

Recent Smart Scale Scoring Change for Accessibility

October 16, 2017



Accessibility has the 2nd Highest Weighting in Smart Scale for FAMPO Region

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	152	0.18	0.1	0.09	0.39	2.09	2.8	3.83	6.91
Measure Weight	50%	50%	50%	50%	0%	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%

Accessibility Findings from Smart Scale Task Force

15% of Score for Category A: FAMPO

Three Accessibility Measures:

1. Access to Jobs (60%)
2. Access to Jobs for disadvantaged populations (20%)
3. Access to Multimodal Choices (20%)

Issues:

1. Measures 1 & 2 which equate for 80% of score use a job accessibility threshold of 45 minutes for highway trips and 60 minutes for transit trips based on an analysis of Statewide averages. As a result, work trips commuting longer than these thresholds are not counted. The FAMPO/GWRC area has a lot of long distance commuters to NOVA, DC, and Dahlgren, but the jobs that they commute to are not counted in the analysis if the commuter time is over the threshold
2. Decay curves for use in the Accessibility analysis were developed for NOVA and for the rest of Virginia only. Fredericksburg area was grouped with the rest of Virginia, but is most similar to NOVA in terms of access to jobs travel characteristics. Data potentially exists for developing a Fredericksburg/NOVA area Decay Curve.
3. For Last mile assumptions, pedestrian trips considered for the end of transit trips, but Bicycle trips are not considered. Bike sharing is growing in NOVA/DC, but is not currently considered.

A. Review of Prioritization Methodology: Accessibility

Examples of Round 2 Accessibility scores:

- ✓ NB River Crossing in Fredericksburg: 2.2
- ✓ I-64 High Rise Bridge in Hampton Roads: 11.4
- ✓ VA 286 Interchange in NOVA: 8.3
- ✓ I-95 Widening in Richmond: 11.2

Likely reason for lower scoring for NB River Crossing compared to other projects is relative lack of jobs within a 45 minute drive from the River Crossing during congested periods. DC and much of Northern Virginia likely outside of 45 minute drive during peak periods.

A. Review of Prioritization Methodology: Accessibility

15% of Score for Category A: FAMPO

Findings:

1. One size fits all approach for entire State except NOVA for Access to Jobs Accessibility calculation is not reasonable for GWRC area. Large percentage of GWRC commute trips are over 45 minutes for Auto and 60 minutes for Transit. Need a different decay curve specific to GWRC or GWRC and NOVA
 - **Average Commute Time for Virginia: 27.7 minutes (25.4 for USA)**
 - **Average Commute Time for DC Metro Area (MD/DC/NOVA): 34.5 minutes**
 - **Average Commute Time for GWRC jurisdictions: 36.5 minutes**
 - **Stafford: 39.4**
 - **City: 25.0**
 - **Spotsylvania: 38.0**
 - **Caroline: 37.7**
 - **King George: 34.0**
 - **City of Roanoke: 20.3**
 - **Henrico County: 21.9**
 - **City of Virginia Beach: 22.9**
1. **First Mile/Last Mile Bicycle trips not included which is important for NOVA/DC work trip ends because of available Bikesharing options**

Summary Timeline of FAMPO correspondence to State on Accessibility Measure for Round 3 of Smart Scale

- **April 17th – FAMPO Letter providing input to State on several Smart Scale items including two issues with Accessibility measure scoring. First issue is critical for GWRC area.**

Regarding AccessibilityFactor:

1. 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 Jobshighway and transit travel time thresholds for reasonableness for the NOVA and Fredericksburg regions.
 2. Consider including bicycle trips for first mile/last mile travel in transit accessibility calculations. Currently pedestrian travel is included, but not bicycle travel.
- **August 11th – State Response to April FAMPO Letter stating that first Accessibility Measures issue identified by FAMPO in April 17th letter would be changed**
 - **August 29th – Fall Transportation Meeting for Fredericksburg District – State presents on proposed Smart Scale changes which include Accessibility Measure issue change**
 - **October 3rd – State Smart Scale e-mail unexpectedly restores Accessibility Measure issue change so that 45 minute Highway and 60 minute Transit caps are restored.**

State Response to FAMPO on August 11th regarding Accessibility Measure Change

- April 17th – FAMPO Letter providing input to State on several Smart Scale items including two issues with Accessibility measure scoring

Regarding Accessibility Factor:

1. 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

This issue will be addressed for Round 3 of SMART SCALE by either (i) applying the NOVA decay curve to the FAMPO region, (ii) developing a FAMPO specific decay curve, or (iii) using a single decay curve statewide.

2. Consider including bicycle trips for first mile/last mile travel in transit accessibility calculations. Currently pedestrian travel is included, but not bicycle travel.

At this time the accessibility tool is not able to measure bicycle accessibility. For example there is an issue related to capacity of bicycle parking and of buses to carry bicycles, which is not captured in the tool used to calculate this measure.

October 3rd State Smart Scale E-mail

- **October 3rd – State Smart Scale e-mail unexpectedly restores Accessibility Measure issue change so that 45 minute Highway and 60 minute Transit caps are restored**

From: SmartPortal (CTB) [mailto:SmartPortal@CTB.Virginia.gov]

Sent: Tuesday, October 03, 2017 6:01 PM

Cc: SmartPortal (CTB) <SmartPortal@CTB.Virginia.gov>

Subject: SMART Portal and SMART SCALE Updates

Good afternoon,

We wanted to provide a few updates.

SMART Portal

1. The deadline for submission of applications for the Revenue Sharing, Transportation Alternatives, and Safety programs is due November 1, 2017. If you have questions about your applications or the Portal, please use the contacts included on the About tab or send an email to SmartPortal@CTB.Virginia.gov.
2. The point of contact for the Revenue Sharing program for our Hampton Roads district has changed. If you have questions, please direct them to Sonya.Hallums-Ponton@VDOT.Virginia.gov.

SMART SCALE

1. At the September meeting of Commonwealth Transportation Board, the Board was presented with several updates as well as feedback we have received to date. As a result of that meeting, there were several additional changes/clarifications proposed for Round 3 of SMART SCALE:
 - a. Congestion Measures
 - i. Scaling Congestion – This item is still under consideration and additional updates will be provided at the October CTB meeting.
 - ii. Current vs. Future Congestion - Person throughput and person hours of delay analysis will now use existing year traffic volumes, not future year traffic volumes.
 1. New roadway facilities tested with a regional travel demand model should be tested using the SYIP highway network.
 - b. Economic Development Measures
 - i. Established maximum square footage of 10 million square feet
 - c. Accessibility
 - i. Restored the 45 and 60 minute cap for auto and transit job access respectively

Current October 20th Deadline for Public Comment on Draft Smart Scale Round 3 Technical Guide

1. **October 20th is current deadline for public comment on proposed Smart Scale Round 3 Technical Guide**
 - Released for Public Comment on August 21st
 - Several changes announced by e-mail on October 3rd
2. **Significant concern at several MPOs regarding October 3rd State Smart Scale changes. Virginia Association of MPOs has written a letter requesting an extension to public comment period and a delay in CTB action on accepting new Technical Guide from October 24th to December 6th CTB meeting**

Questions?

