Air Report



Project Information

Project Name: RTE 7 - WIDEN TO 6 LANES

Project Number: 0007-029-128, B610, C502, P102, R202 **UPC:** 52328

Route Number: 7

Project Limit - From: Reston Avenue To: West Approach of Bridge over Dulles Toll Road

District City/County Residency

Northern Virginia Fairfax Fairfax

IPM Project Description: RTE 7 - WIDEN TO 6 LANES - PE ONLY

Air Quality: Yes

Additional Project

Description:

The proposed roadway will provide an additional lane on each side of the existing roadway (the additional lane will be on the median side where possible) for a total of six, 12' lanes with curb and gutter, divided with a 16' raised grass median, 12' turn lanes at intersections, and a 10' multipurpose asphalt trail on each side. The project length is 6.9 miles. Service drives will be constructed as needed for access to driveways and to complete connections. Bus shelters and pullouts will be considered in the design. Alternative intersection design will be pursued at some of the intersections to improve intersection operation. The existing vertical profiles of westbound and eastbound Route 7 will be held where possible to reduce impacts to surrounding properties. A bridge is proposed at the Difficult Run major stream crossing. Storm water Management will be provided due to the increase in impervious area.

Funding Source: State

PPTA/LAP

Locally Administered? PPTA?

Traffic Data

Design Year: 2033 **Design Year Traffic ADT:**

Existing Year: Existing Year Traffic ADT:

Project Opening Year:



TASK INFORMATION				
Task/Subtask	PED	AED	Assigned To	
Air Determination	07/15/2011	07/14/2011	Voigt, Christopher G.	
Air Study	04/30/2013	11/19/2012	Voigt, Christopher G.	

I. Carbon Monoxide

This project is located in: A Carbon Monoxide Attainment Area

CO Microscale Analysis Required for NEPA? No

• This project qualifies for a Programmatic Categorical Exclusion or has been identified as being exempt from a CO air quality analysis per the Transportation Conformity Rule (40 CFR Part 93), and therefore does not require a project-level CO air quality analysis per VDOT's Project-Level Carbon Monoxide Air Quality Studies Agreement with FHWA dated February 27, 2009.

The project is identified as being exempt from the requirement to determine conformity according to the federal transportation conformity rule and/or qualifies for a Programmatic Categorical Exclusion (PCE) according to the PCE Agreement in effect between the Federal Highway Administration and the Virginia Department of Transportation. Accordingly, it is concluded that the project would not significantly impact air quality and would not cause or contribute to a new violation, increase the frequency or severity of an existing violation, or delay timely attainment of any National Ambient Air Quality Standard.

Comments: Exempt under 40 CFR 93.126, Safety - Projects that correct, improve, or eliminate a hazardous location or feature. The project purpose on IPM (accessed 11/19/2012) includes safety. A safety study (also posted on IPM) dated September 14, 2012 and entitled "Extended Executive Summary, Phase I, Safety Performance Assessment for Virginia Department of Transportation State Route 7 Widening Project" documents safety issues to be addressed in the project design and notes in its general findings (p.5-1) that "[t]he impact of crashes on the study corridor, measured in fatalities, injuries and societal costs are high."



II. Ozone

This project is located in: An 8-hour Ozone Nonattainment Area

- This project is one of a class of projects that is exempt from regional emission requirements under conformity. This exempt category includes certain safety and neutral 'de minimis' projects whose air quality effects would not be detected by the regional emissions analysis for the transportation plans and programs (40CFR 93.126 & 127).
- Federal conformity requirements apply since the project is located, at least in part, in an air quality nonattainment or maintenance area. Accordingly, there must be a currently conforming transportation plan and program at the time of project approval, and the project must come from a conforming plan and program (or otherwise meet criteria specified in 40 CFR 93.109(b)).

Comments: Exempt as noted above.

This project is located in a VOC/NOx Emission Control Area. All reasonable precautions should be taken to limit VOCs and NOx emissions. Restrictions and prohibitions may apply to open burning, fugitive dust and the use of cutback asphalt, particularly during the months of April through October. Refer to DEQ's Open Burning Regulation (9 VAC 5-130-10 et seq.); Cutback Asphalt Regulation (9 VAC 5-40-5490 et seq.); and Fugitive Dust Regulation (9 VAC 5-50-60 et seq.) for requirements.

III. Particulate Matter

This project is located in: A PM2.5 Nonattainment Area

- This project is one of a class of projects that is exempt from regional emission requirements under conformity. This exempt category includes certain safety and neutral 'de minimis' projects whose air quality effects would not be detected by the regional emissions analysis for the transportation plans and programs (40CFR 93.126 & 127).
- Federal conformity requirements apply since the project is located, at least in part, in an air quality nonattainment or maintenance area. Accordingly, there must be a currently conforming transportation plan and program at the time of project approval, and the project must come from a conforming plan and program (or otherwise meet criteria specified in 40 CFR 93.109(b)).

PM Hotspot Analysis Required for NEPA? No

Yes	No	
[]	[X]	Is this project a new or expanded highway project that serves a significant volume of or will result in a significant increase is diesel vehicles, such as facilities with greater than 125,000 annual average daily traffic (AADT) and 8% or more of such AADT is diesel truck traffic?
		Explained: NA
[]	[X]	Does this project create a new or expanded bus or rail terminal or transfer point that will have, or result in an increase of, a significant number of diesel vehicles congregating at that location?
		Explained: NA
[]	[X]	Does this project affect intersections that are at LOS D, E or F with a significant number of diesel vehicles, or that will change to LOS D, E or F because of increased traffic volumes from a significant number of diesel vehicles related to the



project?

Explained: NA

[] [X] Can this project otherwise be considered a project of "air quality concern" as outlined in 40 CFR 93.123 (b)(1) (i),(ii),(iii) or (iv) or (v), or following recommendations obtained through the VDOT PM2.5 Hotspot Screening Process?

Explained: NA

The final rule that establishes the transportation conformity criteria and procedures for determining which transportation projects must be analyzed for local air quality impacts in Fine Particulate Matter (PM2.5) nonattainment and maintenance areas was published on March 10, 2006. This project is located in the Northern Virginia PM2.5 nonattainment area.

Transportation Conformity Guidance for Qualitative Hot-spot Analysis in PM2.5 and PM10 Nonattainment and Maintenance Areas, circulated on March 29, 2006, outlines how to conduct qualitative PM2.5 hot-spot analyses for "projects of air quality concern", as defined in the final rule by 40 CFR 93.123(b)(1). Projects of air quality concern are highway and transit projects that involve significant levels of diesel traffic, or any project that is identified as a localized air quality concern by the PM2.5 State Implementation Plan (SIP). The guidance also notes that a PM2.5 hot-spot analysis is not required for projects that are not an air quality concern, but states that the project-level conformity determination should document Clean Air Act and 40 CFR 93.116 requirements were met without a hot-spot analysis, since the project has been found to not be of air quality concern under 40 CFR 93.123(b)(1).

A comparison of this project with examples of projects considered to be "projects of air quality concern" (that would be covered by 40 CFR 93.123(b)(1) and would require a qualitative PM2.5 hot-spot analysis) shows that this project is not a "project of air quality concern". The construction of this project would not result in a significant increase in the number of diesel vehicles in the area.

Since the project was not found to be a project of air quality concern under 40 CFR 91.123(b)(1), a PM2.5 hot-spot analysis is not required. The following statement should be added to the environmental document for the proposed project:

A PM2.5 hot-spot analysis is not required for this project since it is not an air quality concern. The Clean Air Act and 40 CFR 93.116 requirements were met without a hot-spot analysis, since this project has been found not to be of air quality concern under 40 CFR 93.123(b)(1).

Comments: Exempt as noted above.



IV. Mobile Source Air Toxics

This project requires: No further discussion of MSAT

This project qualifies as a categorical exclusion under 23 CFR 771.117 (c) and/or is exempt under 40 CFR 93.126. As such, this project has been determined to generate minimal air quality impacts for Clean Air Act criteria pollutants and has not been linked with any special MSAT concerns. This project will not result in any meaningful changes in traffic volumnes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOBILE6.2 model forecasts a combined reduction of 72 percent in the total annual emissions rate for the priority MSAT from 1999 to 2050 while vehicle-miles of travel are projected to increase by 145 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

Comments: Exempt as noted above.

Comments

VDOT Comments (June 2007): This project is located within a Moderate Ozone Nonattainment area, a Fine Particulate Matter (PM2.5) Nonattainment area, and a volatile organic compounds (VOC) and oxides of nitrogen (NOx) Emissions Control Area. As such, all reasonable precautions should be taken to limit the emissions of VOC, NOx, and particulate matter. In addition, the following DEQ air pollution regulations must be adhered to during the construction of this project: 9 VAC 5-[130], Open Burning restrictions; 9 VAC 5-40-5490 et seq., Cutback Asphalt restrictions; and 9 VAC 5-50-60 et seq., Fugitive Dust precautions.

