



SMART SCALE Application

## Route 42 Corridor Improvements

Project Status: Scored

Organization: Woodstock Town  
Project ID: 4714

General

### Point of Contact Information

**Project Point of Contact Name**

Lemuel Hancock

**Point of Contact Email**

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**Point of Contact Phone**

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### Project Information

**Project Title**

Route 42 Corridor Improvements

**Principal Improvement**

Highway

### Project Short Description

The Town of Woodstock seeks funding for corridor safety and access management improvements. The corridor is subject to increased traffic with performance deficiencies and is identified as having a high potential for safety improvement (psi).

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

No

**Application Program Requested**

District Grant

**VDOT District**

Staunton

## **Project Detailed Description**

The Town of Woodstock seeks funding for operational, multimodal, safety and access management improvements along the Route 42 Corridor from Hisey Avenue to Main Street (US 11) (approximately 1 mile project length). Project proposes a raised median between Hisey Avenue and the Exit 283 southbound ramps and from the Exit 283 northbound ramps to Main Street. Intersection improvements consist of: 1) a single lane roundabout at Hisey Avenue, 2) lane approach and signal coordination improvements at Henry Ford Drive and the interstate ramps, 3) channelized directional left turn lanes with taper at Motel Drive and Susan Avenue, 4) a hybrid – single lane roundabout at Ox Road with two lanes to accommodate eastbound Route 42 movements, 5) lane approach and signal optimization at Main Street. The project proposes a 10' wide shared use path along the north side of Route 42, between Main Street and Ox Road and between Woodstock Commons Drive and Hisey Avenue, filling in gaps in the existing sidewalk network. Finally, the application also includes pedestrian crossing improvements along the entire corridor, consisting of user activated pedestrian signal heads at signalized intersections, utilizing splitter islands for two-stage crossing at roundabout intersections, and a user activated rapid flashing beacon at the Susan Avenue intersection.

**VTRANS Needs Categories Requested**

- Safety

**Districts Served**

- Staunton

**MPOs Served**

**PDCs Served**

- Northern Shenandoah Valley Regional Commission

**Jurisdictions Served**

- Shenandoah County
- Woodstock Town

**Need Justifications**

**Safety**

Susan Ave PR/NP (Woodstock Town), SC-9745E/W (Shenandoah Cnty)	Intersection safety improvement.
VA-42N	Corridor safety improvement
VA-42N	Corridor safety improvement
VA-42N	Corridor safety improvement
VA-42N	Corridor safety improvement
VA-42N	Corridor safety improvement
VA-42N	Corridor safety improvement
US-11N	Corridor safety improvement
US-11N	Corridor safety improvement
Ramp from I-81S; Ramp to I-81S; I-81S Rmp 283A, VA-42U Rmp 270A	intersection safety improvement
Ox Rd PR/NP (Woodstock Town), UR-3E/W (Woodstock Town)	intersection safety improvement
VA-42N	Corridor safety improvement

## Features

### Highway Improvements

Turn Lane Improvement(s)	Directional turn lanes will be incorporated into the proposed center median along Route 42 at the Motel Drive and Susan Avenue intersections.
Access Management	A raised median will be provided along Route 42 between Hisey Avenue and the Exit 283 southbound ramp and Exit 283 northbound ramps and Main Street to reduce conflict points along the corridor.
Intersection Improvement(s)	Intersection improvements consist of: 1) a single lane roundabout at Hisey Avenue, 2) lane approach and signal coordination improvements at Henry Ford Drive and the interstate ramps, 3) channelized directional left turn lanes with taper at Motel Drive and Susan Avenue, 4) a hybrid – single lane roundabout at Ox Road with two lanes to accommodate eastbound Route 42 movements, 5) lane approach and signal optimization at Main Street.
Innovative Intersection(s) / Roundabout(s)	A single lane roundabout is proposed at Hisey Avenue and a hybrid, single lane roundabout with dual Route 42 eastbound lanes is proposed at Ox Road. The roundabouts will accommodate U-turn heavy vehicle movements.
Traffic Signal Modification	The existing signals at Henry Ford Drive and the interstate ramps will be optimized and coordinated. The existing signal at Main Street will be optimized.
Improve Rail Crossing	The existing, discontinued rail crossing along Route 42 will be improved with the project.

### Bicycle and Pedestrian Improvements

Construct Shared-Use Path	A 10' wide shared use path will be provided along the north side of Route 42, between Main Street and Ox Road (approx. 1,980') and between Woodstock Commons Drive and Hisey Avenue (approx.. 700'), filling in gaps in the existing pedestrian network. Buffer space between SUP and curb will vary depending on R/W width.
Construct Sidewalk	New 5' sidewalk is proposed along the south side of Route 42 to fill in gaps in the existing pedestrian network. Sidewalk improvements will occur primarily at the intersections with the Exit 283 southbound ramps and Ox Road.
Improve Bike/Pedestrian Crossing (At Grade)	The application includes pedestrian crossing improvements along the entire corridor, consisting of user activated pedestrian signal heads at signalized intersections, utilizing splitter islands for two-stage crossings at roundabout intersections, and a user activated rapid flashing beacon at the Susan Avenue intersection.

### Right-of-Way and Utilities

Right-of-Way/Easements acquisition required	R/W acquisition will be required per the cost estimate.
Includes Utility Relocations	Utility relocation will be required per the cost estimate.

## Factors

### Accessibility

Accessibility	Response	Supporting Information
Project includes improvements to existing or new HOV/HOT lanes or ramps to HOV/HOT.	No	
Project includes construction or replacement of bike facilities. For bicycle projects, off-road or on-road buffered or clearly delineated facilities are required  <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e0f0ff;"> <p>This factor has been pre selected because you selected <b>Add/Construct Bike Lane Feature and/or Construct Shared-Use Path</b></p> </div>	Yes	The project includes approximately 2,680 linear feet of new 10' wide shared use path along the north side of Route 42 to fill gaps in the existing sidewalk network.
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).  <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e0f0ff;"> <p>This factor has been pre selected because you selected <b>Add/Construct Bike Lane Feature and/or Construct Shared-Use Path</b></p> </div>	Yes	The project includes segments of new 5' wide sidewalk along the south side of Route 42 to fill gaps in the existing sidewalk network (primarily at the intersections with Ox Road and Exit 283 southbound ramps).
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	

## Environment

Environment	Response	Supporting Information
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).  <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e0f0ff;"> <p>This factor has been pre selected because you selected <b>Add/Construct Bike Lane Feature and/or Construct Shared-Use Path</b></p> </div>	Yes	The project includes approximately 2,680 linear feet of new 10' wide shared use path along the north side of Route 42 to fill gaps in the existing sidewalk network.
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).  <div style="border: 1px solid #add8e6; padding: 5px; background-color: #e0f0ff;"> <p>This factor has been pre selected because you selected <b>Construct Sidewalk Feature and/or Construct Shared-Use Path</b></p> </div>	Yes	The project includes segments of new 5' wide sidewalk along the south side of Route 42 to fill gaps in the existing sidewalk network (primarily at the intersections with Ox Road and Exit 283 southbound ramps).
Project include special accommodations for hybrid or electric vehicles, or space or infrastructure for electric vehicle parking/charging).	No	

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

## Delivery/Funding

### Project Delivery Information

#### Project Planning Status

Project Administered By		Project Delivery Method	
VDOT		Design-bid-Build	
VDOT%	Locality%	Consultant%	
100	0	0	

### Phase Estimate and Schedule

<b>Phase Milestone</b>		<b>Status</b>	
PE (Survey, Environmental, Design)		Not Started	
<b>Percent Complete</b>	<b>Cost Estimate</b>	<b>Start Date</b>	<b>End Date</b>
0	\$1,362,372	2023-08-01	2027-01-31
<b>Phase Milestone</b>		<b>Status</b>	
RW (Right of Way and Easement Acquisition, Utility Relocation)		Not Started	
<b>Percent Complete</b>	<b>Cost Estimate</b>	<b>Start Date</b>	<b>End Date</b>
0	\$10,736,071	2027-02-01	2028-02-28
<b>Phase Milestone</b>		<b>Status</b>	
CN (Construction, Oversight, Inspection, Contingencies)		Not Started	
<b>Percent Complete</b>	<b>Cost Estimate</b>	<b>Start Date</b>	<b>End Date</b>
0	\$3,004,384	2028-03-01	2029-12-31

Project Funding Sources

Project UPC/DRPT Project ID	UPC Description	VDOT / DRPT (\$) \$0
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Total SYIP: \$0

Other Committed Funds

Other Funds Committed to Project	Description of Fund Type	Amount
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Total Other Committed Funds: \$0

Cost Estimate

SMART SCALE Request

Total SYIP Allocations	\$0
Total Other Committed Funds	\$0
Total SMART SCALE Requested Funds	\$15,102,827
Total Project Funding	\$15,102,827
Total Cost Estimate	\$15,102,827

 Economic Development Sites

Is this transportation project referenced in local Comprehensive Plan, local Economic Development Strategy or Regional Economic Development Strategy ?

Yes

# First Bank Development

Site Name	Building square footage	Category of Property
First Bank Development	9000.00	Detailed Site Plan
<p><b>Construction documents, engineering/architectural drawings, and specifications that include construction requirements for a project. These plans are detailed enough for construction and include details regarding building pad locations, grading, drainage, utilities, parking and entrances.</b></p>		
Approved		
<p><b>Access Provision</b></p> <p>Project provides new direct access to the site or improves existing access to the site (site must be physically adjacent to the project). In case of capacity enhancement to limited access facility, new or improved interchange, transit rail capacity improvement, or new transit rail station zoned properties within 0.5 miles of the adjacent interchange(s) or rail station(s) qualify as receiving improved direct access.</p>		

Description	Attachment Type	File Name
Site Plan Approval	Approval Document for Site Development Plan	SitePlanReview_Approval_20180319.pdf
Site Plan (partial, size req)	Site Development Plan	17-0183_FIRSTBANK_SET-1STSUB_1-7.pdf



## Glenmont

Site Name	Building square footage	Category of Property
Glenmont	80000.00	Conceptual Site Plan
<p>A conceptual sketch as part of a rezoning application that must include the following detail: 1) The location, area and density or floor area ratio (FAR) of each type of proposed land use within the development. 2) A delineation of developable land to exclude wetlands and terrain that will not be developed. 3) The location of any proposed roadway facility on site within the development's boundaries and the connectivity of the network addition as proposed. 4) The location of stub-outs on adjoining property and the existing land use of such adjacent property, if applicable, and the location of any proposed stub-outs within the network addition, if applicable.</p>		
Approved		
<p>Construction documents, engineering/architectural drawings, and specifications that include construction requirements for a project. These plans are detailed enough for construction and include details regarding building pad locations, grading, drainage, utilities, parking and entrances.</p>		
Approved		
<b>Access Provision</b>		
Project enhances economic development by improving congestion, mobility, access, or operations in the vicinity of the site but the site is not physically adjacent to the project		

Description	Attachment Type	File Name
Final Plat Approval 244 lots	Approval Document for Site Development Plan	Final Plat Approval - 244 Lots.pdf
Site Plan abbr	Site Development Plan	Locke Property.pdf
Site Plan	Site Development Plan	CompleteApprovedSet.pdf

## Glory Days Grill

Site Name	Building square footage	Category of Property
Glory Days Grill	6470.00	Detailed Site Plan
<p><b>Construction documents, engineering/architectural drawings, and specifications that include construction requirements for a project. These plans are detailed enough for construction and include details regarding building pad locations, grading, drainage, utilities, parking and entrances.</b></p>		
Approved		
<p><b>Access Provision</b></p>		
<p>Project provides new direct access to the site or improves existing access to the site (site must be physically adjacent to the project). In case of capacity enhancement to limited access facility, new or improved interchange, transit rail capacity improvement, or new transit rail station zoned properties within 0.5 miles of the adjacent interchange(s) or rail station(s) qualify as receiving improved direct access.</p>		

Description	Attachment Type	File Name
Site Plan Approval	Approval Document for Site Development Plan	ApprovalLetter.pdf
Site Plan abbr	Site Development Plan	Glory Days Grill_siteplan.pdf

## 45A4((A))65M

Site Name	Building square footage	Category of Property
45A4((A))65M	34256.00	Zoned Only
<p><b>Development project lacks an approved or submitted conceptual or detailed site plan but is consistent with local comprehensive plan's future land use or zoning map and/or zoning code/ordinance. To be eligible, a zoned-only site must have primary access to the project or be directly adjacent to the project.</b></p>		
Existing		
<p><b>Access Provision</b></p>		
<p>Project provides new direct access to the site or improves existing access to the site (site must be physically adjacent to the project). In case of capacity enhancement to limited access facility, new or improved interchange, transit rail capacity improvement, or new transit rail station zoned properties within 0.5 miles of the adjacent interchange(s) or rail station(s) qualify as receiving improved direct access.</p>		

Description	Attachment Type	File Name
Site Location Map	Development Project Zoning/Proffer Reference	Woodstock_ED_Map_45A4-A-65M.jpg

45A4((A))65V

Site Name	Building square footage	Category of Property
45A4((A))65V	25230.00	Zoned Only
Development project lacks an approved or submitted conceptual or detailed site plan but is consistent with local comprehensive plan's future land use or zoning map and/or zoning code/ordinance. To be eligible, a zoned-only site must have primary access to the project or be directly adjacent to the project.		
Existing		
<b>Access Provision</b>		
Project provides new direct access to the site or improves existing access to the site (site must be physically adjacent to the project). In case of capacity enhancement to limited access facility, new or improved interchange, transit rail capacity improvement, or new transit rail station zoned properties within 0.5 miles of the adjacent interchange(s) or rail station(s) qualify as receiving improved direct access.		

Description	Attachment Type	File Name
Site Location Map	Development Project Zoning/Proffer Reference	Woodstock_ED_Map_45A4-A-65V.jpg

 Scores

Project Located in Typology														
Category D	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use	
	Measure	Value	Measure	Value	Measure	Value	Measure	Value	Measure	Value	Measure	Value	Measure	Value
	Increase in Peak Period Person Throughput	20.4 persons	Reduction in Fatal and Injury Crashes	60.5 EPDO	Increase in Access to Jobs	7.3 jobs per resident	Sq. Ft. of Commercial and Industrial Dev. Supported	202,054.4 adj. sq. ft.	Tons of Goods Impacted	12,444.1 thousand adj. daily tons	Potential to Improve Air Quality	81.7 adjusted points	Future Transportation-Efficient Land Use	access * pop/emp density.h
	Reduction in Peak Period Delay	0.5 person hrs.	Reduction in Fatal and Injury Crash Rate	1,091.0 EPDO/100M VMT	Increase in Access to Jobs for Disadvantaged Populations	8.8 jobs per resident	Improvement to Travel Time Reliability	15,254,649.9 adj. buffer time index	Other Factor Values Scaled by Potential Acreage Impacted	2.5 scaled points	Increase Transportation-Efficient Land Use	access * pop/emp density change		

Project Located in Typology														
Category D	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment		Land Use	
Measure Value (0-100)	0.1	0.0	17.4	2.3	0.1	0.2	0.2	1.0	0.3	0.3	0.6	7.6		
Measure Weight (% of Factor)	50%	50%	50%	50%	60%	20%	20%	60%	20%	20%	50%	50%		
Factor Value	0.0		9.8		0.2			0.7			4.1			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%		N/A	
Weighted Factor Value	0.0		2.9		0.0			0.3			0.4			
Project Benefit	3.6													
SMART SCALE Cost	\$15,102,827													
SMART SCALE Score (Project Benefit per \$10m SMART SCALE Cost)	2.4													

 Supporting Documents

## Current Attachments

Description	Attachment Type	File Name
Traffic Data 42	Attachment A - Local Traffic Volumes	Woodstock-42-Traffic-Data-20180508.pdf
Council Resolution	Governing Body Resolution of Support	Route42_Resolution.pdf
Project Concept	Project Sketch	Woodstock-Route-42-Concept.pdf
Project Cost Estimate	Detailed Cost Estimate	4714_Woodstock_Route-42_Hisey-Main_PCES_03AUG18 (002).xlsx
TechMemoWoodstock	Other	Woodstock-Route-42-Tech-Memo-DRAFT.pdf
Route 42 Comp Plan Reference	Local Comprehensive Plan	Comprehensive Plan - Woodstock.pdf



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