were six discrete areas of the APE that had never been surveyed intensively. CRA conducted field survey of these areas for VDOT during May and June 2017. This survey resulted in the identification of one new archaeological site. Site 44ST1220 contains archaeological remains almost certainly associated with a mid-twentieth-century domestic property previously recorded as DHR Inventory No. 089-5426, determined not eligible for the NRHP by your department in 2014. VDOT concurs with the recommendation of our consultant that site 44ST1220 is not eligible for the NRHP under Criteria A, B, and D, and Criterion C is not applicable to the resource.

The VDOT invites the VDHR and the Stafford County Administrator to concur with our recommendations by completing the signature block below, and returning the original signature to my attention within 30 days of the receipt of this letter. Please contact Sarah at (804) 371-6710, Sarah.Clarke@VDOT.virginia.gov, if you have questions about this project.

Sincerely,

[Signature]
Sarah M. Clarke
Environmental Program Planner
Cultural Resources

Enclosures

c. Stafford County Administrator
   Scott Smizik
The Virginia Department of Historic Resources (VDHR) concurs with the Virginia Department of Transportation that:

- The Aquia Church (089-0008) remains listed on the NRHP.

- The American Battlefield Protection Program’s 2014 Potential National Register boundaries for the Chancellorsville Battlefield (088-5180) and the Battle of Fredericksburg I (111-5295) are appropriate historic property boundaries to be used in relation to this project. These boundaries lie outside of the project’s Area of Potential Effects.


- Archaeological Site 44ST1220 is not eligible for the NRHP under Criteria A, B, and D. Criterion C is not applicable to the resource.

- Archaeological Site 44ST0909 is potentially eligible for listing on the NRHP under Criterion D. The site is not eligible under Criteria A and B, and Criterion C is not applicable to the resource. If eligible, the site likely would be important chiefly for the information it contains, which could be retrieved through data recovery, and would have minimal value for preservation in place.

For VDOT Project No. 0095-969-739, P101; UPC: 110527; VDHR File No.: 2007-0006).

Julie V. Langan  
Director, Virginia Department of Historic Resources  
Virginia State Historic Preservation Officer

16 Nov 17  
Date

2007-0006
Attachment 3: Air Quality Conformity Determination
The Honorable Bridget Newton, Chairman
National Capital Region Transportation Planning Board
c/o Mr. Kanti Srikanth, Director of Transportation Planning
Metropolitan Washington Council of Governments
777 North Capital Street, NW, Suite 300
Washington, D.C. 20002-4201

Dear Chairman Newton:

RE: Air Quality Conformity Analysis of the Virginia Department of Transportation (VDOT) and Maryland Department of Transportation (MDOT) amendment to the 2016 Constrained Long-Range Plan (CLRP)

Federal Highway Administration (FHWA) coordinated the transportation air quality conformity determination submittal with the Environmental Protection Agency (EPA) and is making this air quality conformity determination.

On October 18, 2017, the Transportation Planning Board (TPB) approved a resolution for the VDOT and MDOT amendment to the 2016 CLRP, and the analysis demonstrates adherence to all mobile source emissions budgets for ground level ozone precursors Volatile Organic Compounds (VOC) and Nitrogen Oxides (NOx). On December 19, 2017, the FHWA’s District of Columbia Division received EPA’s concurrence letter regarding the review of the 1997 8-Hour Ozone, 2008 8-hour Ozone, Carbon Monoxide and 1997 Fine Particulate Matter (PM 2.5) Standards Conformity (enclosed), the EPA provided technical documentation that supports the conformity finding of the region’s 2016 CLRP Amendment. FHWA finds that the analytical results provided by the TPB to demonstrate conformity are consistent with EPA’s Transportation Conformity Rule (40 CFR Part 93), as amended.

FHWA finds that the VDOT and MDOT 2016 CLRP Amendment conforms to the region’s State Implementation Plans, and that the conformity determination has been performed in accordance with the requirements specified in the Transportation Conformity Rule (40 CFR Part 93), as amended. Any questions concerning this determination should be directed Ms. Sandra Jackson, Community Planner of the FHWA District of Columbia Division, at (202) 493-7031.
Enclosure

cc:
Kwame Arhin, FHWA Maryland Division
Ivan Rucker, FHWA Virginia Division
Edward Sundra, FHWA Virginia Division
DEC 06 2017

Mr. Joseph C. Lawson  
Division Administrator  
Federal Highway Administration  
District of Columbia Division  
1200 New Jersey Avenue, SE (E64-455)  
Washington, D.C. 20006-1103

Dear Mr. Lawson:  

The United States Environmental Protection Agency (EPA) Region III has reviewed the 2008 8-hour ozone national ambient air quality standard (NAAQS) Conformity Determination of the 2016 Constrained Long Range Plan (CLRP) for the Washington Metropolitan Region as adopted by the National Capital Region Transportation Planning Board (TPB) and submitted to EPA by the Federal Highway Administration (FHWA) on October 25, 2017. EPA has reviewed the conformity determination in accordance with the procedures and criteria of the Transportation Conformity Rule contained in 40 CFR part 93.

EPA’s review of the conformity determinations indicates that the determinations meet the requirements of the Clean Air Act and the applicable regulations promulgated under 40 CFR part 93. Enclosed, please find EPA’s detailed evaluation located in the technical support document entitled, “Technical Support Document for the Review of the 2008 8-Hour Ozone National Ambient Air Quality Standard (NAAQS) Conformity Determination for the 2016 Constrained Long Range Plan (CLRP) for the Metropolitan Washington Region.” It should be noted that in EPA’s technical support document, EPA is again deferring to the FHWA on the question of whether the CLRP is fiscally constrained. Therefore, EPA’s concurrence on the conformity determinations is predicated upon FHWA determining that the Plan is fiscally constrained.
Please feel free to call Ms. Maria A. Pino, Acting Associate Director, Office of Air Program Planning, at (215) 814-2181 or Mr. Gregory A. Becoot, at (215) 814-2036 to discuss this review.

Sincerely,

[Signature]

Cristina Fernandez, Director
Air Protection Division

Enclosure

cc: Kwame Arhin (FHWA, MD)
    Sandra Jackson (FHWA, DC)
    Ed Sundra, (FHWA, VA)
    Melissa Barlow (FTA)
Washington, D.C. 20006-1103
District of Columbia Division
FEDERAL HIGHWAY ADMINISTRATION
Ms. Sandra Jackson

Pennsylvania for Project E.C.E.
OFFICIAL BUSINESS
9680 NORTHERN AVE. P.O. 19104-2029
Region 3
ENVIRONMENTAL PROTECTION AGENCY
UNITED STATES
I. Background

The purpose of this document is to review the 2008 8-Hour Ozone NAAQS Conformity Determination of the 2016 CLRP as prepared by the Metropolitan Washington Council of Governments, National Capital Region Transportation Planning Board (TPB). The purpose is to determine whether or not the conformity determination meets the requirements of the Clean Air Act (CAA) and the applicable regulations promulgated thereunder at 40 CFR part 93. On October 25, 2017, EPA Region III received the Metropolitan Washington Region CLRP conformity determination under a cover letter dated October 24, 2017, from the District of Columbia Division of the United States Federal Highway Administration (FHWA). The conformity determination was reviewed in accordance with the procedures and criteria of the Transportation Conformity Rule contained in 40 CFR part 93, sections 93.106, 93.108, 93.110, 93.111, 93.112, 93.113(b) and (c), and 93.118.

Transportation conformity is required under section 176(c) of the CAA to ensure that federally supported highway and transit projects, and other activities are consistent with (conform to) the purpose of the state implementation plan (SIP). The CAA requires federal actions in nonattainment and maintenance areas to "conform to" the goals of SIP. This means that such actions will not cause or contribute to violations of a NAAQS; worsen the severity of an existing violation; or delay timely attainment of any NAAQS or any interim milestone. Actions involving FHWA or Federal Transit Administration (FTA) funding or approval are subject to the Transportation Conformity Rule (40 CFR part 93, subpart A). Under this rule, metropolitan planning organizations (MPOs) in nonattainment and maintenance areas coordinate with state air
quality and transportation agencies, EPA, FHWA, and FTA to demonstrate that their metropolitan transportation plans and TIPs conform to applicable SIPs. This is typically determined by showing that estimated emissions from existing and planned highway and transit systems are less than or equal to the motor vehicle emission budgets (MVEBs) contained in a SIP.

On April 15, 2004, EPA designated the Washington, DC-MD-VA Area as a moderate 8-hour nonattainment area for the 1997 ozone NAAQS. The Washington Area currently has approved MVEBs for the 1997 8-hour ozone NAAQS. EPA designated the Washington, DC-MD-VA Area as a marginal nonattainment area for the 2008 8-hour ozone NAAQS on May 21, 2012 (77 FR 30088) with an effective date of July 20, 2012. Until new mobile budgets are developed, the Washington, DC-MD-VA Area must conform to currently approved MVEBs. For the 8-hour ozone conformity analysis for ozone, under section 93.109 of the federal conformity rule, the existing 2009 Attainment Plan and 2010 Contingency Plan budgets for volatile organic compounds (VOCs) and nitrogen oxides (NOx), which EPA declared adequate on February 7, 2013, are applicable to the ozone conformity determinations. The budgets are 66.5 tons/day (tpd) of VOCs and 146.1 tpy of NOx for the 2009 Attainment Plan and 144.3 tpy of NOx for the 2010 Contingency Plan. In this case, the NOx and VOC budgets are from different plans which is acceptable because the VOC budgets were found adequate through the 2009 attainment plan and the NOx budgets were found adequate through the 2010 contingency plan.

On December 17, 2004, EPA designated the Washington, DC-MD-VA Area as a nonattainment area for 1997 annual fine particulate matter (PM2.5) NAAQS. On January 12, 2009 (74 FR 1146), EPA determined that the entire Washington Area had attained the 1997 annual PM2.5 standard, based on ambient air quality monitoring data. The District Department of the Environment (DDOE), the Maryland Department of the Environment (MDE), and the Virginia Department of Environmental Quality (VADEQ) each submitted the same redesignation request and maintenance plan to EPA on the following dates: June 3, 2013 (DDOE & VADEQ), and July 10, 2013 (MDE). On October 6, 2014 (79 FR 60081), EPA approved the maintenance plan which was developed by DC, Maryland, and Virginia which included MVEBs for years 2017 and 2025 for NOx and PM2.5. The MVEBs for 2017 are 41,709 tpy of NOx and 1,787 tpy of PM2.5. The MVEBs for 2025 are 27,400 tpy of NOx and 1,350 tpy of PM2.5. On August 24, 2016 (81 FR 58010), EPA published a final rulemaking notice revoking the 1997 annual PM2.5 NAAQS for transportation conformity purposes, effective October 24, 2016. As of October 24, 2016, the TPB no longer needs to demonstrate conformity to the 1997 annual PM2.5 NAAQS.

Currently, the Washington, DC-MD-VA Area is attaining the CO NAAQS and submitted a ten-year maintenance plan with MVEBs covering the period 1996-2007. EPA approved the maintenance plan and the associated MVEBs effective March 16, 1996 (January 30, 1996, 96 FR 1104). The Washington, DC-MD-VA Area submitted the required revised second ten-year maintenance plan with MVEBs covering maintenance of the NAAQS through March 2016. EPA approved the second 10-year maintenance plan and MVEBs on April 4, 2005 (70 FR 16938); consequently, after March 2016, the TPB no longer needs to demonstrate conformity to the CO NAAQS.
II. Review of the Submitted Modeling Utilizing the Motor Vehicle Emission Simulator (MOVES2014a)

To evaluate the submitted motor vehicle emissions inventory, it was necessary to review the supporting modeling completed using EPA's Motor Vehicle Emission Simulator (MOVES2014a). The submitted files include run specifications (RunSpecs) describing the scenario parameters, input databases containing local fleet data, and an output database containing the modeling results. The submitted RunSpecs, input databases, and output database(s) were reviewed against the EPA document: MOVES2014 Technical Guidance: Using MOVES to Prepare Emissions Inventories for State Implementation Plans and Transportation Conformity. This document provides guidance on the use of the MOVES model to develop inventories for SIPs as well as analysis of emissions for transportation conformity determinations.

EPA carefully reviewed the RunSpecs, input databases, and output database used in the analysis to ensure that it was completed consistent with the recommendations outlined in the above mentioned MOVES Technical Guidance and are appropriately representative of the modeling domain and analysis year. Table 1 presents a summary of the review of the RunSpecs and the selections made for each parameter. Table 2 presents a summary of the review of each MOVES input parameter from the submittal. Table 3 presents a summary of the review of the output and post-processing methodology.

The RunSpecs, input databases, and output database were reviewed and found to have followed the applicable EPA guidance provided in the MOVES2014 Technical Guidance: Using MOVES to Prepare Emissions Inventories for State Implementation Plans and Transportation Conformity. Additionally, sufficient documentation was provided by to support the data, decisions, and assumptions made for each parameter.

| Table 1. Review of RunSpecs for years 2025, 2030, and 2040 for the Metropolitan Washington Region |
|-----------------------------------------------|------------------------------------------------------------------------------------------|
| Domain/Scale                                  | County scale was selected – allowing for appropriate detail necessary for regulatory analysis. |
| Time Spans Panel                              | Hourly time aggregation was selected. All appropriate months, days, and hours were selected. The appropriate year was selected for the scenario being modeled. |
| Geographic Bounds                             | The appropriate county was selected for each run.                                         |
| Vehicles/Equipment                            | Gasoline, ethanol, diesel, and compressed natural gas (CNG) fuels were selected. All source types were selected. |
| Road Type                                     | All road types were selected                                                             |
| Pollutants and Processes                      | NOx, PM2.5, VOCs, and/or CO were selected. All processes were included in the analysis.   |
Table 2. Review of MOVES input databases for years 2025, 2030, and 2040 for the Metropolitan Washington Region

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Submittal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age Distribution</td>
<td>All source types were included with fractions for ages (0-30 years).</td>
</tr>
<tr>
<td>Average Speed Distribution</td>
<td>Average speed distributions were provided for all source types, for each combination of road type and hour of the day.</td>
</tr>
</tbody>
</table>
| Fuel (fuel formulation, fuel supply, fuel usage, and AVFT) | A complete fuel supply table was provided with all fuel types present in the region.  
Appropriate fuel properties were included in the fuel formulation table, including Reid Vapor Pressure (RVP), ethanol content, and sulfur levels.  
The fuel usage table was provided and described the ethanol use by E-85 capable vehicles.  
The alternative vehicles and fuels (AVFT) table was provided.  
Any and all changes to the default fuels have been sufficiently documented. |
| Meteorology Data                               | Local meteorology data (temperature and humidity) was provided for each hour of the day for each month.                                |
| Ramp Fraction                                  | Local fractions of ramp driving times were provided for restricted access roadways.                                                      |
| Road Type Distribution                         | The vehicle miles traveled (VMT) fraction for each road type was provided for each source type and road type.                         |
| Source Type Population                         | The number of vehicles of each source type was provided.                                                                                   |
| Vehicle Type VMT (includes inputs for annual VMT, daily VMT fraction, hourly VMT fraction, and monthly VMT fraction) | Annual VMT was provided for the five MOVES HPMS vehicle categories.  
Monthly VMT fractions were provided for all source types and month.  
Daily VMT fractions were provided for all days and source types.  
Hourly VMT fractions were provided for each day type and source type. |
| Hotelling                                      | The hotelling activity (auxiliary power unit (APU) use vs extended idle vs. engine off) was described for all model years.            |
| Inspection/Maintenance (I/M) Programs           | The existing I/M program was accurately described.                                                                                       |

Table 3. Review of the output database and post-processing steps for years 2025, 2030, and 2040 for the Metropolitan Washington Region

| MOVESrun table                                  | Appropriate version of MOVES was used. All calculation bundles were processed.                                                               |
| MOVES error table                               | No errors were produced in any of the runs.                                                                                                 |
| MOVESoutput                                     | The output contains emission results for all necessary source types, processes, and pollutants.                                               |
| Output processing                               | The output was appropriately summed to generate the emissions inventory. The methodology was documented.                                       |
III. EPA’s Evaluation

For MVEBs to be approvable, they must meet, at a minimum, EPA’s adequacy criteria found at 40 CFR 93.118(e)(4). EPA’s adequacy criteria are: (1) the submitted control strategy implementation plan was endorsed by the Governor or designee and was subject to a state public hearing; (2) consultation among federal, state, and local agencies occurred; full implementation plan documentation was provided to EPA; and EPA’s stated concerns, if any, were addressed before the control strategy implementation plan was submitted; (3) the MVEBs are clearly identified and precisely quantified; (4) the MVEBs, when considered together with all other emissions sources, are consistent with applicable requirements for maintenance; (5) the MVEBs are consistent with and clearly related to the emissions inventory and the control measures in the submitted control strategy implementation plan; and (6) revisions to previously submitted maintenance plans explain and document any changes to previously submitted budgets and control measures; impacts on point and area source emissions; any changes to established safety margins; and reasons for the changes (including the basis for any changes related to emission factors or estimates of vehicle miles traveled).

For all areas where transportation conformity applies, Table 1 – Conformity Criteria, found in 40 CFR 93.109(b) lists the conformity criteria that apply for transportation plans, TIPs, and projects in 40 CFR 93.110 through 93.119. A transportation plan or TIP conformity determination must include a regional emissions analysis that meets the requirements of 40 CFR 93.122. This regional emissions analysis must use latest planning assumptions (40 CFR 93.110); use the latest emissions model (40 CFR 93.111); and pass the appropriate conformity test – the budget test and/or the interim emissions test(s) (40 CFR 93.118 and 93.119). In addition, other requirements must be met and documented in the transportation plan and TIP conformity determination including interagency consultation and public participation (40 CFR 93.112); and timely implementation of Transportation Control Measures (TCMs) in approved SIPs (40 CFR 93.113). Table 4 below demonstrates how the document prepared by the TPB satisfies the requirements for conformity determinations.

<table>
<thead>
<tr>
<th>SECTION OF 40 CFR PART 93</th>
<th>CRITERIA</th>
<th>Y/N</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.106(a)(1)</td>
<td>Are the horizon years correct?</td>
<td>Y</td>
<td>The years chosen for the 2008 8-hour ozone conformity analyses are appropriate horizon years based on 40 CFR 93.118 (Criteria and procedures: Motor vehicle emissions budget).</td>
</tr>
<tr>
<td>93.106(a)(2)(i)</td>
<td>Does the plan quantify and document the demographic and employment factors influencing transportation demand?</td>
<td>Y</td>
<td>The conformity determination summarized: population, employment, and household data for the Metropolitan Washington, DC area which was utilized in this analysis. These forecasts were based upon the Cooperative Forecasts Round 9.0.</td>
</tr>
</tbody>
</table>

Table 4. EPA’s Evaluation of the Conformity Determination of the Plan Submitted by the District of Columbia Division Office of the Federal Highway Administration on Behalf of TPB to EPA on October 25, 2017.
<table>
<thead>
<tr>
<th>Rule Reference</th>
<th>Description</th>
<th>Answer</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>93.106(a)(2)(ii)</td>
<td>Is the highway and transit system adequately described in terms of the regionally significant additions or modifications to the existing transportation network which the transportation plan envisions to be operational in the horizon years?</td>
<td>Y</td>
<td>Appendix A of the Air Quality Conformity Analysis document includes regionally significant additions or modification projects. The project list includes transit, highway, and high occupancy vehicle (HOV) high occupancy toll (HOT) projects.</td>
</tr>
<tr>
<td>93.108</td>
<td>Is the transportation plan fiscally constrained?</td>
<td>Y</td>
<td>EPA is deferring to TPB and the State of Maryland, the Commonwealth of Virginia, and the District of Columbia transportation agencies who have determined that the plan is fiscally constrained.</td>
</tr>
<tr>
<td>93.110</td>
<td>Is the conformity determination based upon the latest planning assumptions?</td>
<td>Y</td>
<td>(a &amp; b) The latest planning assumptions have been utilized. The latest planning assumptions include the Cooperative Forecasts Round 9.0, which includes forecasts for population and employment data. The latest travel time changes were used in the travel demand model version 2.3.66 or latest.</td>
</tr>
<tr>
<td></td>
<td>(a) Is the conformity determination, with respect to all other applicable criteria in 40 CFR §§93.111 - 93.119, based upon the most recent planning assumptions in force at the time of the conformity determination?</td>
<td>Y</td>
<td>(c) Charges made by each transit provider as well as updated charges were used for future analyses and are located in Appendix A of the conformity document.</td>
</tr>
<tr>
<td></td>
<td>(b) Are the assumptions derived from the estimates of current and future population, employment, travel, and congestion most recently developed by the MPO or other designated agency and is the conformity based upon the latest assumptions about current and future background concentrations?</td>
<td>Y</td>
<td>(d) Reasonable assumptions are discussed in Appendix A of the conformity determination document.</td>
</tr>
<tr>
<td></td>
<td>(c) Are any changes in the transit operating policies (including fares and service levels) and assumed transit ridership discussed in the determination?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(d) Does the conformity determination include reasonable assumptions about transit service and increases in transit fares and road and bridge tolls over time?</td>
<td>Y</td>
<td></td>
</tr>
<tr>
<td>(e) Does the conformity determination use the latest existing information regarding the effectiveness of Transportation Control Measures (TCMs) and other implementation plan measures which have already been implemented?</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(f) Are key assumptions specified and included in the draft documents and supporting materials used for the interagency and public consultation required by 40 CFR §93.105?</td>
<td>Y</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 93.111 Is the conformity determination based upon the latest emissions model? | Y |
| 93.112 Did the MPO make the conformity determination according to the consultation procedures of the conformity rule or the state's conformity SIP? | Y |

Consultation procedures were followed in accordance with the TPB consultation procedures. These procedures are based on the procedures of the state conformity SIP.

**Interagency Consultation** The TPB has consulted with all appropriate agencies. This includes the District of Columbia Department of the Environment, Maryland Department of the Environment, Maryland Department of Transportation, Maryland Office of Planning, Virginia Department of Environmental Quality, Virginia Department of Transportation, Federal Highway Administration, EPA, and county representatives of the counties of the Metropolitan Washington, DC area.

**Public Consultation** The TPB has provided opportunities for public comment on the Conformity Determination. On September 14, 2017, the TPB released for public comment for 30 days, the draft air conformity analysis for the TIP and CLRP.
IV. CONCLUSION

Pursuant to FHWA’s October 25, 2017 request, EPA has reviewed the 2008 8-hour ozone NAAQS Conformity Determination for the 2016 CLRP prepared by the Metropolitan Washington Council of Governments, National Capital Region TPB for the Washington DC-MD-VA Area. EPA has determined that the 2016 CLRP meet the requirements of the CAA and the applicable regulations promulgated at 40 CFR part 93 as long as FHWA determines that the plan demonstrates fiscal constraint.