DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FINDING OF NO SIGNIFICANT IMPACT (FONSI)

Location

Dulles International Airport (IAD)
Fairfax and Loudoun Counties, Virginia

Proposed Federal Action

The proposed federal action is associated with the Virginia Department of Transportation (VDOT) request for easement acquisition from Washington Dulles International Airport (IAD) for the proposed widening of U.S. Route 28. The easement acquisition will require modifications to the existing Airport Layout Plan (ALP).

Project Description

The proposed project is to construct a segment of Phase III of the Route 28 Corridor Improvement Program (Phase III-Areas 4 and 5). The improvements that make up this phase include widening the existing Route 28 from a six (6) lane freeway, to an eight (8) lane freeway starting 0.38 miles north of the intersection of Route 50 and Route 28 and ending 0.121 miles north of the intersection of Sterling Boulevard and Route 28. Approximately 3.5 miles of the project is located adjacent to, or within the IAD property.

Adjustments to the current easement for Route 28 are anticipated to complete Phase III-Areas 4 and 5. The project will require 4.948 additional acres of easement from IAD to accommodate the roadway widening. The proposed widening project is being designed to minimize additional easement requirements and maximize the existing easements by widening to the center of the roadway wherever possible. The majority of the widening will occur within existing roadway medians, shoulders and/or cleared zones.

Purpose and Need

The purpose of the proposed project is to improve traffic flow in the area and to alleviate the traffic delays between Route 50 and Old Ox Road along the Route 28 corridor by widening Route 28 from three (3) through lanes each direction to four (4) through lanes each direction within the areas delineated as Area 4 and 5. Based on the growth in the corridor, traffic volumes on the section of roadway adjacent to the airport has reached the capacity of the six (6) lane section during peak periods. Traffic counts completed on Route 28 within the project limits in 2016 identified an average daily traffic (ADT) volume as high as 143,000. Roughly ten (10) percent of the ADT occurs during the peak period which translates to about 2,500 vehicles per hour (vph) per lane. The Highway Capacity Manual states that maximum capacity of a basic freeway lane (assuming passenger cars only) for free-flow speeds similar to the Route 28 corridor is between 2,300 and 2,350 vph. This value decreases with the addition of trucks, which account for approximately 4 percent of the traffic volume on Route 28.

Alternatives

Three alternatives were considered for the Proposed Action. The alternatives were evaluated to determine if they were reasonable and feasible.

Alternative #1 (No Action): The No Action Alternative would not require construction or additional transportation easements from IAD. This alternative would not fulfill the stated purpose and need to improve traffic flow along Route 28 and alleviate traffic delays by widening the existing roadway from six (6) to eight (8) lanes. Additionally, the failing Level of Service (LOS) of E is anticipated to reach a level of F in thirty (30) years. The decreasing LOS will result in potential adverse effects to Airport patrons due to increased traffic and traffic delays in general, which will consequently increase air quality impacts as the project is located in a moderate nonattainment zone for 8 hour Ozone and a nonattainment zone for $PM_{2.5}$.

Alternative #2 (Outside Widening): Alternative #2 proposes widening only on the outside of the existing Route 28 traffic lanes. Widening on the western side of Route 28 would increase the amount of easement needed from IAD for construction and would also involve more impacts to wooded areas, wetlands, utilities, and driver safety as the roadway would consequently have non-standard geometry. Widening on the eastern side of Route 28 is restricted due to the proximity of the roadway to the National Register of Historic Places listed Sully Historic Site.

Alternative #3 (Inside Widening): Alternative #3 is the Preferred Alternative for the Proposed Action as discussed above in the Project Description. This alternative is designed to minimize additional easement requirements and maximizing the existing easements by widening within the existing paved median of Route 28 to the maximum extent practicable, and where widening in the center is not feasible, widening along the outside shoulder of the existing roadway. The roadway and all associated infrastructure will remain within the existing VDOT easement adjacent to the Sully Historic; no additional encroachments onto the Sully Historic Site are proposed.

Discussion

The attached Short Environmental Assessment Form (EA) addresses the effect of the Proposed Action on the quality of the human and natural environment and is made a part of this Finding. The following impact analysis highlights the more thorough analysis presented in the document.

Air Quality

Fairfax and Loudoun Counties are currently designated as a moderate nonattainment area for 8 hour Ozone and a nonattainment area $PM_{2.5}$. The area is in attainment for all other National Ambient Air Quality Standards (NAAQS) pollutants. The Proposed Action is not intended to increase traffic, but to reduce congestion, stop and go traffic, and improve the LOS along the Route 28 corridor. Emissions from vehicles utilizing this roadway will not increase significantly as a result of the project; therefore, any increases from the Proposed Action would not exceed *de minimis* emission levels. Additionally, the Proposed Action fits a category of projects "That Are Not an Air Quality Concern" under the Transportation Conformity Final Rule for $PM_{2.5}$ emissions, and would not require a $PM_{2.5}$ hot-spot analysis.

The project will result in emissions during construction, however as these are temporary in nature. The Proposed Action is included in the County Transportation Improvement Plan (TIP) and State Six-Year

Improvement Program (SYP). Inclusion of the Proposed Action in the region's TIP and the SYP indicates compliance/conformity with applicable air quality standards. Air quality impacts during construction are therefore assumed to conform with air quality requirements in the region.

Biological Resources:

The Proposed Action is not anticipated to impact protected species or impact critical habitat. Based on the U.S. Fish and Wildlife Service (USFWS) Information, Planning, and Coordination (IPaC) database, one Federal-threatened species, the northern long-eared bat (*Myotis septentrionalis*) and one Federally-endangered species, the Rusty Patch Bumble Bee (*Bombus affinis*), has the potential to use habitat within the Project area. Potential impacts to these species and their associated habitats are not anticipated. Based on the USFWS final 4(d) rule and guidance for the northern long-eared bat, the project submitted a self-certification letter, stating that the project is "relying on the findings of the January 5, 2016 1/5/2016 Programmatic Biological Opinion for Final 4(d) Rule on the Northern Long Eared Bat and Activities Exempted from Take Prohibitions to fulfill our project specific Section 7 responsibilities". No documented maternity roost trees are located within 150 feet of the Proposed Action and no documented hibernacula are located within 0.25 mile of the Proposed Action; therefore, tree removal activities are not prohibited and time of year restrictions (TOYR) are not required for the proposed tree removal activities. It is anticipated that the project will remove approximately five (5) acres of trees. No known colonies of the Rusty patched bumble bee have been found in Loudoun or Fairfax Counties and as the project is within existing transportation corridors, the project is not likely to impact the bumble bee.

The Virginia Department of Conservation and Recreation (DCR) identified one Stream Conservation Unit (SCU) within the project area. The SCU is for Cub Run and the protected species in this SCU is the state listed wood turtle (*Glyptemys insculpta*). To minimize adverse impacts, 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 wood turtle, DCR recommends coordination with Virginia's regulator authority for the management and protection of this species, the Virginia Department of Game and Inland Fisheries (DGIF), to ensure compliance with the Virginia Endangered Species Act. DGIF TOYR for instream work (October 1 to March 31), worker education on the identification of Wood Turtles, and a relocation plan, should they be found during construction, will be implemented for the Proposed Action. Per the DGIF database, the State listed Endangered little brown bat (*Myotis lucifugus lucifugus*) has been observed within the project limits and the State listed Endangered tri-colored bat (*Perimyotis subflavus*) has the potential to occur on the project site. Coordination with the DGIF, the USFWS and other appropriate agencies has been completed as part of the Joint Permit Application (JPA) process through the Corps of Engineers and DEQ. The project will adhere to the recommendations set forth by the DCR.

Coastal Resources

The project is consistent with the Virginia Coastal Zone Management Plan. The Project received a State Programmatic General Permit (17-SPGP-01). The SPGP originates from the U.S. Army Corps of Engineers (USACE) Nationwide Permit #14 which, under agreement with the USACE, is issued by the Virginia Department of Environmental Quality (VDEQ) and for which the VDEQ has provided Coastal Zone Management Act (CZMA) consistency certification. A project that has received this SPGP has been determined by the USACE and the VDEQ to comply with the CZMA.

Section 4(f) Resources

Dulles Airport Historic District

All of the proposed easements for the road widening will occur outside of the Dulles Airport Historic District. The closest potential impact area would be to the Dulles Access Road, which is included with the historic district boundary. The widening is proposed to occur within the existing easement of Route 28 where possible with the addition of minor transportation easements north of the Dulles Greenway interchange where the widening cannot occur within the existing easement. Because the widening around the Dulles Access Road is within the existing transportation easement, it is not anticipated to impact any of the contributing elements to the historic district.

Sully Historic Site

The Sully Historic Site is located at the southern end of the Proposed Action. This segment of the project is designed to widen within the existing Virginia Department of Transportation easement. This location was chosen so that there would be no further encroachment onto the historic site. No horizontal changes in the roadway configuration are proposed; therefore, substantial changes to the Sully Historic Site viewshed are not anticipated.

A noise analysis was conducted for the Sully Historic Site. The analysis indicates that the anticipated noise increases are predicted to be between one (1) and (3) three decibels (dBA), through study year 2031, for all of 32 receptors evaluated throughout the historic site. Eleven (11) of the receptors currently approach or exceed 67 dBA which, according to the State Noise Abatement Policy, is the acceptable upper limit of acceptable noise levels for Section 4(f) sites. Through 2031, it is predicted that sixteen (16) of the receptors (five (5) additional receptors) will approach or exceed acceptable noise levels. In accordance with 23 CFR 774.15(f) a constructive Section 4(f) use does not occur when the impact of projected traffic noise levels of the proposed highway project on a noise-sensitive activity do not exceed the Federal Highway Administration (FHWA) noise abatement criteria or the increase in the projected noise levels of the proposed project is barely perceptible (3 dBA or less).

Dulles Corner Park

The Fairfax County Department of Planning and Zoning identified a potential impact to the County owned Dulles Corner Park. The widening near the Park is occurring within the existing easements located entirely on airport property; therefore, no constructive use of Dulles Corner Park is anticipated.

Historic, Architectural, Archaeological, and Cultural Resources

The Sully Historic Site is listed on the National Register of Historic Places (National Register); additionally, the Washington Dulles Airport Historic District is eligible for listing on the National Register. The Proposed Action was designed to only widen on the western side of Route 28 on the opposite side of the existing roadway median from the Sully Historic Site. This was chosen so there would be no further encroachment onto the historic site. All of the proposed easements for the road widening will occur outside of the Dulles Airport Historic District. Because the widening around the Dulles Access Road is within the existing transportation easement, it is not anticipated to impact any of the contributing elements to the historic district. There should be no increase in visual impacts associated with the construction of the additional lanes to either the Sully Historic Site or the Dulles Airport Historic District.

Noise and Noise Compatible Land Use

Sully Historic Site

The noise levels at the historic site ranges between 59 dB and 73 dB. This noise level is a combination of both roadway vehicular and airport traffic. In the predicted 2031 noise levels, there are 16 receptors which are defined as impacted (66 dB or greater); these range from impacts of 66 dB to 74 dB. The projected noise is predicted to increase between 1 and 3 dBA at each of the receptors. The Proposed Action considered a noise wall and noise berm as potential measures to offset noise impacts. It was anticipated that the required wall height would be 2,014 feet long and 15 feet high to provide adequate noise reduction. The proposed berm required a width of 90 feet and a height of 15 feet to provide adequate noise reduction at a 3:1 slope. Both the noise wall and noise berm would impact the historic viewshed of the Sully Historic Site resulting in a potential adverse effect and 4(f) impact to the site; therefore, both mitigation measures were removed from consideration.

Dulles Corner Park and Wasser Terrace Apartments

The noise levels at the Dulles Corner Park and Wasser Terrace Apartments range from 61 dB to 67 dB. This noise level is a combination of both roadway vehicular and airport traffic. In the predicted 2031 noise levels, there are 8 receptors which are defined as impacted (66 dB or greater); these range from impacts of 66 dB to 68 dB. Fairfax County has issued a building permit for a multilevel commercial parking garage between these sites and Route 28. Upon completion of this structure, it will break the line of sight between the noise-impacted sites and the highway, likely resulting in future predicted noise levels which will not exceed the 66 dB; therefore, eliminating the need for noise abatement at this location.

Temporary noise impacts will occur during construction. These impacts will be temporary in nature during the anticipated 18-month construction schedule. The project will follow Best Management Practices (BMPs) and noise ordinances to reduce excess noise during construction including FHWA approved construction noise limits outlined in Virginia Depart of Transportation (VDOT) 2007 Road and Bridge Specification Section 107.16(b.3), limiting idle time for vehicles on site, making sure that all vehicles are maintained, limiting back up alarms and door slamming to the maximum extent practical, etc.

Water Resources

Wetlands

The Proposed Action will permanently impact 0.18 acres of wetlands and temporarily impact 0.04 acre of several small wetland areas. The Proposed Action will also permanently impact 0.06 acre (388 linear feet) of stream channel and temporarily impact 0.01 acre (25 linear feet) of stream channel. The impacts received an updated preliminary jurisdictional determination from USACE on January 17, 2017 (NAO-2011-2282). The project will fulfill mitigation requirements through the use of mitigation bank(s) within or in adjacent watershed(s). Mitigation for unavoidable permanent impacts will require the purchase of 0.18 wetland credits and 191 stream credits. Wetland and stream impacts have all been permitted through Section 404/401 Clean Water Act permitting. The Proposed Action has received a 17-SPGP-01 from the USACE and a VWP general permit WP3 from the VDEQ. Temporarily impacted wetlands will be restored to their original contour and seeded with appropriate wetland seed mix to ensure there will be no long term impacts to wetlands.

Floodplains

All of the feasible build alternatives involve encroachment into the 100-year floodplain. Hydrologic modeling was conducted for the current conditions and the Proposed Action. Based on the modeling the encroachments in the floodplains will not be considered "significant" according to DOT Order 5650.2. The rise in the floodplain elevation for Indian Creek is 0.08 foot (0.96 inch). The rise in the floodplain elevation for an unnamed tributary of Horsepen Run is 0.04 foot (0.48 inch). The rise in floodplain elevation for an unnamed tributary of Dead Run is 0.05 foot (0.60 inch). The very minimal rise in the floodplain for these streams will not cause a noticeable change in the elevation of the floodplain nor will it cause any significant encroachments. The rise in the floodplain elevation for an unnamed tributary of Indian Creek is 0.14 foot (1.44 inch) and will be contained entirely within an existing stormwater management facility.

To mitigate for the minor encroachments within the floodplains, strict erosion and sediment controls will be implemented to, at least the minimum standards set by the VDEQ or stricter standards as appropriate, and following the approved standards of VDOT. The culvert extensions required at each of the four crossings discussed above have been designed to allow for adequate flow downstream. Stormwater Management Facilities and best management practices are being designed to minimize the impacts from the increased impervious surfaces associated with the proposed widening.

Surface Waters

During construction there is a potential for minor temporary impacts to water quality primarily during storm events. The proposed project will be designed in accordance with the latest versions of the Virginia Erosion and Sedimentation Handbook, the MWAA Design Manual, as well as the specified VDOT standards. All of these specifications require erosion and sedimentation (E&S) control plans and that these E&S measures are implemented during construction.

The project will require a Virginia Stormwater Management Program (VSMP) Permit, which is Virginia's version of the National Pollutant Discharge Elimination System (NPDES) Permits for land disturbance. This permit requires the completion of a Stormwater Pollution Prevention Plan (SWPPP), the implementation of spill prevention control and appropriate countermeasures, the implementation of erosion and sedimentation controls, and regular inspections of the controls. The Proposed Action will follow the II-C criteria set by the VDEQ to treat stormwater management for the new impervious surfaces for the project. A combination of bioretention basins, swales, existing stormwater management retrofits, offsite nutrient credits, and basins will be utilized to treat the required percentage of stormwater for the project. The Proposed Action will also utilize Low Impact Development (LID) techniques as much as possible in order to reduce stormwater runoff pollution and facilitate infiltration at the source.

Other Impact Categories

Additional categories addressed in the EA include, but are not limited to, climate, farmlands, hazardous materials, solid waste and pollution prevention, land use, natural resources and energy supply, socioeconomics, environmental justice, children's health and safety risks, and visual effects. It is the FAA's finding that the Proposed Action will not have any significant effect on any of the addressed categories within the EA.

Mitigation Measures/Conditions of Approval

The FAA is conditioning approval of the Proposed Action upon implementation of the measures outlined below.

Best Management Practices (BMPs) shall be implemented during construction to minimize erosion and sediment transport into surface waters.

Registration for coverage under the General Permit for Discharges of Stormwater from Construction Activities (VAR10) is required for projects involving land disturbing activities equal to, or greater than, one acre, as well as development of a project-specific SWPPP. The SWPPP must be developed in accordance with the VSMP permit regulations.

A project-specific erosion and sediment control (ESC) plan must be completed, and approved by the County, prior to any land disturbing activities equal to or greater than 10,000 square feet. The ESC plan must be prepared in accordance with the Virginia Erosion and Sediment Control Law (Virginia Code §62. 1-44. 15 et seq.) and Regulations (9VAC25-840-30 et seq.). In addition, a project-specific stormwater management (SWM) plan may be required prior to beginning land disturbing activities. If required, the SWM plan must be prepared in accordance with the Virginia Stormwater Management Law (Virginia Code 62. 1-44. 15 et seq.) and Regulations (9VAC25-870-54 et seq.).

All potential wetland mitigation must comply with USACE-USEPA Compensatory Mitigation for Losses of Aquatic Resources (33 CFR 332/40 CFR 230). Permanent impacts to wetlands will require the purchase of 0.18 wetland credits and permanent impacts to streams will require the purchase of 191 stream credits.

Implementation of DGIF time of year restrictions for instream work (October 1 to March 31), worker education on the identification of Wood Turtles, and development of a relocation plan, should Wood Turtles be found during construction.

Fugitive dust must be kept to a minimum by using control methods outlined in 9VAC5-50-60 et seq. of the Regulations for the Control and Abatement of Air Pollution.

All required permits and approved plans for the Proposed Action must be obtained prior to construction

Construction activities must also be conducted in accordance with the provisions set forth in applicable permits.

Public Involvement

A public notice was published in The Washington Post on July 24, 2017. Copies of the draft EA were made available for the public to review at the Centreville Regional Library (14200 St. Germain Dr. Centreville, VA), Chantilly Regional Library (4000 Stringfellow Rd. Chantilly, VA), and Fairfax City Regional Library (10360 North Street, Fairfax, VA). The draft EA was also made available electronically at www.28freeway.com. The thirty (30) day review period ended on August 24, 2017.

No comments were received during the thirty (30) day review period for the draft EA.

Conclusion and Approval

I have carefully and thoroughly considered the facts contained in the attached EA. Based on that information, I find the proposed Federal action is consistent with existing national environmental policies and objectives of Section 101(a) of the National Environmental Policy Act of 1969 (NEPA) and other applicable environmental requirements. I also find the proposed Federal action will not significantly affect the quality of the human environment or include any condition requiring any consultation pursuant to section 102(2)(C) of NEPA. As a result, FAA will not prepare an EIS for this action.

Recommended: _____ 9/06/2017

Susan Stafford — Date
Environmental Specialist, Beckley AFO

Approved: _____ 9/6/17

Matthew DiGiulian — Date
Manager, Beckley AFO

Disapproved: _____ _____

Matthew DiGuilian — Date
Manager, Beckley AFO