



Virginia DOT

Project Prioritization

To ensure the best use of limited transportation funds when selecting projects for the State’s long-range transportation plan, the Virginia Department of Transportation uses the SMART SCALE tool to help establish priorities. Transportation projects are scored on an outcome-based process that is transparent to the public and aids decision makers in making sound transportation investments.

Project Prioritization

Over a 20-year period, traffic related fatalities and serious injuries were trending downward in Virginia. However, fatalities have increased in the past several years.

To reduce traffic-related serious injuries and fatalities and achieve its Toward Zero Deaths vision, the Virginia Department of Transportation (VDOT) has been urging all road users to “Arrive Alive” when they drive, walk, or ride.¹ VDOT recognized, however, that to help Virginians achieve this, there was a need to prioritize its safety investments and focus its efforts on those programs and projects that would best meet the State’s safety needs and goals.

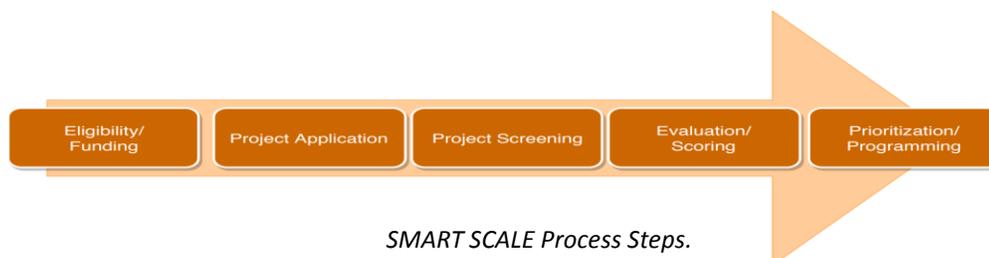


Fatalities and Serious Injuries in Virginia (1996–2015).

(Source: https://www.virginiadot.org/info/resources/SHSP/VA_2017_SHSP_Final_complete.pdf)

SMART SCALE

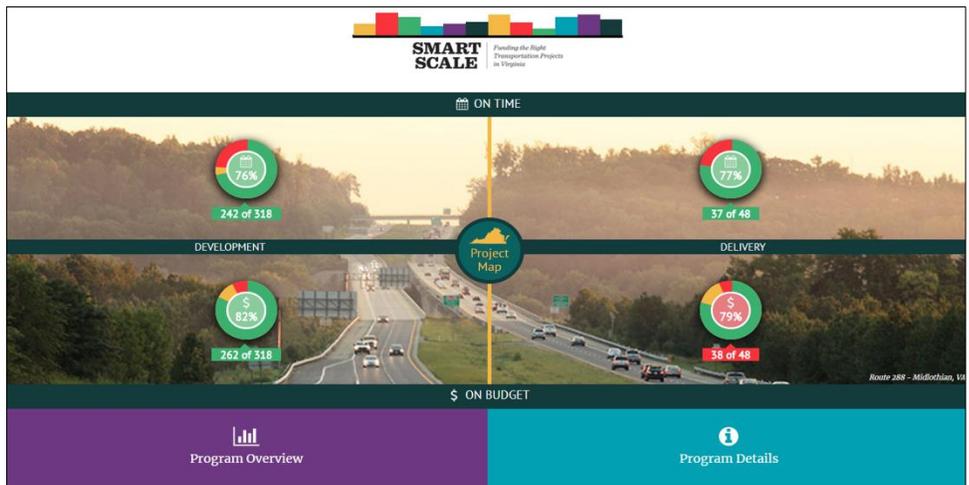
One tool that assists in finding a way to better balance transportation needs and prioritize investments is SMART SCALE²: Funding the Right Transportation Projects in Virginia. Initiated through new legislation in Virginia in 2014, this tool offers a method of scoring planned projects included in VTrans (Virginia’s long-range transportation plan). The projects are scored based on an objective, outcome-based process that is transparent to the public (by making the project scorecard public) and allows decision-makers to make sound investment decisions that are responsive to the State’s needs and residents. The SMART SCALE evaluation process uses quantitative measures to assess the degree to which a project addresses a specific need relative to the requested funding. The process includes five steps that take projects from initial proposal to final programming.³ SMART SCALE also offers a dashboard that provides a brief overview of the ongoing projects.



SMART SCALE Process Steps.

Project Eligibility and Eligible Applicants

Regional and local entities can submit projects for SMART SCALE evaluation. Eligible entities include metropolitan planning organizations, planning district commissions, and public transit agencies. Counties, cities, and towns may also be eligible if they meet certain criteria. Eligible projects must focus on capacity and operational improvements for roadways, transit, bicycle, and pedestrian programs, or transportation demand management.



SMART SCALE Dashboard.

Project Screening

Submitted projects must meet a need identified under one or more of the following categories: corridors of statewide significance, regional networks, urban development areas, and transportation safety needs.⁴

Project Evaluation, Scoring and Prioritization

The project evaluation process has six factors: safety, congestion mitigation, accessibility, environmental quality, economic development, and land use. Each factor has measures that quantify the project benefits. The measures for the safety factor are the number of fatal and severe injury crashes and the rate of fatal and severe injury crashes. This approach prioritizes projects based on the evaluation scores.

Key Accomplishments

- Encourages analysis of project benefits (dollar value from crash reduction) on a basis of relative costs.
- Develops SMART SCALE weighted crash modification factors for different countermeasures. Current methodology weights fatalities 18 times greater than severe injuries. These weighting values help SMART SCALE in developing appropriate scores for project prioritization.
- Supports improved transparency and enhanced accountability by making the project scorecards available to the public.
- Ensures stronger and more thorough project planning.

Summary and Outcome

To evaluate the safety benefits of a proposed project, Virginia uses SMART SCALE, which develops planning-level metrics using state-specific data. As a result, the commonwealth has seen a substantial increase in quality safety projects. Overall, this data-driven prioritization process encourages applicants to consider safety improvements where they are needed. SMART SCALE received the State Transformation in Action Recognition award in 2016.⁵ SMART SCALE is instrumental in measuring the safety effectiveness of many innovative intersection safety countermeasures including continuous green T, displaced left turn, and restricted crossing U-turn.

Contact Information

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References

¹ Virginia Department of Transportation. 2017–2021 Virginia Strategic Highway Safety Plan.

http://www.virginiadot.org/info/resources/SHSP/VA_2017_SHSP_Final_complete.pdf.

² SMART SCALE stands for System Management and Allocation of Resources for Transportation: Safety, Congestion, Accessibility, Land Use, Economic Development and Environment.

³ Virginia Department of Transportation. SMART SCALE. <http://vasmartscale.org/>.

⁴ Virginia Department of Transportation. SMART SCALE Application Guide. <http://smartscale.org/documents/2016smartscaleapplicationguide.pdf>.

⁵ Virginia Department of Transportation. Virginia Receives Top Honors for SMART SCALE Transportation Prioritization Process.

http://www.virginiadot.org/newsroom/statewide/2016/virginia_receives_top_honors106027.asp.