



SMART SCALE Application

Route 601 Low-Speed Curve Realignment #2

Project Status: Scored

Project ID: F2-0000001356-R02

General

Point of Contact Information

Project Point of Contact Name

Josh Frederick

Point of Contact Phone

(540) 672-4347

Point of Contact Email

jfrederick@orangecountyva.gov

Project Information

Short Project Description

This project will realign the northernmost low-speed (15 mph) curve on a major collector road known as Flat Run Road (Route 601).

Notice of Intent

Yes

Project Title

Route 601 Low-Speed Curve Realignment #2

Principal Improvement

Highway

Does this project include any improvements to non-VDOT maintained roadways?

No

Detailed Project Description

This project will realign/straighten the northernmost low-speed (15 mph) s-curve on a major collector road known as Flat Run Road (Route 601) to a new alignment approximately 200 feet to the west. Route 601 has two such low-speed curves and this project focuses on the northernmost one near the Meadows Farms Golf Course. Route 601 forms an important connection between Route 20 and Route 3 (both principal arterials) within the locally-designated Germanna-Wilderness growth area, as evidenced by its upgrade from a local, unclassified road to a major collector in the span of 10 years. Furthermore, this particular section of Route 601 saw a 49% increase in its AADT from 2010 to 2014, primarily due to increased development along Route 3 (the Wal-Mart and Germanna Heights developments) increased enrollment at the Middle School, and the continued build-out of the 4,260-lot Lake of the Woods subdivision (which has its back entrance on Route 601 very close to this project location). In order for this road to truly function as a major collector and to provide an efficient means of transportation, these curve realignments are much-needed. This proposal involves straightening the curve via a realignment to the west of the existing alignment. The new roadway section will be approximately 1,500 feet in length and will necessitate approximately 2 acres worth of right-of-way acquisition (assuming a 50' R/W width). There is only 1 property owner affected by this proposal; this area was recently timbered and is vacant. The project will not produce effects to any structures, wetlands, streams, or other natural features. This project would ideally be conducted in conjunction with the "Route 601 Low-Speed Curve Realignment #1" project due to the proximity to each other and the common goal of straightening Route 601. Continued improvements to Route 601 will provide a better-connected transportation system in the Germanna-Wilderness Area, which helps spur continued growth and development.

SMART SCALE Need Categories

Urban Development Area

Application Program

District Grant

How does this project address VTrans 2040 need?

This project is located within the Germanna-Wilderness locally-designated growth area, which is centered around Route 3 in Orange County. It supports the VTRANS goals to provide local economic competitiveness and to ensure safety for all users by providing a road alignment conducive to the road's classification and function as a major collector road. The ultimate purpose of the county's efforts to improve and straighten Route 601 is for it to provide local connectivity to support the future economic growth in the area. This road provides an essential link between Route 20 and Route 3 and its efficiency-of-travel is needed to provide a well-connected growth area. A secondary effect of this future growth will be to entice development (and commuters) from the north and east, effectively reducing congestion along the Route 29-north corridor and the Fredericksburg area, respectively.

Location

PDCs Served

Rappahannock -
Rapidan Regional
Commission

MPOs Served

Jurisdictions Served

Orange County

Districts Served

Culpeper

Features

Project Features

Highway

Improvement

Roadway Reconstruction/Realignment

Comments

Approximately 1,500 linear feet of two-lane Route 601 will be realigned via straightening of an existing low-speed (15 mph) curve. The design speed of the realigned curve is 40 mph, which matches the majority of the existing roadway.

Bike/Pedestrian

Improvement

Bike/Pedestrian Other

Comments

Enough right-of-way will be acquired to accommodate pedestrian sidewalks/paths in the future. Route 601 is a mix of right-of-way and prescriptive easement. The county's adopted Germanna-Wilderness Area Plan calls for Route 601 to be able to accommodate at least 2 modes of transportation (pedestrians and vehicles), so this acquisition of right-of-way is in support of that goal.

Bus Transit

Improvement

Comments

Rail Transit

Improvement

Comments

Freight Rail

Improvement

Comments

Travel Demand Management (TDM)

Improvement

Comments

Right of Way

Improvement

Right of Way/Easements acquisition required

Comments

The realignment will require approximately 2 acres worth of right-of-way acquisition, assuming a 50' right-of-way width and the approximate 1,500' length of new alignment. Right-of-way is needed from only 1 property owner.

 Factors

Accessibility

Accessibility	Response	Additional Notes
Project includes transit system improvements or reduces delay on a roadway with scheduled peak service of one transit vehicle per hour.	No	
Project includes improvements to an existing or proposed park and ride lot (e.g., new lot, more spaces, entrance/exit, technology (payment, traveler information)).	No	
Project includes construction or replacement of bike facilities. For bicycle projects, off-road or on-road buffered or clearly delineated facilities are required.	No	
Project includes construction or replacement of pedestrian facilities. For pedestrian projects, sidewalks, pedestrian signals, marked crosswalks, refuge islands, and other treatments are required (as appropriate).	No	
Project includes improvements to existing or new HOV/HOT lanes or ramps to HOV/HOT.	No	
Project provides real-time traveler information or wayfinding specifically for intermodal connections (access to transit station or park and ride lot).	No	
Provides traveler information or is directly linked to an existing TMC network/ITS architecture.	No	

Land Use

Land Use	Response	Additional Notes
Is the project within 1/4 mile of parcels currently zoned for mixed use development or parcels identified in the future land use plan as mixed use development?	Yes	The county's adopted Germanna-Wilderness Area Plan (pg 53) identifies the land immediately adjacent to this project to the northwest as future planned development, which is to be accomplished via

		mixed-use zoning districts.
Does the project support in-fill development adjacent to the project?	Yes	As a major collector road and an essential roadway for the county's growth area, the straightening of Route 601 allows its design to meet its function. As the road is upgraded to function as a major collector, it becomes a more legitimate access for businesses and other development.
Is there a locally/regionally adopted corridor/access management plan for the project area that addresses interparcel connectivity and exceeds VDOT's minimum spacing standards?	No	

Environment

Environment	Response	Additional Notes
Project includes construction or replacement of bike facilities. For bicycle projects, off-road or on-road buffered or clearly delineated facilities are required (i.e. Bike Lane or Shared Use Path).	No	
Project includes construction or replacement of pedestrian facilities. For pedestrian projects, sidewalks, pedestrian signals, marked crosswalks, refuge islands, and other treatments are required (as appropriate).	No	
Project includes improvements to rail transit or passenger rail facilities.	No	
Project includes improvements to an existing or proposed park-and-ride lot (e.g., new lot, more spaces, entrance/exit, technology (payment, traveler information)).	No	
Project includes bus facility improvements or reduces delay on a roadway with scheduled peak service of one transit vehicle per hour.*	No	
Project includes improvements to freight rail network or intermodal (truck to rail) facilities/ports/terminals.	No	
Project include special accommodations for hybrid or electric vehicles, or space or infrastructure for electric vehicle	No	

parking/charging).

Project includes energy efficient infrastructure or fleets, including: hybrid or electric buses, electronic/open road tolling, alternative energy infrastructure (e.g., roadside solar panels).

No

Economic Development Factors

Transportation project (Consistency with Local Comprehensive Plan or Local Economic Development Strategy)

Referenced in

Transportation project (Consistency with Regional Economic Development Strategy)

Consistent with

Site Name

Signature Station Development

Development project (Consistent with locality Comprehensive Plan/Zoning)

Specific reference

Development project (Site planning status)

Development project (Site Utilities status)

In place

Development Project (Proposed / Projected Building Square Footage)

235,000 sq ft

Driving Distance to Development Project From Transportation Project

3.00 miles

Does Transportation Project Provide Direct or Indirect Access to the Development Site?

Enhances Access Near the Site But is Not Adjacent to the Site

Delivery/Funding

Project Delivery Information

Project Planning Status

Transportation Element of Local Comprehensive Plan

Project Administered By

VDOT

Existing Project VDOT UPC(s) or DRPT Project Number(s), if applicable

UPC/DRPT Project #	Description
--------------------	-------------

Project Delivery Method

Design-bid-Build

Please indicate who will be/was responsible for the design of this project

VDOT:

100%

Phase Estimate and Schedule

PE (Survey, Environmental, Design)

Phase Type

PE (Survey, Environmental, Design)

Status

Not Started

Percent Complete

0%

Cost Estimate

\$475,000.00

Start Date

10/1/2021

End Date

4/1/2022

RW (Right of Way and Easement Acquisition, Utility Relocation)

Phase Type

RW (Right of Way and Easement Acquisition, Utility Relocation)

Status

Not Started

Percent Complete

0%

Cost Estimate

\$225,000.00

Start Date

10/1/2024

End Date

8/1/2025

CN (Construction, Oversight, Inspection, Contingencies)

Phase Type

CN (Construction, Oversight, Inspection, Contingencies)

Status

Not Started

Percent Complete

0%

Cost Estimate

\$700,000.00

Start Date

9/1/2025

End Date

12/1/2025

Total Cost Estimate

\$1,400,000.00

Project Funding Sources

**SYIP
Allocations**

**SMART
SCALE
Amount
Requested**

**Other
Committed
Funding
Amount**

**Total Proposed Project
Funding**

\$0.00

\$1,400,000.00

\$0.00

\$1,400,000.00

 Scores

Project Located in Typology													
Category C	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use
Measure	Increase in Peak Period Person Throughput	Reduction in Peak Period Delay	Reduction in Fatal and Injury Crashes	Reduction in Fatal and Injury Crash Rate	Increase in Access to Jobs	Increase in Access to Jobs for Disadvantaged Populations	Increase in Access to Multimodal Travel Choices	Sq. Ft. of Commercial and Industrial Dev. Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Other Factor Values Scaled by Potential Acreage Impacted	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	0.0 person hrs.	1.8 EPDO	1,554.8 EPDO/100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	0.0 thousand adj. sq. ft.	0.0 thousand adj. daily tons	0.0 adj. buffer time index	0.0 adjusted points	1.0 scaled points	0.0 adjusted jobs & pop.
Normalized Measure Value (0-100)	0.0	0.0	0.3	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0
Measure Weight (% of Factor)	50%	50%	50%	50%	60%	20%	20%	60%	20%	20%	50%	50%	0%
Factor Value	0.0		4.3		0.0			0.0			1.0		0.0
Factor													

Project Located in Typology						
Category C	Congestion Mitigation	Safety	Accessibility	Economic Development	Environment	Land Use
Weight (% of Project Score)	15%	25%	25%	25%	10%	0%
Weighted Factor Value	0.0	1.1	0.0	0.0	0.1	0.0
Project Benefit	1.2					
SMART SCALE Cost	\$1,400,000					
SMART SCALE Score (Project Benefit per \$10m SMART SCALE Cost)	8.4					

 Supporting Documents

Current Attachments

Description

Signature Station Area Plan Reference

Attachment Type

Local Comprehensive Plan

File Name

SignatureStationGWAPRef.pdf

Description

Route 601 Improvements Area Plan Reference

Attachment Type

Local Comprehensive Plan

File Name

Route601GWAPRef.pdf

<p>Description Route 601 curve realignment #2 project sketch</p> <p>Attachment Type Project Sketch</p> <p>File Name Concept_Plan_Rte601_North_Curve.pdf</p>	<p>Description Germanna Heights (Wal-Mart) development plan; north of project site</p> <p>Attachment Type Site Development Plan</p> <p>File Name Germanna Heights Wal-Mart concept layout.pdf</p>
<p>Description Route 601 curve realignment #2 project cost estimate</p> <p>Attachment Type Detailed Cost Estimate</p> <p>File Name Cost_Estimate_Rte601_North_Curve_FINAL.pdf</p>	<p>Description RRRC resolution of support</p> <p>Attachment Type Resolution of Support</p> <p>File Name 20160824.Smart.Scale.Resolution.pdf</p>



Virginia Department of Rail and Public Transportation
600 East Main Street, Suite 2102
Richmond, VA 23219
(804) 786-4440



VDOT Central Office
1401 East Broad Street
Richmond, VA 23219
(804) 367-7623 (toll-free)
711 (hearing impaired)