

Smart Scale Update

Presentation to FAMPO
April 17, 2017



Smart Scale Update

1. Additional District Grant projects in GWRC

- King George project for Dahlgren Turn Lane Ext for Rte 301 South: Yes
- Stafford District Grant project for Enon Rd @ Rte 1: No

2. State Feedback on NB River Crossing project

- A worthy and viable project for Round 3 of Smart Scale
- Likely needs significant additional funding to use as leverage and/or a strong multimodal component to score well enough to be selected.
- Estimate on additional funding that would have been needed in Round 2: About \$50 Million
- Research underway on potential ways to increase PE funding for project.
 - Current Funding is \$2 Million
 - PE Cost is \$14.5 Million
- Multimodal improvements under consideration for Round 3
 - Transit/TDM/PNR Lots/Bike/Ped
- I-95 Phase 2 Study will analyze potential multimodal needs for NB River Crossing. May need locality help this summer with some improvements (TAP, Revenue Sharing, HSIP, etc.)

Smart Scale Update

3. State Feedback on Rte 610 Direct Connect Ramp

- Project screened out of Smart Scale because of concerns it may not be necessary once committed express lane improvements are completed.
- Probably not a viable application for Round 3 of Smart Scale

4. Preparing for Round 3

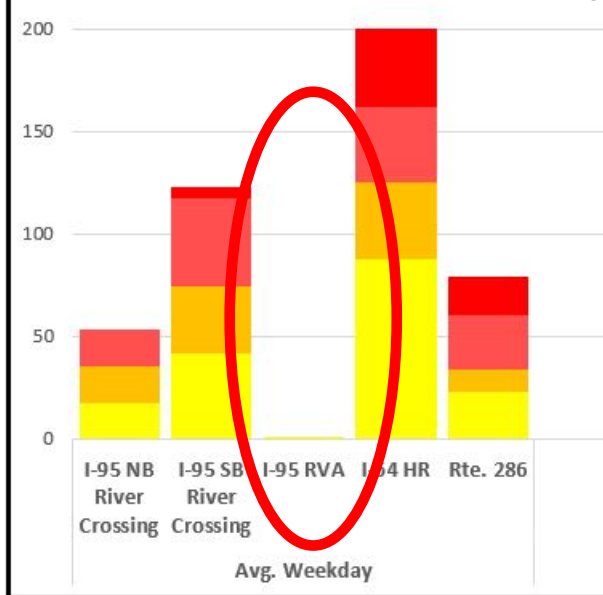
- Schedule to be moved up, perhaps from August to Spring 2018
- Special Task Force for Smart Scale – Input needs to be sent to State before May 10th for consideration by the CTB at retreat planned for this summer. Revised Smart Scale program information likely to be available by Fall 2017.
- Early Fall?: FAMPO/GWRC Coordination for Smart Scale Round 3 applications likely begins

Example: Importance of Multimodal Improvements in Round 2 Smart Scale Scoring Methodology

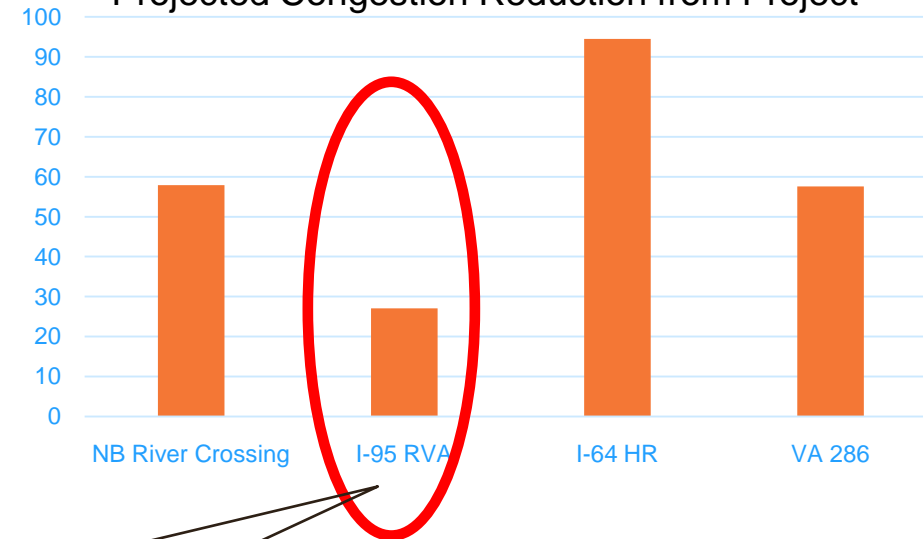
Comparison Example of Round 2 Congestion scores for Average Weekday:

- ✓ NB River Crossing in Fredericksburg: 57.9 (Score lowered due to SB improvements)
- ✓ I-64 High Rise Bridge in Hampton Roads: 94.5 (Highest score in state)
- ✓ VA 286 Interchange in NOVA: 57.6
- ✓ I-95 Widening in Richmond: 27.1 (Most of score due to a new PNR Lot)

FAMPO 2016 INRIX – Actual Congestion



Round 2 Congestion Scores – 2025
Projected Congestion Reduction from Project



Project has little existing congestion, but received a congestion score close to half that for the SB River Crossing primarily because it included a large PNR Lot.

Summary of Major Smart Scale Task Force Input

27 Total Recommendations

- 10 Recommendations regarding process
- 17 Recommendations regarding six Smart Scale Factors
 - Congestion = 4
 - Safety = 3
 - Accessibility = 2
 - Environment = 2
 - Economic Development = 4
 - Land Use = 2

Table 4.6 Calculate SMART SCALE Score

Project Located in Typology Category A	Congestion Mitigation		Safety		Accessibility			Environment		Economic Development			Land Use
	Person Throughput	Person Hours of Delay	Number of Fatal and Injury Crashes	Rate of Fatal and Injury Crashes	Access to Jobs	Access to Jobs for Disadvantaged Populations	Access to Multimodal Choices	Air Quality and Energy Environmental Effect	Impact to Natural and Cultural Resources	Project Support for Economic Development	Intermodal Access and Efficiency	Travel Time Reliability	Transportation Efficient Land Use
Measure Score	1.4	0.79	6.9	1.24	0.152	0.18	0.15	0.09	0.39	2.09	2.8	3.83	6.91
Measure Weight	50%	50%	50%	50%	60%	20%	20%	50%	50%	60%	20%	20%	100%
Weighted Measure Score	0.7	0.39	3.45	0.62	0.09	0.04	0.03	0.04	0.19	1.25	0.56	0.77	6.91
Raw Factor Score	1.09		4.07		0.16			0.25		2.58			6.91
Factor Weighting	45%		5%		15%			10%		5%			20%

Highlights from Smart Scale input on Process

- 1. Focus more Statewide High Priority Program funding on major regional projects.** Restrict project applications to those identified as meeting a VTrans Needs Assessment need for a Corridor of Statewide Significance (CoSS).
- 2. Restrict bicycle/pedestrian projects from consideration in the Statewide High Priority Program.** These projects can be considered for funding in the District Grant Program.
- 3. Refine the Smart Scale prioritization methodology to better assess the benefits of large regional projects versus small projects.**
- 4. Improve pre-application coordination between State and applicants so applicants can obtain reliable feedback on project eligibility.** Consider providing complimentary pre-screening of candidate projects submitted by an early deadline to encourage earlier project submissions and reduce the risk of candidate projects being screened out.
- 5. Since the number of project applications is likely to increase significantly from Round 2 to Round 3 (e.g., from 436 to 1,000), consider developing either an expanded screening process or two-phase prioritization process where initial screening or first-phase prioritization would employ a simpler approach to identify the top X% (e.g., 50%, of submitted eligible projects).** Then only this top X% of projects would go through the robust prioritization scoring methodology for Smart Scale. This approach would create a more sustainable work effort for State staff, allow more resources to be devoted to the top X% of projects, and help improve quality control.

Highlights from Smart Scale input on Six Factors

1. Congestion

- Include all travel days: Sunday through Saturday in Congestion analysis. Current analysis only considers average weekday.

2. Safety

- For larger projects competing for Statewide High Priority funding on Corridors of Statewide Significance, include accidents in all areas of reoccurring traffic congestion for any travel day (Sunday through Saturday).

3. Accessibility

- Either develop a decay curve for the Fredericksburg Region or group the Fredericksburg Region with NOVA for the decay curve analysis, instead of grouping Fredericksburg with the rest of the state. Review Access to Jobs highway and transit travel time thresholds for reasonableness for the NOVA and Fredericksburg regions.

4. Environment

- Peak traffic for all travel days (weekday and weekend) should be included in the Air Quality scoring.

5. Economic Development

- Increase weighting of Intermodal Access and Efficiency and Travel Time Reliability measures for all projects. Currently each receives 20% of the economic development score.

6. Land Use

- Increase buffer size to more than one mile for large regional projects. Using a one-mile buffer for all projects regardless of size gives small projects an advantage over larger projects.

Questions?



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SCALE**

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