

Evaluating Significant Projects that May Ease Congestion in Northern Virginia Interim Progress Report #4

July 1, 2014

Legislative Background

Chapters 768 and 825 of the 2012 Acts of Assembly amended the *Code of Virginia* by adding § 33.1-13.03:1, directing the Virginia Department of Transportation (VDOT), in ongoing coordination with the Commonwealth Transportation Board (CTB), the Department of Rail and Public Transportation (DRPT), and the Northern Virginia Transportation Authority (NVTA), to evaluate and develop a quantitative rating system for at least 25 significant transportation projects in and near the Northern Virginia Transportation District, to the extent funds are available for such a purpose. (The effort to develop the rating system and evaluate and rate the projects is hereinafter collectively referred to as the “Rating Study” or “study.”)

The enacting legislation directs that the project evaluation and rating be based on the project’s expected effectiveness at easing congestion and, to the extent possible, the rating should also be based on the project’s expected improvement in regional mobility in the event of a homeland security emergency. The evaluation and ratings are to be completed and published on VDOT’s website every four years. Interim progress reports are to be published on VDOT’s website every six months. VDOT posted its first three reports on its website on January 1, 2013, July 1, 2013 and January 1, 2014, respectively. The interim reports are available at:

http://www.virginiadot.org/projects/northernvirginia/evaluating_significant_projects.asp.

The full text of the *Code of Virginia* §33.1-13.03:1 can be found at:

<https://lis.virginia.gov/cgi-bin/legp604.exe?000+cod+33.1-13.03C1>.

VDOT’s Northern Virginia District Office and DRPT are leading the Rating Study. This Interim Report #4 serves as an update on tasks already in progress and new activities commenced since the last Interim Report.

Update on Tasks Noted in Interim Progress Report #3 – January 1, 2014

Conduct ongoing coordination with the CTB and the NVTA: VDOT continually coordinates with the Northern Virginia representatives of the CTB and with the NVTA.

Status – Since the January 2014 Interim Report, VDOT has coordinated with the following entities regarding the establishment of the Project Evaluation Framework and the results of the Project Selection Process.

- Provided ongoing updates to the Northern Virginia representatives of the CTB, as well as to the NVTA Chairman.
- Provided study updates to the NVTA Jurisdiction and Agency Coordination Committee at their regularly scheduled meetings.

- Coordinated with and provided study briefings to the NVTA Project Implementation Working Group and NVTA Technical Advisory Committee to obtain feedback on the project selection, nomination and evaluation process.

The following tasks are new tasks that VDOT and DRPT have initiated since the January 2014 Interim Report.

Tasks Undertaken Since Interim Progress Report #3 – January 1, 2014

1. **Provide baseline regional congestion analysis:** The baseline congestion assessment has been completed and shared with the Peer Review, the stakeholders, NVTA and CTB. Detailed maps showing baseline congested conditions are posted on the study website, noted above.
2. **Project nominations:**
 - On February 3rd, VDOT issued a call for project nominations for evaluation and rating from the NVTA and the CTB. VDOT requested nominations by February 25th.
 - The NVTA approved a list of project nominations to undergo Project Selection analysis for the Rating Study. Together, the NVTA and the CTB nominated 37 projects for evaluation and rating. Twenty-five projects were roadway widenings, ten were interchange/intersection projects, and two were intelligent transportation system (ITS) projects.
3. **Development of the methodology to evaluate and rate significant transportation projects in Northern Virginia:**

Status – VDOT and DRPT developed the project evaluation approach, known as the Project Evaluation Model (PEM), and refined it with input from project stakeholders (representatives of the localities in Northern Virginia and the transit agencies/commissions), Peer Review Group, NVTA, and the CTB.

- VDOT met with the Peer Review Group on December 19, 2013, to review the technical methodology for evaluating and rating projects. Potential measures of effectiveness were also reviewed, and changes were made based on comments of the Peer Review.
- VDOT met with local/regional transportation and transit representatives on January 6, 2014, and discussed the proposed PEM and potential measures of effectiveness for the study.
- Due to the highly technical nature of the approach, VDOT conducted a webinar on January 16th to further explain the evaluation framework and modeling approach to project stakeholders.
- VDOT reviewed project stakeholders' comments on the proposed evaluation framework and made significant changes to the framework in response. The study team met with representatives from the NVTA member jurisdictions and

transit agencies on January 31st to discuss the comments and the revised evaluation framework. At this meeting, stakeholder representatives endorsed the revised framework and participated in an interactive input session to provide the study team with the relative importance of each performance measure to be used in the study (weights).

- VDOT presented the Project Evaluation framework to the NVTA at their February 20th meeting.

4. Selection of projects to be evaluated and rated: From late February through early March 2014, the study team used the Project Selection Model (PSM) to assess the 37 NVTA and CTB nominated projects with regard to each project's significance and ability to reduce congestion and improve mobility during a homeland security emergency.

Status – The NVTA endorsed the results of the Project Selection Model at their March 13th meeting. **The NoVA CTB representatives provided an update on the results of the Project Selection Model to the CTB at their March 19th meeting.**

- All of the submitted projects met at least one of the six CTB Priorities, passing the first step in the Project Selection Framework.
- All 37 NVTA and CTB nominated projects proceeded through to the second step of the Project Selection process where the significance and the congestion reducing potential of each project were assessed. Emergency Mobility was also assessed as part of this second tier screen.
- Available funding provided for the evaluation and rating of 40 projects in this first round of the Rating Study. As there were 37 projects nominated, all projects were selected to move forward to evaluation and rating.
- In April 2014, VDOT published a spring Fact Sheet to inform the public of the Project Selection framework. Further detail on the selection process and criteria used in the Rating Study is available on VDOT's project website:

www.virginiadot.org/projects/northernvirginia/evaluating_significant_projects.asp

5. Evaluation and rating process for nominated projects: After the nominated projects passed the CTB Priorities and Project Selection screens, the study team began the analysis of the 37 selected projects in the Project Evaluation phase of the study.

Status – From March through June 2014, VDOT evaluated the nominated projects using the regional travel demand forecasting model (these runs did not include the more detailed operational models) to arrive at a basic rating for each nominated project. Results were shared with the Peer Review Group, the project stakeholders, NVTA Staff and the Northern Virginia CTB members. Results will be presented to the NVTA in July.

- The Peer Review Group met on June 5th to review the performance measures from the Regional Travel Demand Model and the resultant basic ratings. Their suggestions were incorporated into the basic rating process.
- On June 19th, 2014, VDOT presented the approach and basic project ratings to the stakeholders. The basic ratings are scheduled to be finalized by July 1st, with more detailed ratings to be completed by December 31st.

6. Peer Review Group expanded by addition of Smart State Transportation Initiative (SSTI).

Status – In June 2014, SSTI, associated with the University of Wisconsin, was added as a third member of the Peer Review Group. SSTI joins Texas Transportation Institute and the Center for Urban Transportation Research located within the University of Southern Florida, as an independent subject matter expert reviewing the technical components of the study.

Next Steps

The following represents the key next steps and the anticipated schedule:

- Present basic ratings to NVTA in July
- Prepare detailed evaluation and rating, which will include traffic simulation models and generate measures included in the Project Evaluation Framework – July 1 to October 30, 2014
- Final project ratings – December 2014