

# Smart Scale Round Four Update

February 10, 2021



# Smart Scale Round Comparison

	Round 1	Round 2	Round 3	Round 4
Total Applications Scored	287	404	433	397
Total Project Costs	\$13.4 Billion	\$10.9 Billion	\$12.3 Billion	\$7.8 Billion
Funds Requested	\$7.2 Billion	\$8.6 Billion	\$7.4 Billion	\$6.3 Billion
Funds Available	\$1.4 Billion	\$1.0 Billion	\$780 Million	\$1.37 Billion

# Smart Scale Round 4

## Rappahannock-Rapidan Region Projects

Applicant	Project	Funds Requested	Total Project Cost	Benefit Score	Benefit/Funds Requested (Smart Scale Score)	District Rank	State Rank
RRRC	I-66 WB Exit 28 & Route 17 (North side roundabout)	\$8.9M	\$8.9M	8.43	9.46	12	55
Fauquier County	Route 55/Route 709 Roundabout	\$10.3M	\$10.3M	9.48	9.18	13	59
Orange County	Route 231/High Street Roundabout (Gordonsville)	\$7.8M	\$7.8M	5.70	7.34	16	76
RRRC	I-66 EB Exit 28 & Route 17 (South side RCUT)	\$7.6M	\$7.6M	5.30	7.02	17	82
RRRC	Route 29/Lees Mill Road RCUT	\$6.8M	\$6.8M	3.63	5.33	18	101
Fauquier County	Route 17 &	\$7.8M	\$7.8M	3.18	4.07	20	123

# Smart Scale Round 4

## Rappahannock-Rapidan Region Projects

Applicant	Project	Funds Requested	Total Project Cost	Benefit Score	Benefit/Funds Requested (Smart Scale Score)	District Rank	State Rank
Orange County	Route 522/Route 20 Roundabout	\$10.9M	\$10.9M	3.68	3.36	22	151
Town of Warrenton	Broadview/W Lee/ US 17 Bus/ Winchester Interscection Improvements	\$12.2M	\$12.2M	3.35	2.75	23	172
Madison County	Route 230 & Route 687 Roundabout	\$9.6M	\$9.6M	2.51	2.60	24	176
Town of Culpeper	Orange Rd & Fredericksburg Rd Intersection	\$11.4M	\$11.4M	2.73	2.39	26	182
Town of Warrenton	US 17 Business / Roebing Street	\$13.1M	\$13.1M	2.13	1.62	29	215

# Smart Scale Round 4

## Rappahannock-Rapidan Region Projects

Applicant	Project	Funds Requested	Total Project Cost	Benefit Score	Benefit/Funds Requested (Smart Scale Score)	District Rank	State Rank
Fauquier County	Route 29/ Route 215 Intersection Improvements	\$1.3M	\$1.3M	-	-	33	332
Fauquier County	Route 29/ Broad Run Church Road Intersection	\$3.2M	\$3.2M	-	-	33	332
Orange County	Route 3/Route 20	11.6M	\$11.6M	-	-	33	332

\*Projects above had negative impacts to natural/cultural resources that outweighed benefits accrued in other categories resulting in a net zero overall score

## PROJECT SCORECARD

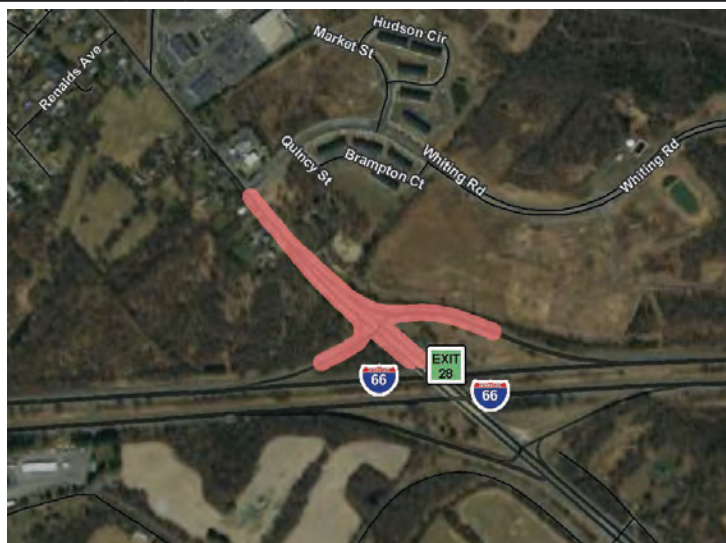
**I66 WB, Exit 28 Ramps & Route 17 Intersection, Roundabout**

Project Id: 6978

This project redesigns/reconfigures the intersection with a roundabout to address safety and operational issues. The project realigns Route 17 and the I66 Exit 28 on and off ramps and improves the grade separated interchange's queuing issue and congestion, the result of vehicles coming off the ramp not able to make the left turn on to SB Route 17.

<b>9.5</b> SMART SCALE SCORE	<b>#55</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$8,907,190
	<b>#12</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$8,907,190
		<b>Project Benefit</b>	8.4
		<b>Project Benefit / Total Cost</b>	9.5

**Submitting Entity:** Rappahannock - Rapidan Regional Commission  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** HPP  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	4.5 person hrs.	48.0 EPDO	27,189.8 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	205,000.0 adj sq. ft.	0.0 daily tons	3,029,370.0 adj. buffer time index	0.0 adjusted points	0.01 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.7	7.7	76.3	0.0	0.0	0.0	0.3	0.0	0.0	0.0	3.2		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.4		28.3		0.0			0.2			0.0			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		8.5		0.0			0.1			0.0	-0.2		
Project Benefit	8.4													
SMART SCALE Cost	\$8,907,190													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	9.5													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

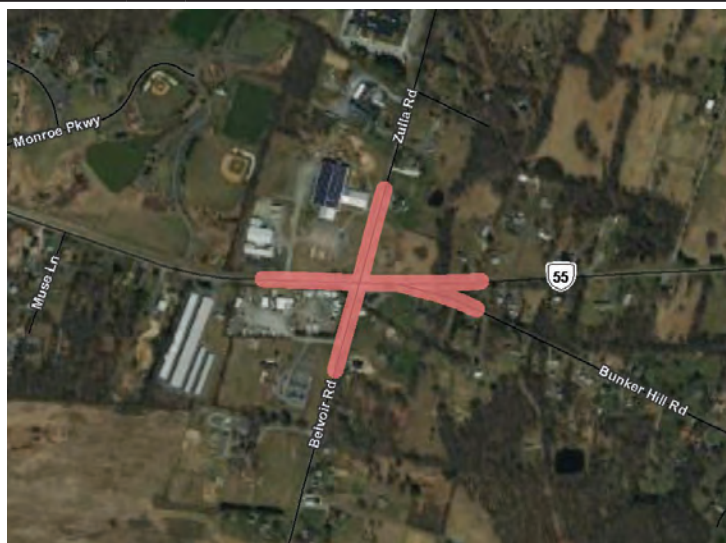
**Roundabout at Route 55 and Route 709**

Project Id: 6671

The project will convert the intersection to a ±130' diameter roundabout at Route 55 and Route 709 for safety and operational improvements. The project includes construction of sidewalks along all intersection quadrants and the addition of crosswalks along all four legs of the intersection. The project provides designated entrances to the El Agave Restaurant in the SE quadrant of the intersection along Route 55 & Route 709 to what is currently uncontrolled access.

<b>9.2</b> SMART SCALE SCORE	<b>#59</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$10,335,200
	<b>#13</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$10,335,200
		<b>Project Benefit</b>	9.5
		<b>Project Benefit / Total Cost</b>	9.2

**Submitting Entity:** Fauquier County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	5.4 persons	1.7 person hrs.	21.1 EPDO	35,657.7 EPDO / 100M VMT	0.8 jobs per resident	0.8 jobs per resident	8.1 adjusted users	82,614.0 adj sq. ft.	0.0 daily tons	0.0 adj. buffer time index	10.9 adjusted points	0.02 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.3	0.3	3.4	100.0	0.0	0.0	0.3	0.1	0.0	0.0	0.2	6.5		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.3		32.4		0.1			0.1			0.2	5 (max point reduction)	N/A	
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%			
Weighted Factor Value	0.0		9.7		0.0			0.0			0.0	-0.3		
Project Benefit	9.5													
SMART SCALE Cost	\$10,335,200													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	9.2													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



## PROJECT SCORECARD

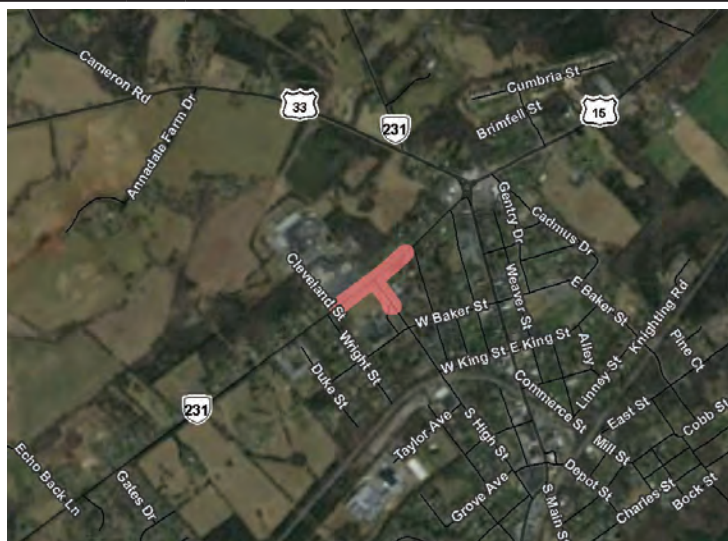
**Route 231 / High Street (Gordonsville) Roundabout**

Project Id: 7186

This project converts a four-leg, two-way stop-controlled intersection in the Town of Gordonsville (Route 231 and High Street (Route 1006)) into a roundabout. Crosswalks will be provided for better pedestrian accommodation.

<b>7.3</b> SMART SCALE SCORE	<b>#76</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$7,762,450
	<b>#16</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$7,762,450
		<b>Project Benefit</b>	5.7
		<b>Project Benefit / Total Cost</b>	7.3

**Submitting Entity:** Orange County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** DGP  
**Evacuation Route:** No  
**VTRANS Need:** Urban Development Area



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	6.7 persons	0.7 person hrs.	18.4 EPDO	22,393.9 EPDO / 100M VMT	0.6 jobs per resident	0.6 jobs per resident	10.1 adjusted users	0.0 adj sq. ft.	0.0 daily tons	41,082.7 adj. buffer time index	13.4 adjusted points	0.04 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.4	0.1	3.0	62.8	0.0	0.0	0.4	0.0	0.0	0.0	0.3	12.9		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.2		20.9		0.1			0.0			0.3			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		6.3		0.0			0.0			0.0	-0.6		
Project Benefit	5.7													
SMART SCALE Cost	\$7,762,450													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	7.3													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



## PROJECT SCORECARD

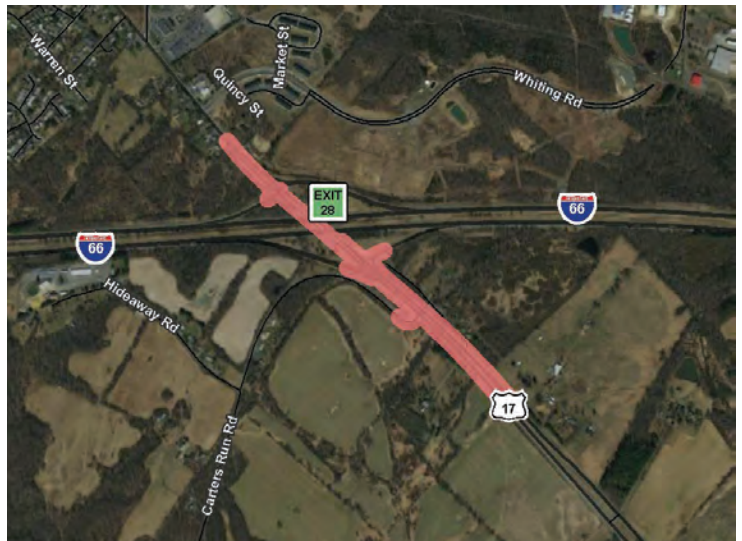
**I66 EB, Exit 28 Ramps & Route 17 Intersection, RCUT Redesign**

Project Id: 6942

This project redesigns/reconfigures the intersection with an R-CUT to address safety needs and includes constructing an RCUT on US-17 at the eastbound I-66 ramps. The project also adds a U-turn location further south on Route 17 which also improves visibility over the current crossover. This crossover is limited by queues (especially queued trucks) from the W.B. I-66 intersection along N.B. US-17 at peak times.

<b>7.0</b> SMART SCALE SCORE	<b>#82</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$7,549,150
	<b>#17</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$7,549,150
		<b>Project Benefit</b>	5.3
		<b>Project Benefit / Total Cost</b>	7.0

**Submitting Entity:** Rappahannock - Rapidan Regional Commission  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** HPP  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	2.4 person hrs.	57.5 EPDO	8,007.2 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	205,000.0 adj sq. ft.	0.0 daily tons	2,015,030.0 adj. buffer time index	746.0 adjusted points	0.03 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.4	9.2	22.5	0.0	0.0	0.0	0.3	0.0	0.0	16.8	8.5		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.2		13.2		0.0			0.2			16.8			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		4.0		0.0			0.1			1.7	-0.4		
Project Benefit	5.3													
SMART SCALE Cost	\$7,549,150													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	7.0													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

Route 29 and Lees Mill Road Intersection R-CUT

Project Id: 6984

The project will convert the intersection to an un-signalized Restricted Crossing U-Turn/Superstreet.

<b>5.3</b> SMART SCALE SCORE	<b>#101</b> OF 397 STATEWIDE	SMART SCALE Requested Funds	\$6,804,950
	<b>#18</b> OF 36 DISTRICTWIDE	Total Project Cost	\$6,804,950
		Project Benefit	3.6
		Project Benefit / Total Cost	5.3

**Submitting Entity:** Rappahannock - Rapidan Regional Commission  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** HPP  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	1.5 person hrs.	41.1 EPDO	634.1 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	2,103.3 adj sq. ft.	0.0 daily tons	10,105,300.0 adj. buffer time index	917.0 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.2	6.6	1.8	0.0	0.0	0.0	0.0	0.0	0.1	20.6	0.0		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.1		5.1		0.0			0.0			20.6			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		1.5		0.0			0.0			2.1	0.0		
Project Benefit	3.6													
SMART SCALE Cost	\$6,804,950													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	5.3													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

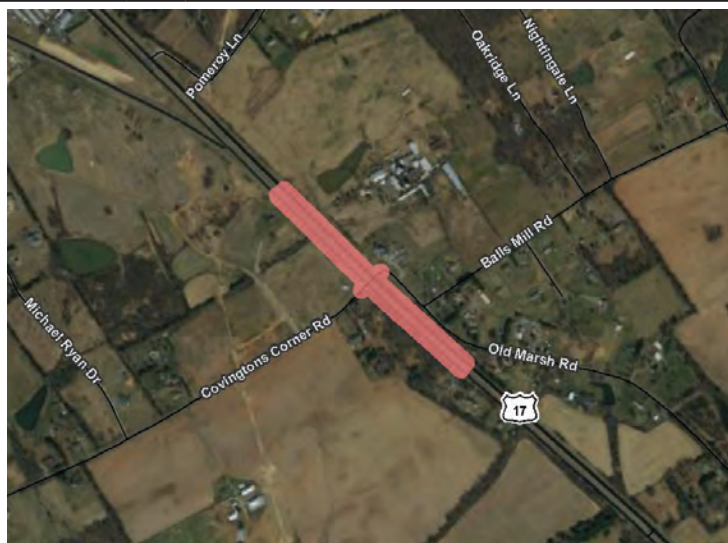
Route 17 and Covington's Corner Road R-CUT

Project Id: 6921

The project converts the Route 17 and Covingtons Corner Road/Balls Mill Road intersection to an R-CUT.

4.1	#123 OF 397 STATEWIDE	SMART SCALE Requested Funds	\$7,815,160
	#20 OF 36 DISTRICTWIDE	Total Project Cost	\$7,815,160
SMART SCALE SCORE		Project Benefit	3.2
		Project Benefit / Total Cost	4.1

**Submitting Entity:** Fauquier County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	0.2 person hrs.	44.0 EPDO	2,476.1 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	100,447.0 adj sq. ft.	0.0 daily tons	5,655,920.0 adj. buffer time index	663.0 adjusted points	0.03 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.0	7.1	6.9	0.0	0.0	0.0	0.2	0.0	0.1	14.9	9.1		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.0		7.0		0.0			0.1			14.9			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		2.1		0.0			0.0			1.5	-0.5		
Project Benefit	3.2													
SMART SCALE Cost	\$7,815,160													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	4.1													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



## PROJECT SCORECARD

Route 522 / Route 20 Roundabout

Project Id: 7183

This project converts a four-leg, signal-controlled intersection between two rural primary highways in Orange County (Route 522 and Route 20) into a roundabout. Crosswalks and a trail will be provided for better pedestrian accommodation.

3.4	#151 OF 397 STATEWIDE		SMART SCALE Requested Funds	\$10,930,200
	#22 OF 36 DISTRICTWIDE		Total Project Cost	\$10,930,200
SMART SCALE SCORE			Project Benefit	3.7
			Project Benefit / Total Cost	3.4

Submitting Entity: Orange County  
Preliminary Engineering: Not Started  
Right of Way: Not Started  
Construction: Not Started  
Eligible Fund Program: DGP  
Evacuation Route: No  
VTRANS Need: Safety (non-CoSS)



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Reasources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	5.2 persons	6.0 person hrs.	57.6 EPDO	5,910.5 EPDO / 100M VMT	2.4 jobs per resident	1.6 jobs per resident	15.5 adjusted users	214,218.0 adj sq. ft.	17,171.7 daily tons	1,929,580.0 adj. buffer time index	20.7 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.3	1.0	9.2	16.6	0.1	0.1	0.6	0.3	1.3	0.0	0.5	1.3		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.6		11.4		0.2			0.5			0.5			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.1		3.4		0.0			0.2			0.0	-0.1		
Project Benefit	3.7													
SMART SCALE Cost	\$10,930,200													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	3.4													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

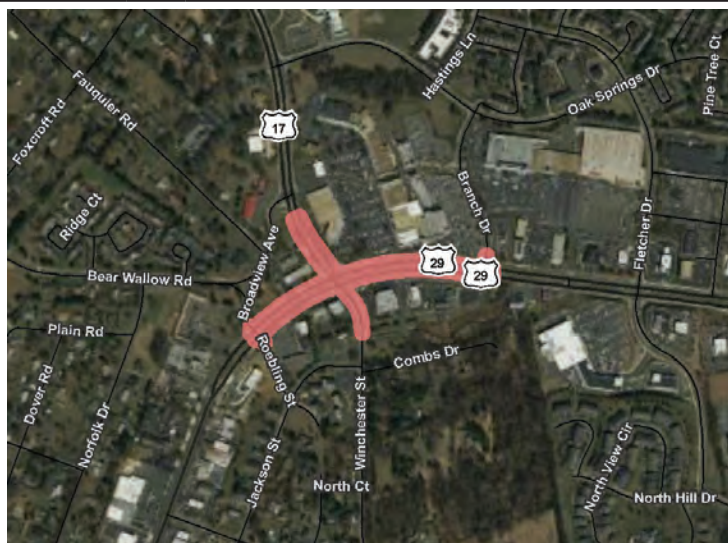
**Broadview/W Lee/US17BusN/Winchester Intersection Improvement**

Project Id: 7170

Project will convert an existing intersection with safety needs to an innovative intersection design "Hybrid Roundabout" and includes Share Use Path, Sidewalks, Crosswalks and Bicycle Lanes.

<b>2.7</b> SMART SCALE SCORE	<b>#172</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$12,185,000
	<b>#23</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$12,185,000
		<b>Project Benefit</b>	3.3
		<b>Project Benefit / Total Cost</b>	2.7

**Submitting Entity:** Warrenton Town  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	40.6 persons	33.0 person hrs.	56.2 EPDO	2,128.8 EPDO / 100M VMT	9.1 jobs per resident	5.9 jobs per resident	121.8 adjusted users	16,613.8 adj sq. ft.	1,678.8 daily tons	28,973,500.0 adj. buffer time index	162.3 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	2.2	5.4	9.0	6.0	0.5	0.3	5.0	0.0	0.1	0.3	3.7	1.3		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	3.8		8.1		1.4			0.1			3.7			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.4		2.4		0.2			0.0			0.4	-0.1		
Project Benefit	3.3													
SMART SCALE Cost	\$12,185,000													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	2.7													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

### Route 230 & Route 687 Intersection Improvements

Project Id: 7149

This project will install an approximately 130' roundabout at the intersection of Route 230 (Orange Road), Route 231, and Route 687 (Fairgrounds Road) in the Pratts area of Madison County.

2.6	#176 OF 397 STATEWIDE		SMART SCALE Requested Funds	\$9,670,470
	#24 OF 36 DISTRICTWIDE		Total Project Cost	\$9,670,470
SMART SCALE SCORE			Project Benefit	2.5
			Project Benefit / Total Cost	2.6

Submitting Entity: Madison County  
Preliminary Engineering: Not Started  
Right of Way: Not Started  
Construction: Not Started  
Eligible Fund Program: DGP  
Evacuation Route: No  
VTRANS Need: Safety (non-CoSS)



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	0.9 person hrs.	23.2 EPDO	6,938.5 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	15,791.5 adj sq. ft.	0.0 daily tons	0.0 adj. buffer time index	0.0 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.2	3.7	19.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.1		8.4		0.0			0.0			0.0			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		2.5		0.0			0.0			0.0	0.0		
Project Benefit	2.5													
SMART SCALE Cost	\$9,670,470													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	2.6													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



## PROJECT SCORECARD

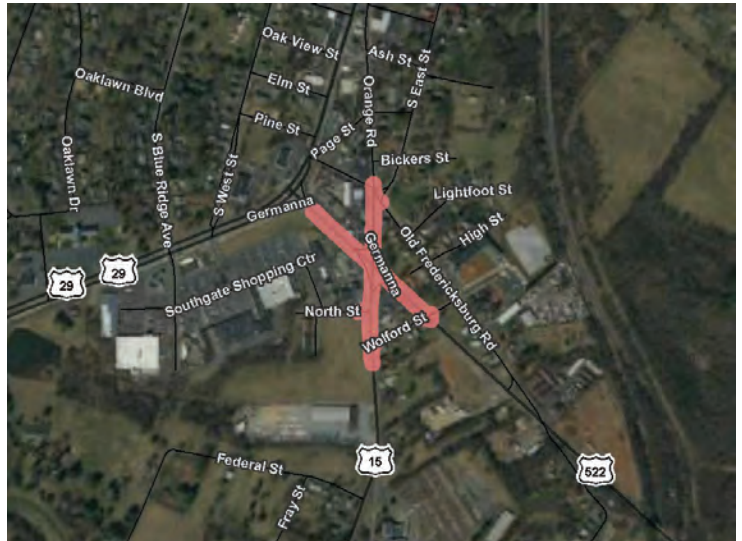
**Orange Rd / Fredericksburg Rd Intersection**

Project Id: 7133

Project converts Orange Rd/Fredericksburg Rd signalized intersection to a single-lane roundabout. Pedestrian crosswalks and sidewalks on each roadway approaching the intersection are added. Business access in NW, SE and SW quadrants modified to RIRO. Orange Rd and Cherry St intersection gains refuge island, crosswalks and curb ramps. Application improves pedestrian access and safety while maintaining vehicle traffic flow through project area; currently no pedestrian crosswalks exist in vicinity.

<b>2.4</b> SMART SCALE SCORE	<b>#182</b> OF 397 STATEWIDE		<b>SMART SCALE Requested Funds</b>		\$11,415,800
			<b>Total Project Cost</b>		\$11,415,800
	<b>#26</b> OF 36 DISTRICTWIDE		<b>Project Benefit</b>		2.7
			<b>Project Benefit / Total Cost</b>		2.4

**Submitting Entity:** Culpeper Town  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** DGP  
**Evacuation Route:** No  
**VTRANS Need:** Urban Development Area



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Reasources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	12.4 persons	10.8 person hrs.	27.1 EPDO	4,239.2 EPDO / 100M VMT	21.3 jobs per resident	19.4 jobs per resident	18.5 adjusted users	1,516,710.0 adj sq. ft.	1,322.2 daily tons	2,130,850.0 adj. buffer time index	24.7 adjusted points	0.01 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.7	1.8	4.3	11.9	1.2	1.0	0.8	2.4	0.1	0.0	0.6	2.4		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	1.2		6.6		1.1			1.5			0.6			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.1		2.0		0.2			0.5			0.1	-0.1		
Project Benefit	2.7													
SMART SCALE Cost	\$11,415,800													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	2.4													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

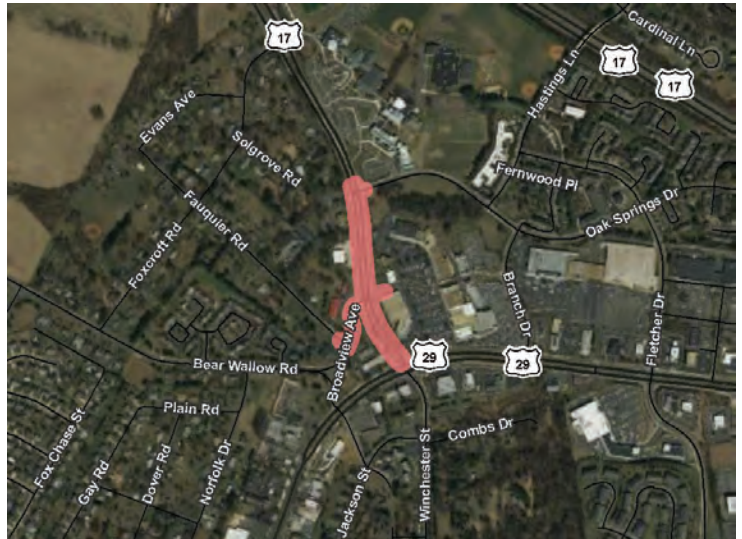
**Business US17/Roebling St Intersection Improvement**

Project Id: 7150

Project will convert an existing intersection into a roundabout to address multiple conflict points and safety issues. Additionally the project will introduce traffic calming measures, bicycle/pedestrian facilities, and crosswalks at this key gateway into the Town.

<b>1.6</b> SMART SCALE SCORE	<b>#215</b> OF 397 STATEWIDE	<b>SMART SCALE Requested Funds</b>	\$13,084,000
	<b>#29</b> OF 36 DISTRICTWIDE	<b>Total Project Cost</b>	\$13,084,000
		<b>Project Benefit</b>	2.1
		<b>Project Benefit / Total Cost</b>	1.6

**Submitting Entity:** Warrenton Town  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Reasources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	21.3 persons	2.1 person hrs.	19.2 EPDO	4,499.8 EPDO / 100M VMT	1.0 jobs per resident	1.1 jobs per resident	64.0 adjusted users	16,613.8 adj sq. ft.	0.0 daily tons	1,177,660.0 adj. buffer time index	85.4 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	1.1	0.4	3.1	12.6	0.1	0.1	2.6	0.0	0.0	0.0	1.9	0.3		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.7		5.9		0.6			0.0			1.9			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.1		1.8		0.1			0.0			0.2	0.0		
Project Benefit	2.1													
SMART SCALE Cost	\$13,084,000													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	1.6													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

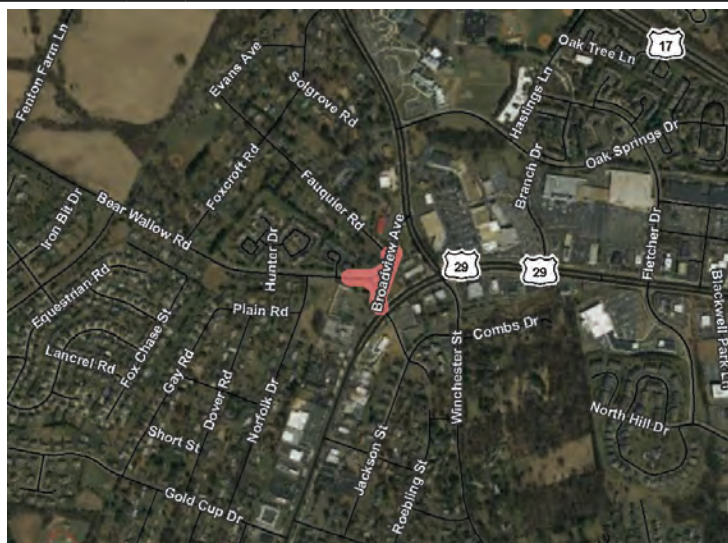
### Bear Wallow/Roebling/Broadview Intersection Improvement

Project Id: 7168

Convert an existing intersection to a roundabout to reduce the number of conflict points and crashes by up to 82%. The innovative intersection design will also provide for traffic calming and bicycle/pedestrian enhancements. This location is a key linkage between an existing Broadview Improvement Project currently underway, a site primed for redevelopment, and the access to the U.S. Training Center located on Bear Wallow Road.

0.4 SMART SCALE SCORE	#295 OF 397 STATEWIDE	SMART SCALE Requested Funds	\$6,402,390
		Total Project Cost	\$6,402,390
	#31 OF 36 DISTRICTWIDE	Project Benefit	0.3
		Project Benefit / Total Cost	0.4

**Submitting Entity:** Warrenton Town  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** DGP  
**Evacuation Route:** No  
**VTRANS Need:** Urban Development Area



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	7.6 persons	1.4 person hrs.	0.8 EPDO	435.7 EPDO / 100M VMT	2.9 jobs per resident	3.4 jobs per resident	22.8 adjusted users	33,227.6 adj sq. ft.	0.0 daily tons	100,990.0 adj. buffer time index	30.4 adjusted points	0.00 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.4	0.2	0.1	1.2	0.2	0.2	0.9	0.1	0.0	0.0	0.7	0.3		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.3		0.5		0.3			0.0			0.7			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		0.1		0.0			0.0			0.1	0.0		
Project Benefit	0.3													
SMART SCALE Cost	\$6,402,390													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	0.4													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



## PROJECT SCORECARD

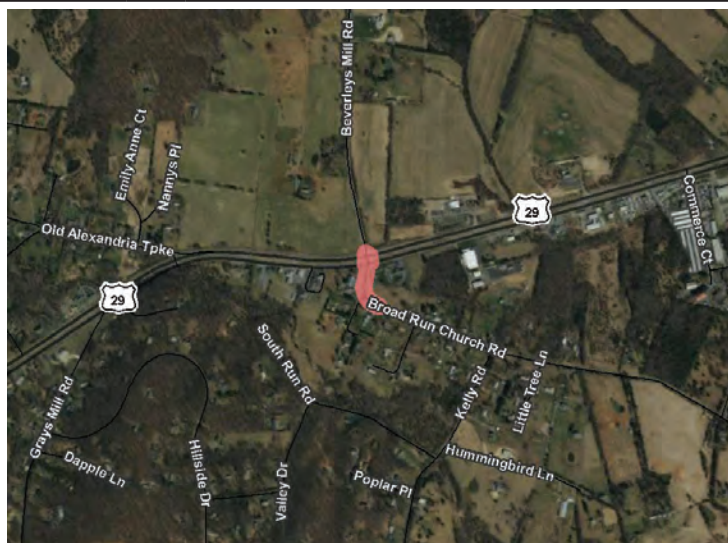
Route 29/Broad Run Church Road Intersection Improvements

Project Id: 7101

The project will add an additional left turn lane at the Route 600 NB approach and includes associated traffic signal modifications.

0.0 SMART SCALE SCORE	#379 OF 397 STATEWIDE	SMART SCALE Requested Funds	\$3,243,230
	#33 OF 36 DISTRICTWIDE	Total Project Cost	\$3,243,230
		Project Benefit	0.0
		Project Benefit / Total Cost	0.0

**Submitting Entity:** Fauquier County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	0.4 person hrs.	8.5 EPDO	234.0 EPDO / 100M VMT	0.1 jobs per resident	0.1 jobs per resident	0.0 adjusted users	8,972.1 adj sq. ft.	111,544.0 daily tons	22,799,600.0 adj. buffer time index	0.0 adjusted points	0.10 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.1	1.4	0.7	0.0	0.0	0.0	0.0	8.8	0.2	0.0	31.4		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.0		1.1		0.0			1.8			0.0	5 (max point reduction)		
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%		N/A	
Weighted Factor Value	0.0		0.3		0.0			0.6			0.0	-1.6		
Project Benefit	0.0													
SMART SCALE Cost	\$3,243,230													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	0.0													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

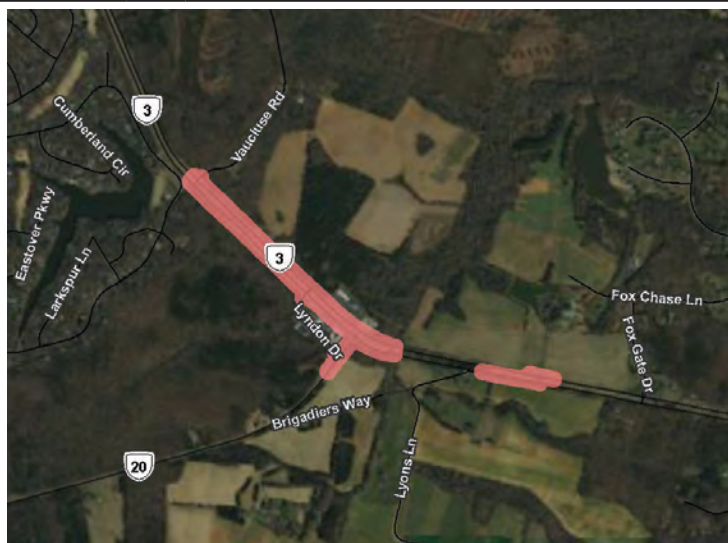
Route 3 / Route 20 Intersection Improvements

Project Id: 7194

This project converts a four-leg, signal-controlled intersection between two primary highways in Orange County (Route 3 and Route 20) into a Continuous Green-T intersection.

0.0 SMART SCALE SCORE	#387 OF 397 STATEWIDE	SMART SCALE Requested Funds	\$11,631,200
	#34 OF 36 DISTRICTWIDE	Total Project Cost	\$11,631,200
		Project Benefit	0.0
		Project Benefit / Total Cost	0.0

**Submitting Entity:** Orange County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** DGP  
**Evacuation Route:** No  
**VTRANS Need:** Urban Development Area



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Resources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	5.3 person hrs.	24.1 EPDO	648.7 EPDO / 100M VMT	1.2 jobs per resident	0.9 jobs per resident	0.0 adjusted users	1,104,440.0 adj sq. ft.	10,476.8 daily tons	9,948,840.0 adj. buffer time index	0.0 adjusted points	0.14 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.9	3.9	1.8	0.1	0.0	0.0	1.8	0.8	0.1	0.0	44.4		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.4		3.3		0.1			1.2			0.0	5 (max point reduction)		
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%		N/A	
Weighted Factor Value	0.0		1.0		0.0			0.4			0.0	-2.2		
Project Benefit	0.0													
SMART SCALE Cost	\$11,631,200													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	0.0													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.

## PROJECT SCORECARD

Route 29/Vint Hill Road Intersection Improvements

Project Id: 6908

The project will modify the existing intersection configuration by adding a right turn lane to the WB Route 215 approach and includes associated traffic signal modifications

0.0 SMART SCALE SCORE	#364 OF 397 STATEWIDE	SMART SCALE Requested Funds	\$1,274,000
	#36 OF 36 DISTRICTWIDE	Total Project Cost	\$1,274,000
		Project Benefit	0.0
		Project Benefit / Total Cost	0.0

**Submitting Entity:** Fauquier County  
**Preliminary Engineering:** Not Started  
**Right of Way:** Not Started  
**Construction:** Not Started  
**Eligible Fund Program:** Both  
**Evacuation Route:** Yes  
**VTRANS Need:** Corridor of Statewide Significance



SMART SCALE Area Type D														
Factor	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	Square Feet of Commercial/Industrial Development Supported	Tons of Goods Impacted	Improvement to Travel Time Reliability	Potential to Improve Air Quality	Impact to Natural and Cultural Reasources	Support of Transportation-Efficient Land Development	Support of Transportation-Efficient Land Development
Measure Value	0.0 persons	0.0 person hrs.	8.8 EPDO	296.3 EPDO / 100M VMT	0.0 jobs per resident	0.0 jobs per resident	0.0 adjusted users	31,077.8 adj sq. ft.	0.0 daily tons	8,496,820.0 adj. buffer time index	0.0 adjusted points	0.11 impacted acres	access * pop/emp density.h	access * pop/emp density change.
Normalized Measure Value (0-100)	0.0	0.0	1.4	0.8	0.0	0.0	0.0	0.0	0.0	0.1	0.0	34.8		
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%	*	N/A	N/A
Factor Value	0.0		1.2		0.0			0.0			0.0			
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%	5 (max point reduction)	N/A	
Weighted Factor Value	0.0		0.4		0.0			0.0			0.0	-1.7		
Project Benefit	0.0													
SMART SCALE Cost	\$1,274,000													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	0.0													

\*The second environment measure subtracts up to 5 points from the project benefit score. Because it is subtracted after combining all weighted factors, it has no measure weight and the 10% factor weight is not applied to it.



# Smart Scale Round 4

## Follow-Up Activities

- Review Category Scoring
  - RRRC is in Category D
    - Accessibility – 15%
    - Congestion – 10%
    - Economic Development – 35%
    - Safety – 30%
    - Environmental – 10%
  - All but one project scored highest in category D

# Smart Scale Round 4

- 10 projects scored highest in Safety
- 4 scored highest in Environmental
- 1 scored highest in Economic Development
- Economic Development scores generally lower than in previous years and/or were less favorable than congestion scores in round 4

# Smart Scale Round 4

## Follow-Up Activities

- RRRC Regional Long Range Plan (RLRP)
  - Update provided later in the meeting
  - Timeline is for RLRP update to be completed / adopted in 2021