



TECHNICAL ADVISORY COMMITTEE

Wednesday, July 21, 2021, 7:00 pm

Live-streamed on [YouTube](#)

MEETING SUMMARY

I. Call to Order/Welcome

- Chairman Boice called the meeting to order at 7:05 pm at the NVTA Office.
- Attendees:
 - **Members:** Randy Boice, Armand Ciccarelli, Amy Morris, Frank Spielberg, Pat Turner, Karen Campblin, Dr. Shanjiang Zhu (joined via Zoom from home due to family medical needs)
 - **NVTA Staff & Consultants:** Monica Backmon (Executive Director), Dr. Sree Nampoothiri (Senior Transportation Planner), Dr. Ria Kulkarni (Regional Transportation Planner), Dalia Leven (Cambridge Systematics)
 - **Others:** On YouTube live stream.

II. Summary of April 27, 2021 Meeting

- The motion to accept the meeting summary was approved unanimously.

III. TransAction Update

- Dr. Nampoothiri relayed that the Authority approved the TransAction vision statement and the TransAction update process has begun with Cambridge Systematics as the primary consultant.
- Dr. Nampoothiri informed that the TransAction Goals, Objectives and Measures will be discussed with all Committees and at focus group meetings for feedback on priorities and objectives for consideration. The input will be weaved into the TransAction update. He mentioned that the goal is to streamline TransAction goals and measures and have them approved by October 2021, with the subsequent approval of performance measure weights by November 2021 to enable travel demand modeling and forecasting development further.
- Mr. Ciccarelli asked reasons for revisiting performance measures. Ms. Backmon noted and Ms. Leven supported that the performance measures will be reduced in number from 15 to about 10 and will take on a fresh narrative based on the new vision and goals framework while also abiding by legislation.



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- Dr. Nampoothiri noted that currently, NVTA is in Phase 1 of the TransAction update process. Phase 1 lasts through October. A primary effort of Phase 1 includes updating the TransAction project list with bottom-up projects (jurisdiction/agency projects) and top-down projects (projects identified by the team to address any system needs unmet by the bottom-up projects). He mentioned that there are 352 projects in the current TransAction, which were revisited and updated as appropriate. Furthermore, new projects were added through the jurisdiction and agency coordination process.
 - Mr. Spielberg asked if the projects are looked at and addressed from the system perspective. Both Dr. Nampoothiri and Ms. Backmon agreed and provided examples to support top-down and bottom-up project needs from a system perspective. Mr. Spielberg followed up, asking if a rail connection across the American Legion Bridge would be considered as a top-down project to which Ms. Backmon concurred.
- Dr. Nampoothiri introduced Scenario Analysis and that it is a coherent part of the TransAction update. He indicated that Ms. Dalia Leven, of Cambridge Systematics, would cover this topic for discussions and feedback from the Committee. He added that a travel demand forecasting model, based on Metropolitan Washington Council of Governments/Transportation Planning Board (MWCOG/TPB) model, is being developed for the NVTA region. He added that this Cube-based model will utilize DTA-Lite, a queue-based mesoscopic traffic simulation model.
- Ms. Leven introduced the thought process of developing goals and objectives that are to be established upon the foundation of core values from the updated vision, namely, equity, safety and sustainability.
 - On safety, Mr. Spielberg encouraged looking at safety for bike-pedestrians on the same level with as much emphasis as safety of roads. He also mentioned that safety is a challenge for models and is addressed more on the engineering and design level than on a system level.
- Ms. Leven introduced equity, its definitions and encouraged the Committee to consider looking at it from the perspective of a specific cohort of system users with which this core value could be evaluated. Similarly, she introduced sustainability and opened discussions on how to portray these core values.
- Ms. Leven continued and reiterated goals presented at the previous committee meeting – mobility, accessibility and resiliency, and their respective definitions.
 - Mr. Ciccarelli put forth for consideration to define resilience as operational performance and ability to recover from disruptions during "changing



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conditions" rather than "unusual conditions." Ms. Leven appreciated and acknowledged the feedback for consideration.

- Ms. Leven further presented potential objectives of reducing congestion and delay, improving travel time reliability, and reducing transportation-related emissions with their respective sample measures.
 - **Mobility:** Mr. Spielberg commented that mobility is much more than how fast you get to your destination. He added that mobility should embrace affordability, time of day reliability and physical disability, citing an example of rising costs of using I-66 and delay.
 - Mr. Boice noted that delay in the TransAction plan is defined by various organizations and standards such as the Institute of Transportation Engineers (ITE) and Highway Capacity Manual (HCM). He noted that the plan addresses delay as a system measure for forecasting purposes [in terms of person-hours of delay (PHD) and congestion.]
 - Dr. Zhu emphasized the transferability and comparability of delay metrics over forecasting horizon year, which is much feasible to measure in PHD at a regional or sub-regional level.
 - Ms. Leven expressed and Mr. Ciccarelli agreed that much of these concepts of affordability and physical ability to access transportation networks would be covered under equity. Ms. Backmon noted that TransAction is both geographically and financially unconstrained, and the projects are needs-based that consider both mobility and accessibility. Ms. Campblin added that accessibility could be seen in two ways – proximity and usability, meaning how users get to the networks to reach activity centers.
 - ✓ Ms. Leven considered feedback from the Committee and noted that these metrics would be looked into further with an equity magnifier.
 - **Accessibility:** Ms. Leven indicated that equity as a core value would be addressed through accessibility, which embraces the objective of improving access to jobs (HB599 requirement) and multimodal connectivity while reducing dependency on driving. Some stated examples were access to jobs, access to regional activity centers (RAC), and improvements to First Mile Last Mile (FMLM) connections.
 - **Resiliency:** Ms. Leven indicated the three potential objectives, namely, maintaining operations during extreme conditions (HB599 requirement),



expanding travel choices, and improving the safety of the transportation system.

- Mr. Ciccarelli was interested in knowing how the plummet in transit ridership due to public health emergency and its delayed or dissipated recovery would impact travel demand forecasting.
 - ✓ Ms. Leven acknowledged that it is deemed obscure how far and rooted the impacts are experienced and added that this would be addressed as a part of the scenario analyses efforts. The scenario analyses take into consideration a business-as-usual scenario, as well as alternative scenarios to assess if NVTA investments are contextual.
- Mr. Ciccarelli asked if the zero-emission vehicle scenario considers the life-cycle emission impacts from cradle-to-grave, namely carbon emissions from power plants that enable charging zero-emissions vehicles. Ms. Leven responded that the model does not account for this life-cycle assessment but could consider incorporating life-cycle impact as an overarching principle.
- Dr. Zhu reiterated his observation on overall objectives and noted that mobility and accessibility are related to the quality of life and economic alternatives. He cited an example that transportation includes passenger vehicles and logistic systems (such as trucks) that pertain to mobility and improved economic activity. Overall, he alluded that mobility could relate to the quality of life while accessibility could map onto economic opportunities.
- Ms. Morris observed and stated that measures for accessibility and resiliency may be similar and asked if there was any difference between them. Ms. Leven responded that objectives under accessibility address economic opportunities reachable by auto and transit in a certain period (45 and 60 mins respectively). In contrast, objectives under resiliency assess whether there are any other alternative modes of transportation to driving to reach destinations within 45-60 mins given a choice and affordability. She also emphasized that these are drafts of objectives and measures that will evolve through feedback and discussions. Furthermore, Ms. Leven added that current new alternative modes and potential future alternative modes are not represented in the model; however, scenario planning includes both conventional and automated Transportation



Network Companies (TNCs). Lastly, she added that the model evaluates system improvements such as trails and bike-ped improvements more qualitatively than quantitatively.

○ **Identifying Scenarios:**

- Ms. Leven noted that the purpose of scenario analysis was to avoid investment obsolescence and to make sure that the investments made are context-sensitive and viable. The aim was not to predict a "most likely" or a "preferred" scenario.
- The four scenarios are:
 - ✓ Technology: Assesses possible impacts of a Connected and Automated Vehicles (CAV)/Electric Vehicle (EV)/Shared vehicles scenario and maps to the Transportation Technology Strategic Plan
 - ✓ Transportation Pricing: Assesses roadway, curbside or congestion pricing or free fare transit, incentives to shift away from peak period travel
 - ✓ Climate Change: Assessing impacts of climate change such as sea-level rise on the transportation system and investments
 - ✓ Telework & e-commerce growth
- Ms. Campblin asked if equity could be marked for scenario planning because all performance measures have an equity consideration. Ms. Leven clarified that performance measures that address equity and sustainability would be applied to all scenarios to assess equity impacts for each scenario.

IV. NVT A Update

- Ms. Backmon relayed that the Authority will not be meeting in August, and the next meeting will be on September 9, 2021. The Committee was also informed that the draft proposal for the Transportation Technology Strategic Plan was accepted by the Association of Metropolitan Planning Organizations to be presented in October by Ms. Mackenzie Love. Ms. Backmon also stated that the call for project applications for the FY 2022-2027 Six-Year Program (SYP) is open from July 1, 2021, through October 1, 2021. This will be the last SYP based on the current TransAction before the plan is updated. Also, the available funding to populate the SYP update is currently being assessed.



V. Adjournment

- The meeting adjourned at 8:20 pm. The next meeting date is September 15, 2021.

DRAFT