

Virginia Division

June 11, 2021

400 North 8th Street, Suite 750 Richmond, Virginia 23219-4825 Phone: 804-775-3320 Fax: 804-775-3356 http://www.fhwa.dot.gov/vadiv

Susan H. Keen, P.E. State Location and Design Engineer Virginia Department of Transportation 1401 East Broad Street Richmond, Virginia 23219

Dear Ms. Keen:

The Federal Highway Administration (FHWA) received Virginia Department of Transportation's attached letter, dated May 5, 2021 This letter requested approval for the addition of new ramps to the existing interstate system and modification of existing interchange ramps along the Interstate 495 corridor between Route 267 (Dulles Toll Road) and the George Washington Memorial Parkway. FHWA approves the interstate access modifications.

We have reviewed the Interchange Justification Report and have determined that the proposed modifications are acceptable based on safety, operations, and engineering considerations. Our approval is subject to reevaluation if significant changes occur in the final design or if the construction is delayed (as specified in 23 CFR 771.129). If you have questions, please contact Tarsem Lal, P.E. at 202-493-7036 or <u>Tarsem.Lal@dot.gov</u>.

Sincerely,

Thomas Nelson, Jr., P.E. Division Administrator

Attachments: FHWA Headquarters Concurrence Virginia Department of Transportation Request Letter



Memorandum

Subject: <u>ACTION</u>: Virginia, Interchange Justification Report, I-495 Express Lanes Northern Extension, Fairfax County

From: Thomas D. Everett THOMAS D Digitall Executive Director EVERETT Date: 2 15:25:2

To: Thomas L. Nelson, Jr., P.E. Division Administrator Richmond, VA Digitally signed by THOMAS D EVERETT Date: 2021.06.09 15:25:29 -04'00'

In Reply Refer To: HICP-10

Date:

The Interchange Justification Report (IJR) dated April 2021 regarding proposed modifications to the I-495 at Route 267 and I-495 at the George Washington Memorial Parkway interchanges in the McLean area of Fairfax County was reviewed and the proposed modifications are acceptable based on safety, operations and engineering considerations.

Final approval of this access modification may be given provided that the scope and design of the selected alternative in the approved final environmental document is consistent with the Interstate Access Justification Report dated April 2021.

This approval is subject to reevaluation if significant changes occur in the final design or if the construction is delayed (as specified in 23 CFR 771.129).

Should you have any questions, please contact Clayton Wellman at 202-366-4658.



COMMONWEALTH of VIRGINIA

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

Stephen Brich Commissioner

May 5, 2021

MEMORANDUM

REQUEST FOR MODIFIED ACCESS TO INTERSTATE 495

From: Susan H. Keen, P.E. State Location & Design Engineer

To: Mr. Thomas L. Nelson Jr., P.E. Division Administrator, FHWA

Attn: Mr. Tarsem Lal, P.E. Specially Designated Project Oversight Manager, FHWA

Interstate 495 Express Lanes Northern Extension (NEXT) Project State Project #: 495-029-419; UPC 113414 Fairfax County

Mr. Nelson:

Attached is an Interchange Justification Report (IJR) requesting the addition of new ramps to the existing interstate system and modification of the existing interchange ramps along the Interstate 495 corridor between Route 267 (Dulles Toll Road) and the George Washington Memorial Parkway (GWMP).

The purpose of this project is to address existing and future transportation needs including:

- Reducing congestion;
- Providing additional travel choices; and
- Improving travel reliability.

The Preferred Alternative for this corridor includes the following improvements:

- Extending the existing four I-495 Express Lanes from their current terminus between the I-495 / Route 267 interchange and the Old Dominion Drive overpass north approximately 1.6 miles to the GWMP interchange;
- Additional GP auxiliary lanes between the Route 267 and Route 193 interchanges;

Mr. Thomas L. Nelson, Jr., P.E. Project #: 0495-029-419; UPC 113414 Fairfax County Page 2 of 3

- Additional direct access to and from the Express Lanes network;
- Improvements to I-495 interchanges between Route 123 and GWMP; and
- Reconstruction of I-495 overpasses in the study area.

The traffic analysis included in the I-495 NEXT IJR for the design year 2045 was based on the Preferred Alternative that was identified in the EA and will be considered for approval by FHWA in the NEPA decision document. The analysis showed that in 2045, the project improvements will move up to 7,600 more people per hour in both directions combined – compared with the 2045 No-Build scenario – and will better accommodate future travel demand. By increasing the person-carrying capacity of I-495 and improving trip time and travel reliability in both the Express Lanes and the regular lanes, drivers will have less incentive to use neighborhood cut-through routes, with a 12% reduction in travel demand on Georgetown Pike and 49% reduction in intersection delays along that corridor in 2045. GP lanes travel time savings would range between four to six minutes in the AM Peak Period and 4.5 to 18 minutes in the PM Peak Period.

For the interim year 2025, the traffic analysis was based on the Public Hearing Conceptual Plans for Phase 1. Results from the operational analysis indicate that future traffic demand can be served by the overall corridor capacity for the 2025 interim year, and that additional capacity associated with future auxiliary lanes and ramps will not be required immediately, but will be needed by the 2045 design horizon. The analysis results showed that in 2025, the project improvements will move up to 5,400 more people per hour in both directions combined – combined with the No-Build scenario – and will better accommodate future travel demand. Demand and cut-through on Georgetown Pike would decrease by 14%, with a resulting 44% reduction in intersection delays along that corridor. Travel time savings in 2025 would range between three to four minutes in the AM Peak Period and four to eight minutes in the PM Peak Period.

The safety analysis performed for the I-495 NEXT IJR demonstrated that the project's safety and operational improvements are anticipated to reduce crashes by 20% in 2045 across the study area, including GP and Express Lanes, interchange ramps, the DTR/DAAR, and adjacent arterial intersections. The most significant reductions in crashes are predicted along the I-495 GP lanes in the area of the Georgetown Pike and GWMP interchanges due to reductions in congestion, shifts in traffic demand, and geometric improvements. New direct access ramps to the Express Lanes at the DTR and the GWMP would increase safety, as compared with the existing I-495 configuration, which currently requires drivers to potentially cross four lanes to access the

Express Lanes entrances / exit points. The project will also improve factors that would make the corridor safer, including roadway features like acceleration and deceleration lanes along the GP lanes, and adding a shoulder in the northbound direction of the GP lanes during peak periods. These improvements are expected to reduce rear-end and side-swipe collisions.

At the request of the Fairfax County Board of Supervisors, VDOT has been conducting an independent supplemental operational analysis of nearby intersections in the Tysons area – with

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and without the I-495 NEXT project – in collaboration with the Fairfax County Department of Transportation and their ongoing planning efforts at these locations. VDOT will continue to work with Fairfax County to analyze future improvements in the Tysons area as these studies advance, and to discern the relationship of impacts between I-495 NEXT and the potential intersection improvements under study by Fairfax County. Results are documented in a separate study memorandum independent of the IJR.

The IJR has been reviewed/coordinated with the FHWA Specially Designated Project Oversight Manager, Mr. Tarsem Lal, P.E.

VDOT staff supports this project and looks forward to your concurrence for this Interchange Justification Report. If you have any questions or comments, please contact Theron Knouse, P.E., at 804-371-2792.

Sincerely,

Susan H. Keen, P.E. State Location & Design Engineer