

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

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

FROM: Randy Boice, PE, Chairman, Technical Advisory Committee

DATE: November 30, 2016

SUBJECT: Report from the Technical Advisory Committee

1. Purpose. To inform the Northern Virginia Transportation Authority on the recent activities of the Authority's Technical Advisory Committee (TAC).

2. Background. The TAC met on November 16, 2016. The Committee was briefed on the Authority's agenda for the November 10 Authority meeting.

The Committee continued its discussion on the draft performance measures for the analysis as part of the TransAction update. The Committee's recommendation on the performance measures is attached with this memorandum. The key recommendations are:

- The Committee recommended that the congestion reduction related measures (TransAction Goal 1) should receive 60% weighting, measures that enhance the reliability of the network (TransAction Goal 2) should receive 30% weighting, and measures that reduce negative impact of transportation (TransAction Goal 3) should receive 10% weighting.
- Most of the conversation involved the Proposed Objectives and the Candidate Measures and Weightings categories
- Proposed Objectives – Goal 1
 - Add 1.3 *Improve connections among and within population and employment centers*
 - Remove 1.5 *Support and strengthen local land use objectives* and 1.6 *Reduce household transportation costs*. It is assumed that local land use objectives have already been considered by the localities submitting the projects. Reducing household transportation costs was considered difficult to quantify and is dependent on too many variables outside of agency control.
- Candidate Measures/Weightings – Goal 1
 - Retain and consider combining *Total person hours of delay, Transit crowding, Person hours of congested travel in automobiles, and Person hours of congested travel in transit vehicles*.
 - Retain *Congestion severity (maximum travel time ratio)* and *Congestion duration*
 - Retain *Percent of jobs/population within 1/2 mile of transit, and Access to Jobs within 45 mins by auto and 60 mins by transit*.

- Add two new measures: *Aggregate travel time between MWCOG-defined Regional Activity Centers (RAC)* and *Lane miles and sidewalk miles within ½ mile radius RAC*.
- Remove the measures *Consistency with local planning efforts* and *Average cost per commute trip*.
- Proposed Objectives – Goal 2
 - Reword 2.2 to *Provide more route and mode options and increase integration between modes and systems*
- Candidate Measures/Weightings – Goal 2
 - The Committee recommended that the Authority keep the measurement of safety at a very broad level, consider assigning high/medium/low scores at the plan stage and consider more detailed data-centered analysis during program development. For example, projects that directly address a specific safety issue would be assigned a high value. It is acknowledged that most projects would get the same score.
 - Retain the measures *Share of travel by non-SOV modes*, *Number of SOV trips during peak periods*, and *Person hours of travel caused by 10% increase in PM peak hour demand*.
 - Remove the measures *Last mile connections* and *PHT in congested/crowded conditions*.
 - The Committee recommended keeping the congestion reduction relative to cost ratio as the measure for cost-benefit analysis. This would not have a weight; rather, it would be a way to rank the results.
- Proposed Objectives – Goal 3
 - Retain the measure *Reduce transportation related air pollution*
- Candidate Measures/Weightings – Goal 3
 - Remove the measures *Amount of impervious area* and *Number of ROW expansions that impact resources* as they should be addressed at the project level and not at the plan level.
 - Use *Criteria pollutant emissions based on VMT by speed*.

The Committee is scheduled to make a recommendation on specific weighting assignments for individual measures at its January meeting, after the Authority approves a final set of performance measures.

3. Next steps. The Committee will continue to be engaged with the TransAction update and provide technical input and advice as needed. The next meeting of the Technical Advisory Committee is scheduled for January 18, 2017, 7:00 pm at the NVTA offices.