

**NORTHERN VIRGINIA TRANSPORTATION AUTHORITY**

**Technical Advisory Committee**

**May 21, 2014 at 7pm**

**NVTA Office – 3060 Williams Drive (Suite 510)**

**AGENDA**

- I. **Call to Order/Welcome** Chair Boice
  
- II. **Approval of Summary Notes – April 16, 2014**
  
- III. **NVTA Updates** Monica Backmon
  
- IV. **“Benefits” – Estimation Methodology**
  
- V. **Adjournment**

**Next Meeting**

**Wednesday, June 18, at 7pm**

**NVTA Office**

# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

## Technical Advisory Committee

April 16, 2014 at 7pm

NVTA Office – 3060 Williams Drive (Suite 510)

### SUMMARY NOTES

#### I. Call to Order/Welcome

Chair Boice

- Chair Boice called the meeting to order at 7:01pm.
- Attendees:
  - ✓ Members: Chair Boice; Agnes Artemel; Robert Dunphy; Doug Fahl; Pat Turner; Shangjiang Zhu.
  - ✓ NVTA Staff: John Mason (Interim Executive Director); Michael Longhi (CFO); Keith Jasper (Program Coordinator).
  - ✓ Other Staff: Noelle Dominguez (Vice Chair, JACC).
- Mr. Mason introduced Keith Jasper, who provided an overview of his transportation background and experience.
- Mr. Mason explained that all Committee members appointed by NVTA will serve for a term of three years, with no limit to the number of terms that can be served. However, the duration of the initial term for some current members will be less than three years to minimize the number of Committee members up for re-election or replacement in any given year. The following initial terms were agreed:
  - ✓ Chair Boice – two years (2013-2015)
  - ✓ Agnes Artemel – two years (2013-2015)
  - ✓ Pat Turner – one year (2013-2014)
  - ✓ Absent NVTA members – TBD
- The duration of terms for Committee members appointed by the Secretary of Transportation were set at the time of their appointment.

#### II. Approval of Summary Notes – March 19, 2014

- Following a brief discussion regarding the wording in the penultimate sub-bullet on page 1 of the March 19, 2014 draft minutes, Committee members agreed that “sometimes a worst spot could be the better measure of the big picture” be replaced with “sometimes a more congested spot could be the better measure of the big picture”.
- Agnes Artemel moved to approve the minutes of March 19, 2014 with the above modification; seconded by Doug Fahl. Motion carried unanimously.

### III. “Benefits” – Definition and Methodology

- Mr. Mason set the context for the discussion by referencing a key passage from HB2313 regarding long-term benefits for each locality, and by summarizing some topics for consideration by TAC members.
- The Committee had a wide-ranging discussion regarding “Benefits” and possible approaches for determining the “Benefits” to each jurisdiction. Key highlights/suggestions were:
  - ✓ Terms such as “Benefit” and “Long-Term” are not defined by HB 2313.
  - ✓ Funds should be allocated to projects that help to achieve regional solutions. A regional plan is needed that will lead to regional projects that are prioritized for implementation. The TransAction 2040 Plan does not do this.
  - ✓ Regional projects can be expected to have an impact beyond the jurisdiction in which they are implemented. This is important for achieving a geographic balance in the allocation of benefits.
  - ✓ It was noted that current forecasts call for a larger population in the future and we must anticipate that congestion will worsen if we do not make transportation investments and/or change land use policies.
  - ✓ Regional activity centers may represent a good focus for transportation improvements.
  - ✓ Projects selected for implementation must reflect urban density and scale in the locality.
  - ✓ It is critical to demonstrate how projects selected for implementation will be a benefit to the region. This calls for an objective and robust methodology towards estimating impacts and benefits, leveraging existing data sources and models. The methodology must embrace highway, rail, and transit improvements.
  - ✓ It was suggested that a review be conducted to determine whether there are any lessons that can be learned related to allocation of benefits from the original WMATA Compact. NVTC has an allocation model for operational costs.
  - ✓ Potential benefits-related metrics could include delay, travel time, emissions/pollution and accessibility.
  - ✓ Project development schedules and the slow rate of making changes in land use mean estimation of benefits should be made over a period of not less than six years, and could actually be longer.
  - ✓ It is difficult to communicate the concept of transportation investments making traffic conditions better than they would have been, while not actually making conditions better than they are today.
- At the conclusion of the discussion, the Committee agreed four key principles:
  - ✓ Benefits may have a positive impact on multiple jurisdictions.
  - ✓ Benefits to jurisdictions cannot be equated to revenues generated by, or attributable to, each jurisdiction.
  - ✓ The minimum time period for the estimation of benefit accruing to each locality should be at least six years.

- ✓ The estimation of benefits should take advantage of ongoing analyses and existing models.

#### IV. **Adjournment**

- Meeting adjourned at 8:15pm.

DRAFT

# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

## Technical Advisory Committee

### “Benefit” Estimation

- **The law**

- HB 2313: “With regard to the revenues distributed under subdivision 1 [70% revenues], each locality's total long-term benefit shall be approximately equal to the proportion of the total of the fees and taxes received by the Authority that are generated by or attributable to the locality divided by the total of such fees and taxes received by the Authority.”<sup>1</sup>
- The Authority shall be responsible for long-range transportation planning for **regional transportation projects** in Northern Virginia. In carrying out this responsibility, the Authority shall, on the basis of a regional consensus, whenever possible, set regional transportation policies and priorities for regional transportation projects. The policies and priorities shall be guided by **performance-based criteria such as the ability to improve travel times, reduce delays, connect regional activity centers, improve safety, improve air quality, and move the most people in the most cost-effective manner.**<sup>2</sup>
- HB 599: Requires VDOT evaluation scoring driven by congestion reduction

- **NVTA TransAction 2040 Vision and Goals**

- The TransAction vision, adopted by the Transportation Coordinating Council in 1999, is for an improved multimodal transportation system that facilitates achievement of specific regional goals.

*In the 21st century, Northern Virginia will develop and sustain a multimodal transportation system that supports our economy and quality of life. It will be fiscally sustainable, promote areas of concentrated growth, manage both demand and capacity, and employ the best technology, joining rail, roadway, bus, air, water, pedestrian, and bicycle facilities into an interconnected network.*

- These seven goals developed for the TransAction 2040 Plan build on the goals from the TransAction 2030 Plan and are used to guide the assessment and prioritization of projects included in TransAction 2040:
  - Provide an integrated, multimodal transportation system;

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<sup>1</sup> § 15.2-4838.1. Use of certain revenues by the Authority.

<sup>2</sup> § 15.2-4838. Responsibilities of Authority for long-range transportation planning.

- Provide responsive transportation service to customers;
  - Respect historical and environmental factors;
  - Maximize community connectivity by addressing transportation and land use together;
  - Incorporate the benefits of technology;
  - Identify funding and legislative initiatives needed to implement the Plan; and
  - Enhance Northern Virginia relationships among jurisdictions, agencies, the public, and the business community.
- **TAC Recap (4/16/2014) – four key principles:**
    - Benefits may have a positive impact on multiple jurisdictions;
    - Benefits to jurisdictions cannot be equated to revenues generated by, or attributable to, each jurisdiction;
    - The minimum time period for the estimation of benefit accruing to each locality should be at least six years; and
    - The estimation of benefits should take advantage of ongoing analyses and existing models.
    - The 4/16 TAC discussion did not address benefit estimation methodologies or performance measures.
- **HB599 Rating Study Performance Measures<sup>3</sup>**
    - Congestion duration;
    - Person hours of delay;
    - Person hours of congested travel in autos;
    - Person hours of congested travel in transit vehicles;
    - Transit crowding;
    - Accessibility to jobs; and
    - Emergency mobility.

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<sup>3</sup> VDOT/DRPT: *Evaluation of Significant Transportation Projects in Northern Virginia Transportation District Fact Sheet, Spring 2014*

- **Considerations for TAC discussion**

- How well do the HB599 performance measures and the suggested HB2313 performance-based criteria support the estimation of each locality's total long-term benefit with regard to the 70% revenues?
- Are alternative/additional/fewer measures or criteria needed?
- How are regional transportation projects defined?
- How should benefits of VRE/Wmata/PRTC and NVTC projects be allocated?
- To what extent does the estimation of benefits of NVTA projects need to embrace the TransAction 2040 vision and goals?
- To what extent should the **selection process** for NVTA projects (funded with 70% revenues) reflect the requirement that each locality's total long-term benefit be approximately equal to the proportion of the total of the fees and taxes received by the Authority that are generated by or attributable to the locality divided by the total of such fees and taxes received by the Authority?

# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

## TECHNICAL ADVISORY COMMITTEE

### MEMORANDUM

**FOR:** Chairman Martin E. Nohe and Members  
Northern Virginia Transportation Authority

**FROM:** Randy Boice, Chair, Technical Advisory Committee

**DATE:** April 30, 2014

**SUBJECT:** Benefits

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1. **Purpose.** To share with the Authority our initial perspective on the “benefits” definitional challenge.
2. **Discussion.** At our April 16 meeting we had a focused discussion on the challenge of defining what is meant by “benefits” in the context of statutory mandate for jurisdictions to share benefits proportional to their revenue contribution over time. Key comments included:
  - Terms such as “benefit” and “long-term” are not defined in legislation.
  - TransAction 2040 provides a regional perspective of the jurisdictional “needs”; however, it does not include a regional sense of complementary benefits.
  - Demographic forecasting consistently reflects regional population growth and population shifts between “inner” and “outer” areas.
  - Regional activity centers provide a good focus for transportation improvements.
  - It is critical to demonstrate that projects selected for the regional long range plan will benefit the region; not just particular jurisdictions. This suggests the need for an objective and robust methodology that estimates impacts and benefits, leveraging existing data sources and models. This methodology must embrace highway and transit (rail, bus, etc.) improvements.
  - Project development schedules and the slow rate of making changes in land use mean estimation of benefits should be made over a period of not less than six years. This period of time could be longer.
  - It is difficult to communicate the concept of transportation investments making traffic conditions better than they would have been, while not actually making conditions better than they are today.



**3. Principles.** As a preliminary perspective on addressing the “benefits” challenge, the Committee agreed on these general principles:

- Benefits to jurisdictions cannot be equated to revenues generated by, or attributable to, each jurisdiction.
- Benefits may have a positive impact on multiple jurisdictions.
- The **minimum** time period for the estimation of benefit accruing to each jurisdiction should be at least six (6) years.
- The estimation of benefits should take advantage of ongoing analyses and existing models.

**4. Next steps.** As we look forward to the next meeting, I anticipate that our focus will be to continue the discussion on “benefits”. Specifically we will consider which measures are most appropriate for estimating congestion reduction and other project impacts, and the methodology/data sources associated with determining the scale and distribution of each of these measures.

In the longer term, we anticipate:

- Reviewing the findings of VDOT’s HB599 study.
- Reviewing current practices for monitoring traffic congestion and other trends in Northern Virginia, and to suggest options for enhancing the state of the practice in support of NVTA’s annual reporting obligations.
- Supporting the development of the scope of work for the update to the TransAction 2040 long range plan, with a specific focus on identifying projects with the greatest regional significance.