

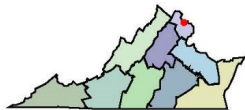
HOW TO READ A SCORECARD

A project scorecard is prepared for each project that is evaluated and scored. The scorecard is a snapshot of project information and scoring. The following provides a brief overview of the information contained in the scorecard.

1 The intersection of E Church Road (Route 625) and Lincoln Avenue (Route 1496)/Belfort Street (Route 1481) has undergone an engineering review of the existing site conditions, crash data, and traffic data to identify and analyze potential alternatives to improve safety and traffic operations. The study has considered multi-modal accommodations, sight distance, turn movement volumes, crash types and patterns, performed a warrant analyses, and completed an intersection screening and alternative evaluations. The recommendation is for the construction of a mini-roundabout at this intersection. The mini-roundabout proposed assumes a 90' inscribed circle diameter with a traversable island. It also includes 6' wide sidewalks and ADA compliant ramps at all 4 corners of the intersection. Right of way impacts are anticipated at the corners of the intersection where necessary for the implementation of the pedestrian facilities.

24.4	#10 OF 413 STATEWIDE	SMART SCALE Requested Funds	\$2,207,710
SMART SCALE SCORE	#1 OF 38 DISTRICTWIDE	Total Project Cost	\$3,207,710
		Project Benefit	5.4
		Project Benefit / Total Cost	16.8

3 Submitting Entity: Loudoun County
Preliminary Engineering: Not Started
Right of Way: Not Started
Construction: Not Started
Eligible Fund Program: DGP
Evacuation Route: No
Resiliency Commitment: Yes
VTRANS Need: UDA, Safety



1 Project Overview: Includes the project name, a short description of the project, and the application ID.

2 Score Summary: Provides the SMART SCALE score, rank, project cost, and benefit.

3 Project Information: Provides information about the project, applicant, delivery status, requested funding, and project need.

5

SMART SCALE Area Type A														
Factor	Congestion Mitigation		Safety		Accessibility			Economic Development		Environment		Land Use		
Measure	Increase in Peak Period 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	132.5 persons	43.0 person hrs	14.4 EPOD	3,792.5 EPOD / 100M VMT	0.2 jobs per resident	0.2 jobs per resident	38.1 adjusted users	0.0 adj sq ft	0.0 daily tons	232,374.0 adj. buffer time index	3.7 impacted points	0.0	9.1 access * pop/temp density in	9.2 access * pop/temp density change
Normalized Measure Value (0-100)	5.3	4.2	2.6	2.2	0.0	0.0	3.1	0.0	0.0	0.0	3.7	0.0	13.1	13.3
Measure Weight (% of Factor)	50%	50%	70%	30%	60%	20%	20%	60%	20%	20%	100%		50%	50%
Factor Value	4.8		2.5		0.6			0.0		3.7		13.2		
Factor Weight (% of Project Score)	45%		5%		15%			5%		10%		20%		
Weighted Factor Value	2.1		0.1		0.1			0.0		0.4		2.6		
Project Benefit	5.4													
SMART SCALE Cost	\$2,207,710													
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	24.4													

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4 Evacuation Route and Resiliency Commitment: Per Virginia Code § 33.2-214.2 B. (ii), it is identified for the applicant whether such projects are located on a primary evacuation route. Per Virginia Code § 33.2-214.2 B. (iii), the applicant self-identifies, whether a project has been designed to be or the project sponsor has committed that the design will be resilient.

5 How to calculate the SMART SCALE using the Scoring Table:

1. The *Measure Value* is determined by assessing the data and characteristics of the project and is then normalized as a percentage of the highest *Measure Value* in that year's cohort of projects.
2. The *Normalized Measure Value* is then multiplied by the *Measure Weight*.
3. *Normalized Measure Values* are then summed to equal the *Factor Value*.
4. The *Factor Value* is then multiplied by the appropriate *Factor Weight* for the area type of the project.
5. *Project Benefit* is then calculated from the sum of the *Weighted Factor Values*.
6. The *SMART SCALE Score* is calculated by taking the *Project Benefit* and dividing by the *SMART SCALE Cost* (in tens of millions).

Explanations of Measures Values:

- Congestion Mitigation
 - Person throughput is the projected increase in persons moving through the project limits during the peak period for current year.
 - Delay is the projected reduction in cumulative time for all persons to move through the project limits for current year.
- Safety
 - Reduction of fatal and injury crashes and crash rate is calculated using the Equivalent Property Damage Only (EPDO) methodology used by FHWA. This equates all crash severities on the same scale by assigning a higher weight to fatal and injury crashes than those that are property damage only.
 - Crash rate reduction is determined by the number of crashes per 100 Million Vehicle Miles Traveled (VMT). This measure also uses the EPDO methodology stated in the first safety measure.
- Accessibility
 - Access to jobs is the number of jobs to which each person has access within 45 minutes (60 minutes for transit projects). The total number of jobs divided by the population equates to jobs per person.
 - Access to jobs for disadvantaged populations is calculated in the same manner as the first Accessibility measure, only for a particular subset of the population.
 - Increase to multimodal travel choices is determined by how the project supports travel choices and the connections between modes. Points are assigned based on project characteristics, and are then multiplied by the number of non-single occupancy vehicle users.
- Economic Development
 - Square Feet of Commercial and Industrial development supported uses either 50% or 100% of each development's square footage based on the proximity of the development to the project. A point value is then determined based on how the project fits with local and regional economic plans and policy, and is multiplied by the adjusted square feet of development.
 - Tons of goods impacted determines the amount of daily freight tons impacted by the project and multiplies the tonnage by a point value based on certain criteria.
 - Improvement to travel time reliability uses weather event frequency and impact as well as incident frequency and impact along with a buffer index to evaluate the improvement in travel time reliability. This value is multiplied by corridor Vehicle Miles Traveled (VMT) to scale the results.
- Environment
 - Potential to improve air quality based on project benefits to non-single occupancy vehicle (SOV) users and reduced delay for freight movement.
 - Evaluates potential natural and cultural acreage impacted using a tiered buffer around the project limits, and is a subtractive measure based on the total potential sensitive acreage impacted.
- Land Use
 - Future Transportation Efficient Land Use measure reports a project's non-work accessibility scaled by the surrounding area's 2030 population and employment density.
 - Increase in Transportation Efficient Land Use measure reports a project's non-work accessibility scaled by the surrounding area's 2010 to 2030 increase in population and employment density.