

TTC Focus Area Analytic Framework- DRAFT

9/30/2025  
Version 8b

			Focus Area alignment with...				Potential Next Steps		
Overall Rank	Focus Area	Why it's Important	TTSP <sup>1</sup> Strategies	NVTA Core Values	TransAction Goals	Combined Average Rating	NVTA	Other Organizations	Highly Aligned/ Relevant TTSP Strategies
1	<b>Transit Technology Integration</b> > Zero Emission Buses, charging infrastructure, shared inventories, fare payment, and bus priority systems.	Bus rapid Transit, real-time information, mobile ticketing, and connected transit systems improve rider experience, expand accessibility, and encourage mode shift away from SOVs.	High	High	High	High	> Convene working group for NVTA-funded and related transit technology deployments (This could tie in with regional technology coordination and help serve as a platform for jurisdictions to share plans for technology projects)	> NVTC/DRPT Transit Technology meetings for coordination of regional project updates and information sharing from a technical/local perspective > WMATA's Cloud-Based Transit Signal Priority System staff provide updates to the TTC	1, 2, 4, 6, 7, 8, 9
2	<b>Active Transportation</b> > Applications of connected active transportation tech for Vision Zero.	Active transportation is enhanced by safe, connected, and visible infrastructure. New safety technologies protect vulnerable users and encourage sustainable travel.	Medium	High	High	High	> Identify pilot corridors for connected active transportation tech (e.g. pedestrian detection, HAWK [High-intensity Activated crossWalkJ]/ connected crossings)	> MWCOC TPB Bicycle & Pedestrian Subcommittee to align with regional Vision Zero strategies > Vendors to share active transportation tech applications for NoVA jurisdictions	2, 6, 8
2	<b>Predictive Safety Analytics</b> > Smarter signalization and predictive roadway risk assessment tools.	Smart traffic signals, variable speed limits, and connected vehicle systems can reduce crashes and improve traffic flow, which improves safety and reliability for commuters and freight.	High	High	Medium	High	> Map high-risk roadway segments using crash data, traffic flow, weather data > Support development of regional platforms for data sharing among jurisdictions to enable predictive analytics	> VDOT to provide information session on using Pathways for Planning and Crash data portal for roadway safety applications > MWCOC TPB Safety Subcommittee integrates outputs into regional safety targets > Vendors to share roadway rick score applications for NoVA jurisdictions	1, 2, 4, 6, 7
4	<b>Autonomous Vehicle (AV) Legislative Coordination</b> > Ensuring Northern Virginia jurisdictions are represented in shaping state legislation and pilot frameworks as AVs enter the Metro region.	AV deployment requires regulatory clarity and collaboration. Coordinating with Private Sector AV providers ensures safety, compliance, and integration with regional transportation systems.	High	Low	High	Medium	> Produce regional policy recommendations or a framework for AV deployment (safety standards, routes, data sharing) > Participate in meetings and monitor state legislation to ensure regional concerns are incorporated	> Members from VDOT/VRTC to provide status update on HB 2627 to TTC > VTTI to conduct safety evaluations > Private AV providers to share deployment data	1, 2, 4, 6, 7
4	<b>Regional Technology Coordination &amp; Procurement Strategies</b> > A shared inventory of local technologies across jurisdictions to identify alignment and support efficient procurement.	Collaborative planning and joint procurement reduce costs, avoids duplication, and ensures interoperability of emerging technologies across jurisdictions.	High	Medium	Medium	Medium	> Build a shared inventory / map of existing technology assets across jurisdictions > Explore potential for creating model contracts, procurement templates for emerging transportation technologies	> Local jurisdictions share technology project information and procurement announcements via an online shared database > Collaborate with Virginia Institute of Procurement on best practices for regional procurement of technology projects	4, 7, 9
6	<b>Dynamic Curbside Management &amp; Parking</b> > Addressing growing competition for curb space (delivery, ride-hailing, shared mobility devices, parking, transit).	Competition for curb space is increasing due to delivery services, ride-hailing, micro-mobility, outdoor dining, parklet spaces and transit. Technology solutions can balance these demands, reduce congestion, and ensure equitable access for all users.	Medium	Low	Low	Low	> Identify high-demand curb zones (e.g., commercial districts, transit hubs)	> Local jurisdictions to test dynamic pricing and curb allocation pilots > Arlington to coordinate with Alexandria on data gathered from Performance Parking Pilot	5, 7
6	<b>Automated Traffic Enforcement (ATE)</b> > ATE involves installing cameras to reduce speeding, running red-lights, and other traffic violations to deter unsafe driving patterns, change driver behavior, and supplement enforcement.	Can help in preventing fatalities and serious injuries of roadway users, especially vulnerable roadway users.	Low	Medium	Low	Low	> Assess legal and policy barriers/opportunities to ATE deployment regionally > Include ATE cost benefit analysis	> Local governments to pilot ATE in Vision Zero priority corridors. > Legislative representative provide status update on ATE and obstacles that jurisdictions experience with keeping money in NoVA	4, 5
8	<b>Artificial Intelligence (AI) and Cybersecurity Education</b> > Regional AI coordination and education of cyber risks and opportunities requiring regional frameworks.	As transportation systems digitize, AI can optimize mobility but also introduces risks. Cybersecurity awareness ensures systems remain resilient, secure, and trusted by the public.	Low	Low	Low	Low	> Explore interest in workshops/trainings for NVTA-member jurisdictions on AI risk and cybersecurity best practices > Add Artificial Intelligence strategy to TTSP	> FBI, CISA (Cybersecurity and Infrastructure Security Agency) provide training modules > VDOT, ITS, and MWCOC's Homeland Security & Public Safety Committee to share best practices	3, 7

<sup>1</sup>Transportation Technology Strategic Plan

Ratings Key		Next Steps Key	
Rating	Alignment with TTSP, Core Values, TransAction Goals	Indicates NVTA staff to integrate Focus Area's goals into TransAction	
High	Focus Area <b>directly considers</b> TTSP Strategy/ NVTA Core Value/ NVTA TransAction Goal	Indicates primary effort lead	
Medium	Focus Area <b>somewhat considers</b> TTSP Strategy/ NVTA Core Value/ NVTA TransAction Goal		
Low	Focus Area <b>does not consider</b> TTSP Strategy/NVTA Core Value/ NVTA TransAction Goal		