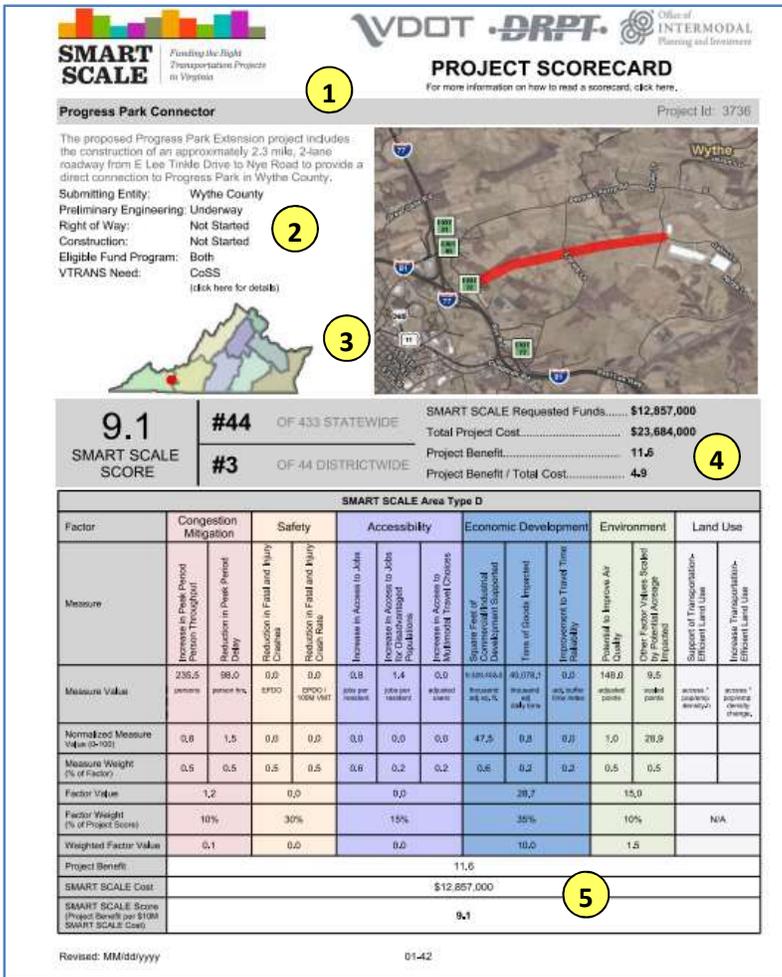


# HOW TO READ A SCORECARD

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

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

**3** **Project Map:** Helps identify the limits of the project and the location of the project within the Commonwealth of Virginia.

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

**5** **Scoring Table:** Displays detailed information on how the SMART SCALE score was determined. Factor and measure values are shown to allow the reader to follow the calculation steps and better understand how the project performed in each area.

SMART SCALE Area Type D													
Factor	Congestion Mitigation		Safety		Accessibility			Economic Development			Environment	Land Use	
Measure	Increase in Peak Period Trip Throughput	Reduction in Peak Period Delay	Reduction in Fatal and Injury Crashes	Reduction in Fatal and Injury Crashes	Increase in Access to Jobs	Increase in Access to Jobs	Increase in Access to Jobs	Square Feet of Commercial/Industrial Development	Jobs Created	Jobs Created	Reduction in Air Quality	Other Factor Values Scored	
Measure Value	235.5	98.0	0.0	0.0	0.8	1.4	0.0	1,100,000	10,000	10,000	149.0	0.5	
Normalized Measure Value (0-100)	0.8	1.5	0.0	0.0	0.0	0.0	0.0	47.5	0.8	0.0	5.0	28.9	
Measure Weight (% of Factor)	0.5	0.5	0.5	0.5	0.6	0.2	0.2	0.6	0.2	0.2	0.5	0.5	
Factor Value	1.2		0.0		0.0			28.7			15.0		
Factor Weight (% of Project Score)	10%		30%		15%			35%			10%		N/A
Weighted Factor Value	0.1		0.0		0.0			10.0			1.5		
Project Benefit	11.6												
SMART SCALE Cost	\$12,857,000												
SMART SCALE Score (Project Benefit per \$10M SMART SCALE Cost)	9.1												

## How to calculate the SMART SCALE Score 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 future year 2025.
  - Delay is the projected reduction in cumulative time for all persons to move through the project limits for future year 2025.
- 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 uses specific criteria to assign point values to each project and multiplies them by the number of peak period non-single occupancy vehicle users.
  - The potential natural and cultural acreage impacted uses a buffer around the project limits and a weighting system based on other factor points earned by the project to determine the value.
- Land Use
  - Future Transportation Efficient Land Use measure reports a project's non-work accessibility scaled by the surrounding area's 2025 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 2025 increase in population and employment density.