Draft Transportation Technology Strategic Plan – Action Plan

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List of Abbreviations

PCAC – Planning Coordination Advisory Committee (NVTA Statutory Committee)

PPC – Planning and Programming Committee (NVTA Standing Committee)

SYP – Six Year Program

TAC – Technical Advisory Committee (NVTA Statutory Committee)

TTC – Transportation Technology Committee (Advisory Committee to the NVTA Executive Director)

TTSP - Transportation Technology Strategic Plan

Additional Committee information can be found on NVTA's website: https://thenovaauthority.org/about/



Recap - Pathway to TTSP Approval

December 2020: Shared draft TTSP 'core content' with TTC

• 8 Strategies, 9 NVTA Roles, 3 Core Values

January 2021: Shared draft TTSP (minus Action Plan) with TTC

• TTC discussed draft TTSP (full document without Action Plan)

February/March 2021: Expanded review

- Discussed draft Action Plan with TTC
- Shared/discussed draft TTSP with TAC, PCAC, and PPC

March 2021: TTSP mini-session at NoVA Transportation Roundtable

April 2021: Seek TTSP/Action Plan recommendations from all committees

May 2021: NVTA consider/approve TTSP/Action Plan

May 2021 onwards: Implement Action Plan

Integrate into TransAction



Recap – Authority Vision for TransAction

"Northern Virginia will plan for, and invest in, a **safe, equitable, sustainable, and integrated** multimodal transportation system that enhances quality of life, strengthens the economy, and **builds resilience**"

Approved by NVTA on December 17th, 2020



Recap – PPC Feedback on the draft TTSP

- Two members of the TTC also serve on the PPC; TTC Chairman David Snyder, and Mayor Jeanette Rishell. Their experience and insights into the development of the draft TTSP enhanced the discussions had by the PPC.
- Feedback included:
 - Emphasize that the TTSP will take a needs-driven approach
 - Stress that investments should be made smartly, so as to avoid obsolescence
 - Request to clarify how the TTSP will be actualized, and to provide more detail regarding how it will interact with TransAction
 - Recommendations to allow for flexibility in setting expectations and goals (as technology and innovative approaches are constantly evolving and being used in new ways)



Recap - TTSP Content at the 6th Northern Virginia Transportation Roundtable

- Held virtually and live streamed on Wednesday, March 10th, 2021.
- More than **140 people joined in total**, including 12 members of the Authority.
- The Roundtable included a mini-session on the draft TTSP
 - NVTA Executive Director, Monica Backmon provided an introduction and history of the TTSP, starting with creation of the TTC.
 - TTC Chairman, Councilmember David Snyder, emphasized the importance of proactively planning for innovation, and committing to furthering the core values in the process.

Recap - TTSP Content at the 6th Northern Virginia Transportation Roundtable

- Live polling was used to ask **5 TTSP-related questions**, including 3 that were multiple choice, and 2 that encouraged free-form responses:
- "What innovative approaches can the region take to improve transportation equity in Northern Virginia?"
 - Over 50 unique responses were received and a few common topics quickly emerged: effective and meaningful engagement that starts with asking and listening; providing more service and access to multiple modes; improving safety through infrastructure; reduced or free fares/trips; and provision of reliable and real-time data to the public.
- "Which safety needs in Northern Virginia could be addressed by emerging transportation technologies? (Please consider all users and modes.)"
 - Free-form responses ranged from suggestions to address/mitigate dangerous travel behaviors like distracted or impaired driving, to using data to target investments in safety-related infrastructure improvements, to encouraging connectivity between modes to optimize the overall transportation system and reduce crashes, particularly between vehicles and people biking or walking.



Feedback from TAC and TTC: Recommended Rewording of Strategies

| Curi | rent Draft Strategies | Recommended Revisions to Draft Strategies | | | | | |
|------|--|--|--|--|--|--|--|
| 1 | Reduce Congestion | Reduce congestion and increase throughput | | | | | |
| 2 | Maximize access to jobs, employees and housing | | | | | | |
| 3 | Maximize cybersecurity and maximize privacy for members of the public | Maximize cybersecurity and privacy for members of the public | | | | | |
| 4 | Minimize potential for Zero Occupancy Vehicles | Minimize potential for Zero Occupancy passenger Vehicles | | | | | |
| 5 | Develop pricing mechanisms that manage travel demand and provide sustainable travel options | | | | | | |
| 6 | Maximize the potential of physical and communication infrastructure to serve existing and emerging modes | | | | | | |
| 7 | Enhance regional coordination and encourage interoperability in all systems | | | | | | |
| 8 | Create a network of charging infrastructure, for use by private and fleet vehicles | Advance decarbonization of the transportation system | | | | | |



TTSP Draft Action Plan

- What, When, Who?
- Actions must be traceable to at least one strategy, and include measure(s) of effectiveness;
- Some actions may be triggered by external events, e.g. federal/state legislation, market penetration thresholds;
- Most actions will be initiated by NVTA staff; not all will be implemented by NVTA staff;
- Define a monitoring plan; and
- Define a review and update cycle.



TTSP Draft Action Plan Proposed Structure

- Introduction
- Strategy-Specific Summaries
 - Overview
 - Assumptions Made
 - Action Plan
- Consolidated Actions Table
- Next Steps
 - Monitoring Progress and Update Cycle
 - The Review/Update Process



TTSP Draft Action Plan

Strategy-Specific Summaries

Strategy #_: TITLE

Overview

A paragraph describing the predicted time frame in which it will be appropriate to take action, in keeping with the roles described in the draft Transportation Technology Strategic Plan (TTSP), in pursuit of a Strategy.

Assumptions Made

• Generally, 2 – 5 bullet points.

Actions

| ltem | Responsible Party | Trigger Point | Time Frame | Current Status | Actions | Stakeholders | Metric(s) of Success |
|------|----------------------|---------------|---------------|----------------|---------|--------------|----------------------|
| | | | | | • | • | • |

TTSP Draft Action PlanConsolidated Actions Table

| Roles | | | | | | | Immediate | | | | Near Term | | | | Mid Term | Long Term | | | |
|---------------------|-----------------------|----------|----------|--------------|----------|--------|----------------------|-----------------------|-------------------------|--------------------|----------------------|--|-------------------------------------|----------------------|-------------|--|--------------------|--|--|
| | | | | | | | Jan - March, 2021 | April - June, 2021 | July - Sept, 2021 | Oct - Dec, 2021 | Jan - March, 2022 | April - June, 2022 | July - Sept, 2022 | Oct - Dec, 2022 | 2023 - 2025 | 2026 - 2029 | 2030 and Beyond | | |
| Title | Applicable Strategies | | | | | | | | TransAction kick-off | | | Completion of TransAction Phase 1 | | TransAction adoption | | Development of legislative program | | | |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | Development of legislative program | Six Year Program Update FY2022-2027 | | | | | | |
| Funding | 1A, 1B | 2A | 3A, 3B | | | 6A, 6B | 7A | 8A | | | | | | | | | | | |
| Policy | | | | 4B | 5A | | | 8B | | | | | | | | | | | |
| Advocate | 1 C | | | 4C,4D, 4E | 5A | | | 8C | | | | | | | | | | | |
| Champion | 4 | 4 | | 4 | | 4 | * | 4 | | | | | | | | | | | |
| Facilitate | 4 | ~ | | ~ | | ~ | 7B | ~ | | | | | | | | | | | |
| Stakeholder | | | ~ | | 4 | | | | | | | | | | | | | | |
| Planning | 1A | 2A | 3A | 4A | 5B | 6A | 7A | 8A | | | | | | | | | | | |
| Outreach/ Education | 4 | 4 | | 4 | 4 | 4 | * | 4 | | | | | | | | | | | |
| Observer | | | * | | | | | | | | | | | | | | | | |

| Key | | | | | | | | | |
|-------------|---------------|--------|-----------|-----------------|--|--|--|--|--|
| Preparatory | Potential | Direct | Follow Up | Continual/ | | | | | |
| Action | Direct Action | Action | Action | Serendipitously | | | | | |



TTSP Action Plan: Possible Outcomes

- TransAction scenario (sensitivity) analysis
 - Incentives and pricing mechanisms to reduce car dependency
 - Climate change and resiliency of regional transportation system
 - Pandemic 'new normal' implications of increased work-from-home and e-commerce
- Outreach/education
 - Facts and Myths: Connected, Autonomous, Shared, and Electric (CASE) vehicles
- Identify potential additions to NVTA's Legislative Program
 - Support EV infrastructure
 - Support Zero Emission Vehicles
 - Concern regarding Zero Occupant Vehicles



TTSP Action Plan: Possible Outcomes

- Identify potential refinements to future NVTA SYP project selection process (post-TransAction update)
 - Contingent on...?
 - Standardization, e.g. transit signal priority communications
- Funding
 - TransAction Project List is the first filter for projects that can be funded using NVTA regional revenues
 - NVTA staff currently coordinating with jurisdiction/agency staff
- Develop White Papers identifying potential topics for future regional transportation policy
 - Shared mobility devices
 - Autonomous transit shuttles
 - Zero occupant vehicles
 - Human Services transportation



TTSP: Anticipated Recommendations

- Approval of the Eight Strategies
- Approval to begin implementation of the Action Plan

If approved, NVTA Staff will also:

- Provide an update on progress every six months until TransAction is adopted
- Include TTSP/Action Plan in public engagement efforts around the TransAction update



Next Steps

- Following this meeting, share draft Action Plan for PPC review and comment with one-week response deadline (approximately April 1st)
- Share final draft of TTSP/Action Plan in early April
- Next PPC meeting TBD
 - Request action to recommend eight strategies and Action Plan for NVTA approval in May



PPC Feedback Requested

- Thoughts on what you have heard today?
- Beyond NVTA Committees, who should we seek feedback from?
- What level of detail is required for the public-facing versions of the TTSP/Action Plan?
- Suggestions on low-cost visualizations? Examples?



THANK YOU!