

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

TO: Chairman Martin E. Nohe and Members

Northern Virginia Transportation Authority

FROM: Monica Backmon, Executive Director

DATE: February 2, 2017

SUBJECT: Authorization for Executive Director to Submit Comments on VTrans Draft

Recommendations and Draft Tier 1 Combined Summary

1. Purpose. To seek authorization for the Executive Director to submit comments on the draft recommendations and draft Tier 1 combined summary for the VTrans Multimodal Transportation Plan (VMTP 2025) update.

- **2. Suggested Motion:** I move authorization for the Executive Director to submit comments on the draft recommendations and draft Tier 1 combined summary for the VTrans plan update to the Virginia Office of Intermodal Planning and Investment.
- 3. Background. The Virginia Office of Intermodal Planning and Investment (OIPI) is leading the effort to develop and implement the Statewide Transportation Needs Assessment process as part of the VTrans Multimodal Transportation Plan 2025 (VMTP). The VMTP2025, along with the VTrans Vision Plan, make up the overall statewide Transportation Plan, VTrans2040. One of the key purposes of the Needs Assessment is to serve as a screen for projects applying for consideration under the Smart Scale prioritization process. All projects submitted for the Smart Scale process must pass through an initial screening process. This initial screening process is a critical component because it links the planning and programming processes to ensure the overarching transportation goals of the Commonwealth are advanced. If a project does not meet the capacity and operations needs or the safety needs under the Transportation Needs Assessment of VTrans2040, it cannot move forward in the HB2 process. The Transportation Needs Assessment will assess the State's transportation needs at three scales, and will include a statewide assessment of safety needs:
 - Corridor of Statewide Significance (COSS) Interregional travel market
 - Regional Networks Intraregional travel market
 - Urban Development Areas (UDA) Local activity center market

For projects to advance under the district grant program, they must meet a need on:

- A Corridor of Statewide Significance
- A Regional Network
- An Urban Development Area
- A Statewide Safety Need

For projects to advance under the high priority projects program, they must meet a need on:

- A Corridor of Statewide Significance
- A Regional Network

On Thursday, January 26, 2017, the VTrans consultant team presented VMTP2025 draft recommendations and the draft tier one combined summary, to the Regional Jurisdiction and Agency Coordinating Committee (RJACC). The presentation was followed by an Open House held at the NVTA offices.

The OIPI has requested comments on the drafts by the end of February 2017. NVTA staff in coordination with the RJACC, will develop a set of comments and recommendations to be submitted by the Executive Director, on behalf of the NVTA.

Attachment(s):

- **A.** VMTP2025 Recommendations presentation
- B. VMTP Tier 1 Draft Recommendations for NOVA

















VMTP 2025 Recommendations Regional Meetings January/February, 2017





Today's Agenda

Technical Meeting Presentation (10-15 minutes)

- VTrans2040 Vision, Guiding Principles, and Goals
- 2025 Needs Assessment, Consolidation, and Tiering
- 2025 Recommendations Approach & Next Steps

Stakeholder & Public Open House (1-2 hours)

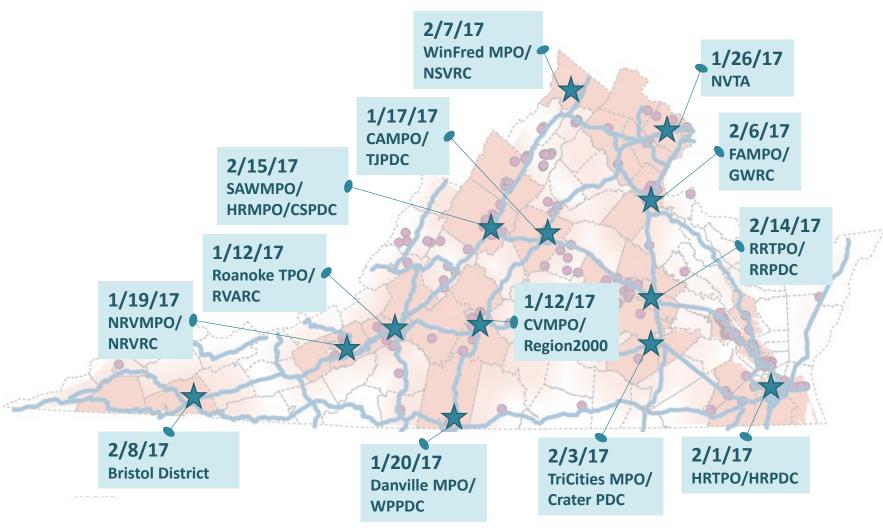
- Review Draft Proposed Tier 1 Recommendations
 - Discussion and Interactive Workshop
 - Questionnaire
 - Next Steps







Regional Meetings









The General Assembly of Virginia directs the Commonwealth Transportation Board with assistance from the Office of Intermodal Planning and Investment (OIPI), to conduct a comprehensive review of statewide transportation needs in a **Statewide Transportation Plan – VTrans**.



Vision – Virginia's multimodal transportation plan will be *Good for* Business, Good for Communities, and Good to Go. Virginians will benefit from a sustainable, reliable, transportation system that advances Virginia businesses, attracts a 21st century workforce, and promotes healthy communities where Virginians of all ages and abilities can thrive.







Guiding Principles Optimize Return on Investment Ensure Transparency & Accountability, and **Promote Performance Management** Ensure Safety, Security, and Resiliency Improve Coordination between **Efficiently Deliver Programs** Transportation and Land Use Consider Operational Improvements and **Ensure Efficient Intermodal Connections Demand Management First** Goals **Economic Competitiveness & Prosperity** Proactive System Management Accessible & Connected Places ☐ Healthy & Sustainable Communities Safety for All Users How Do We Use the Vision, Guiding Principles, Goals, and Objectives? The VTrans2040 Vision framework includes guiding principles, goals, objectives, and a data-driven trends analysis. This framework guides development of four companion efforts:

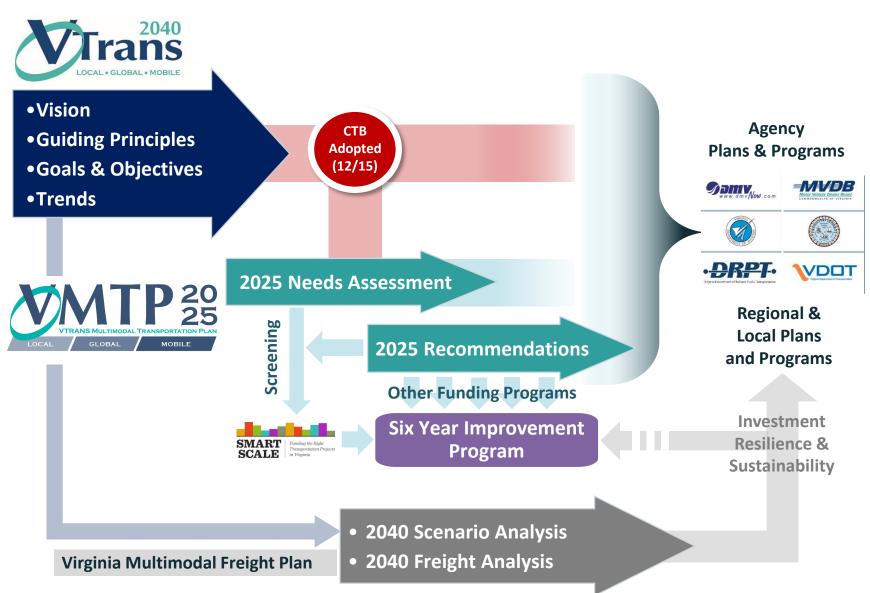


Needs Assessment Recommendations

2040 Scenarios2040 Freight Analysis



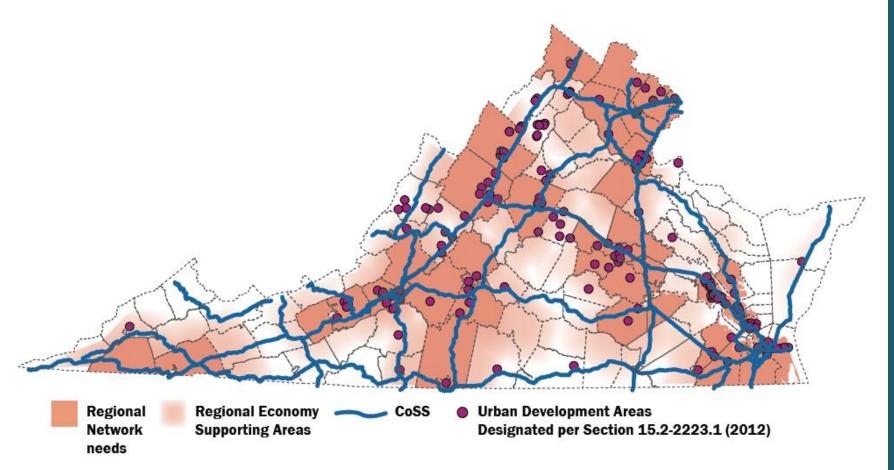
VTrans2040: The Big Picture







2025 Needs Assessment



Needs Across Three Travel Markets & Statewide Safety Needs

- 12 Corridors of Statewide Significance (CoSS)
- 15 Regional Networks
- 214 Urban Development Areas (UDAs)
 (or Code-Referenced Designated Growth Areas, current as of January 2017)

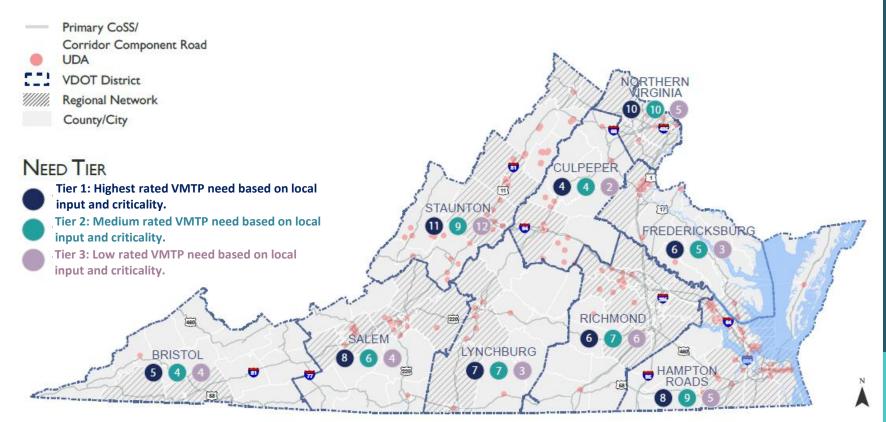






Consolidated & Tiered Needs

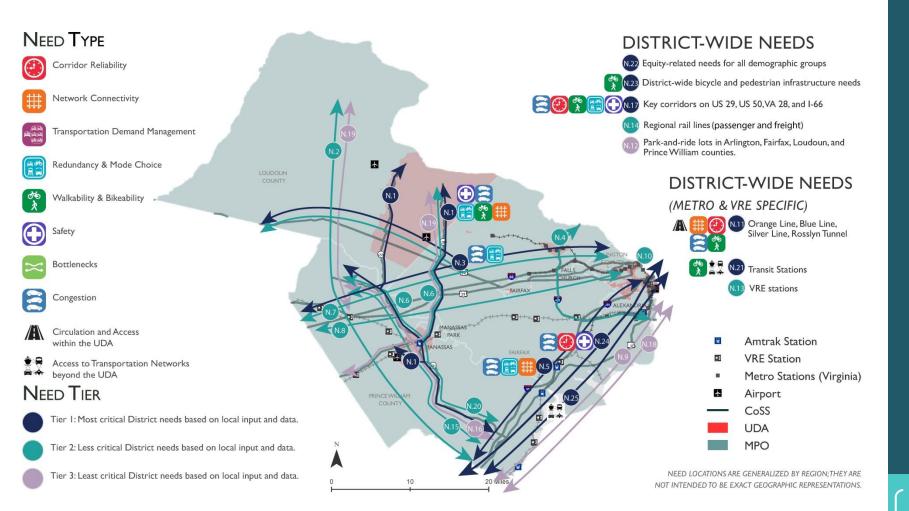
Over 800 needs identified in the needs assessment (adopted by the CTB in December 2015) were consolidated to 170 needs, then grouped into three tiers representing local and regional input on priority and a data driven needs criticality assessment.







Consolidated & Tiered Needs







Consolidated & Tiered Needs

Need ID	Need Description	Need Icons	Final Tiering
N.5	Within the NVTA Region, the I-95, I-395 and US I corridors have passenger and freight congestion, mode choice and connectivity needs.	2# #	1
N.II	Within the NVTA Region, the Metro Orange, Blue, and Silver lines and the Rosslyn Tunnel all have congestion, reliability, station accessibility, transit connectivity and bicycle and pedestrian needs as well as severe train throughput and passenger carrying capacity constraints.		1
N.21	Within the NVTA Region, transit stations (rail stations and bus hubs) have multimodal access needs (bicycle access, walking, driving/ carpooling/parking, and/or shuttle services).	*	1
N.17	Within the NVTA Region, the US 29, US 50, VA 28, and I-66 corridors have safety, congestion, reliability, mode choice, bicycle and pedestrian needs.		1
N.I	Within the NVTA Region, the VA 28,VA 234, and VA-659 regional corridors have congestion, mode choice, safety, connectivity and bicycle and pedestrian needs, and constrained access to Dulles Airport.		1
N.3	Within the NVTA Region, the US 29, US 50, and I-66 regional corridor (Prince William, Fairfax, and Arlington) have congestion and mode choice needs.	2	1
N.24	Within the District and cross-District, I-95/I-395 and US I from Stafford County to Washington D.C, has congestion, reliability and safety needs.		- 1
N.23	Within the NVTA Region, there are bicycle and pedestrian infrastructure needs, missing links in the network, and safety needs for those modes.	#	1
N.25	Within the District and cross-District, the I-95/US I corridor between Fredericksburg and Washington, D.C. has multimodal accessibility and transit capacity needs.		1
N.22	Within the NVTA Region, there are equity-related multimodal access needs for all demographic groups.		- 1
N.2	Within the NVTA Region, the VA 234 and US 15 regional corridors have reliability, safety, mode choice, congestion, and connectivity needs.		2
N.10	Within the NVTA Region, the Long Bridge has bottleneck, mode choice and reliability needs.		2
N.7	Within the NVTA Region, the US 29, US 50 and I-66 have reliability and mode choice needs.		2
N.13	Within the NVTA Region, VRE stations have passenger and parking capacity, transit connectivity, bicycle and pedestrian access needs.	#	2
N.14	Within the District and cross-District, regional rail lines have passenger and freight rail congestion and reliability needs.		2
N.4	Within the NVTA Region, I-495 has congestion needs, particularly adjacent to interchanges and from Tysons Corner to the American Legion Bridge.	8	2
N.8	Within the NVTA Region, the I-66 and US 29 have reliability needs.	②	2
N.15	Within the NVTA Region, the VA 234 corridor has mode choice and network connectivity needs.	#	2
N.20	Within the NVTA Region, the VA 234 and VA 28 corridors have safety, reliability, congestion, and bicycle and pedestrian needs.		2
N.6	Within the NVTA Region, the US 29, VA 7, and I-66 interchanges /intersections with VA 28 and VA 234, have congestion, reliability, safety, mode choice, bicycle and pedestrian access and connectivity needs.		2
N.9	Within the NVTA Region, I-95 and US-1 have reliability needs.		3
N.16	Within the NVTA Region, the VA 234 corridor has network connectivity, mode choice and safety needs.	##	3
N.18	Within the NVTA Region, the I-95 and US I have safety needs for all users.	()	3
N.19	Within the NVTA Region, the US 15 and VA 28 have safety, reliability, congestion, and connectivity needs.	⊕@≘#	3
N. 12	Within the NVTA Region, park-and-ride lots in Arlington, Fairfax, Loudoun and Prince William counties all have capacity, transit connectivity, bicycle and pedestrian access and travel demand management (TDM) related needs.		3





2025 Recommendations

New concept for VTrans

- Highlights critical projects in the next 10 years that address the VTrans vision, goals, and objectives within Virginia's most significant transportation needs
- New Federal planning regulations associated with MAP-21 and FAST Act place more attention on performance based planning and programming

Project-level recommendations

- Represents one source for a potential pipeline of future projects and planning
- Strengthens the connection between VTrans goals and short-term programming
- Facilitate agencies, regions, and localities in developing their own priorities and recommendations







2025 Recommendations

Tier 1 Need

Tier 2 Need

Tier 3 Need

Gap Assessment

Do the Funded & Pipeline Projects Fully Address the Need?

Recommendation Tracking

Fully Funded: 2017-2022 Six Year Improvement Program (SYIP) and other programs

Unfunded Pipeline: Project sources include – SYIP partially funded, MPO LRTPs & PDC plans, Smart Scale unfunded, Transit Development Plans, and other regional

and local studies and plans



Study/Plan Program/Policy Strategies

More Detail

Projects

Study/Plan Program/Policy Strategies

Study/Plan Program/Policy

C

Less Detail





Tier 1 Recommendations

- Focus on VTrans2040 Guiding Principles
 - Optimize Return on Investment
 - Consider Operational Strategies and Demand Management First
- Unfunded Pipeline Projects and New Project Ideas that target the need
 - New project ideas include detailed project descriptions and planning-level costs
 - New project ideas may also include recommendations for corridor management, programming strategy, or need for a new study or plan







Today's Objective & Next Steps

Meeting / Open House

- VTrans2040 and VMTP2025 summary
- Review Tier 1 Recommendations
 - Consider the recommendations included (unfunded pipeline and new ideas) and the scope of each recommendation
 - Recommendations are presented in 2 formats:
 - Summary sheet showing all project recommendations
 - A profile for every unfunded project and new project idea

Next Steps

 Review Tier 1 Recommendations and provide feedback during the open house and through an online questionnaire (link provided to attendees after meeting)







Questions / More Information

VTrans2040 Vision:

http://www.vtrans.org/vtrans2040.asp

Includes links to the VTrans2040 Vision and associated trend documents. Also includes a link to the new, interactive VTrans2040 website, http://www.vtrans2040.com, which provides access to VTrans2040 content, including an on-line map of the VMTP Needs Assessment. For a broad overview of VTrans, refer to: http://www.vtrans.org/plans.asp.

VTrans Multimodal Transportation Plan (VMTP) 2025 Needs Assessment http://vtrans.org/vtrans_multimodal_transportation_plan_2025_needs_assessment.asp Includes links to detailed needs assessments finalized in December 2015 for the Corridors of Statewide Significance, Regional Networks, Urban Development Areas, and Statewide Safety Needs.

VTrans Multimodal Transportation Plan (VMTP) Needs Synthesis and Recommendations Development http://www.vtrans.org/vtrans2040.asp

Initial content is available on the VTrans2040 homepage describing the recommendations development process, including webinar presentations from March and June 2016. Refer back to this site, and the vtrans2040.com page for further information on this process through winter and spring 2017.



VII.B

VMTP Tier 1 DRAFT Recommendations for NoVA					
Need N.11: Within the NVTA Region, the Metro Orange, Blue, and Silver lines and the Rosslyn Tunnel all have congestion, reliability, station accessibility, transit connectivity and bicycle and pedestrian needs as well as severe train throughput and passenger carrying capacity constraints.					
	s well as severe train throughput and passenger carrying ca				
KEY PROJECTS ADDRESSING THIS NEED FUNDED PROJECTS	POTENTIAL GAPS	NEW PROJECT IDEAS NOVA07 - Increased Bus Service Frequency along Rosslyn-Ballston Corridor Into DC			
onstruction of the Metrorali Silver Line Phase II in Dulles Corridor nplement ITS Safety Improvements in I-66 Rosslyn Tunnel	Improvements identified are primarily for the Silver line, not the other 2 Metrorail	NOVADS - Peak Period Bus Transit Service Supplementing Metrorail Blue Line Service between Crystal City and Rosslyn into DC NOVAD4 - WMATA Core Station Improvements (Virginia portion only)			
erndon Metrorail Intermodal Access Improvements and Intersection Improvements at Herndon arkway and Van Buren Street letrorail Blue Line Traction Power Upgrades	lines. Reliability, capacity constraints and throughput are not adequately addressed by the identified projects.	NOVA03 - WMATA-Identified Pedestrian and Bicycle Project Priorities			
UNFUNDED PIPELINE PROJECTS OVA31 - All 8 car Metronali trains on Orange, Blue and Silver Lines					
Need N. 21: Within the NVTA Region, transit stations (rail stations and bus hubs) have multimodal access needs (bicycle access, walking, driving/ carpooling/parking, and/ or shuttle services).					
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS allston-MU Metrorail Station West Entrance: SmartScale 2015		NOVA27 - Seven Corners TOD Study NOVA25 - Street Grid Study: TODS and activity centers			
letrorail bus access improvements: I-66 Vienna Metrorail Accessibility and Capacity Improvements, senhower Metrorail Station Bus Loop		NOVA23 - VRE Station Improvements: parking and operational capacity			
onstruct Telegraph Road Park and Ride Lot adjacent to 1-95 commuter parking lot UNFUNDED PIPELINE PROJECTS OVA53 - East Falls Church Multimodal Safety and Access Project: addition of bus facilities (bays,	Projects enhance roadway connections and transit service, but pedestrian and bicycle access to transit stations need to be addressed. Access to VRE and Amtrak are not	NOVA03 - WMATA-Identified Pedestrian and Bicycle Project Priorities			
nelters, access lane) and installation of bikeshare stations OVA32 - Implement Tysons Street Grid OVA33 - Prentice Drive Extension to future Loudoun Gateway and Ashburn Metrorall Stations:	addressed by the identified projects.				
martScale Round 2 request OVA34 - Frontier Drive Extension (near Franconia Springfield Metrorail Station): SmartScale Round 2 quest					
Need N.23: Within the NVTA Region, there are b	icycle and pedestrian infrastructure needs, missing links in	the network, and safety needs for those modes.			
KEY PROJECTS ADDRESSING THIS NEED FUNDED PROJECTS	POTENTIAL GAPS	NEW PROJECT IDEAS NOVA03- WMATA-Identified Pedestrian and Bicycle Project Priorities			
alls Church: Pedestrian Crossings and Downtown Planning Opportunity Area: both SmartScale 2015 ilddleburg Downtown Pedestrian Improvements detstrian and Bicycle Fabilities on Route 123, Cinder Bed Road, Van Buren Street, McKinley Road,		NOVA13 - Implementation of select/high priority projects from the Northern Virginia Regional Bikeway and Trail Network			
umfries Road, Horner Road, Opitz Boulevard, Army Navy Drive, Van Dorn Street, and Route 7 all Connections and Construction: Detween Potomac Yard and Four Mile Run Trail, Mt. Vernon Trail, otomac Heritage Trail at Featherstone Wildlife Refuge, Old Cameron Run Trail (last project is	There is a need for a strategic bicycle and pedestrian plan that ties different plans				
nartScale 2015) keshare support: Capital Bikeshare Expansion on George Washington Memorial Parkway and	together.				
keshare Infrastructure in Reston, Falls Church edestrian and Bicycle Access for Loudoun County Metrorall Stations UNFUNDED PIPELINE PROJECTS					
OVA53- East Falls Church Multimodal Safety and Access Project: addition of bus facilities (bays, lelters, access lane) and installation of bikeshare stations					
Need N.22: Within the NVTA Region, there are equity-related multimodal access needs for all demographic groups.					
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS onstruct new Potomac Yard Metrorail Station on the blue/yellow lines		NOVA22 - Transit Study in Low Income and Minority Areas NOVA17 - Metrobus Priority Corridor: Columbia Pike			
RT Service Restructuring and Expansion between North Glebe Rd to Pentagon: SmartScale 2015 rystal City Transitway Northern Extension		NOVA12 - Netrobus Priority Corridor: Crystal City/Potomac Yard NOVA18 - Metrobus Priority Corridor: Crystal City/Potomac Yard NOVA19 - Metrobus Priority Corridor: Leesburg Pike NOVA19 - Metrobus Priority Corridor: Little River Tumpike/Duke Street			
Instruction of the Metrorali Sliver Line Phase II in Dulles Corridor UNFUNED PIPLINE PROJECTS DVA53 - East Falls Church Multimodal Safety and Access Project: addition of bus facilities (bays,	Infrastructure at and near transit stations to improve access and complement the additional paratransit vehicle service is desired. Also, multimodal access to other demographics. DRPT noted that paratransit is a small piece of the puzzle to address	NOVA2D- Metrobus Priority Corridor: Little River Turnpike/Duke Street NOVA21 - Metrobus Priority Corridor: Richmond Highway Express NOVA28 - Route 7 BRT			
elters, access lane) and installation of bikeshare stations DVA54 - Paratransit Vehicles (Transit Operational Program for WMATA ADA Paratransit Plan)	equity - expanded, more reliable local bus service is the best option.	NOVA13 - Implementation of select/high priority projects from the Northern Virginia Regional Bikeway and Trail Network			
DVA63 - West End Transitway: BRT line from Van Dorn to Pentagon Metrorali Stations DVA64 - West End Transitway: Southern Towers street network (SmartScale Round 2 request) DVA65 - Duke Street Transitway in Alexandria (Detween Landmark Mall and Diagonal Rd.)		NOVA03 - WMATA-identified Pedestrian and Bicycle Project Priorities			
	, I-395 and US 1 corridors have passenger and freight cong	estion, mode choice and connectivity needs.			
KEY PROJECTS ADDRESSING THIS NEED FUNDED PROJECTS	POTENTIAL GAPS	NEW PROJECT IDEAS NOVA23 - VRE Station improvements: parking and operational capacity			
tlantic Gateway Third Track Improvements UNFUNDED PIPELINE PROJECTS	While the recent Fast Lane Grant and the proposed DC2RVA high speed rail addresses some of the rail bottlenecks, improvements to rail transit and freight capacity,	NOVA24 - Commuter Bus Services from Fredericksburg and Stafford County to DC			
DVA23 - Long Bridge Improvements DVA02 - VRE Fredericksburg Enhancements: station improvements including platforms and parking DVA30 - DCRWA High Speed Rail: speed/reliability improvements to VRE and Amtrak	accessibility and connectivity could use additional attention.				
Need N.24: Within the NVTA Region and cross-Dist	rict, I-95/I-395 and US 1 from Stafford County to Washingto	on D.C, has congestion, reliability and safety needs.			
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS	POTENTIAL GAPS	NOVA01 - Investments in projects, programs and technologies that catalyze a shift to nonpeak period			
Japtive Traffic Signal Controls: SmartScale 2015 5 I widenings: between Marys Way and Featherstone Road and between Possum Point Road and ady's Hill Road: both SmartScale 2015. Also widen US 1 in association with interchange project at US1		highway travel for freight (Virginia Multimodal Freight Plan, 2013) NOVA23 - VRE Station Improvements: parking and operational capacity			
nd Route 123. **iden Neabsco Mills Road between US 1 and Smoke Court: SmartScale 2015 (not funded) nostruct HOV Ramps for 1-95 at US 1 and Fort Belvoir, 1-95 NB off ramp at Exit 166		NOVA24 - Commuter Bus Services from Fredericksburg and Stafford County to DC			
395 improvements: Widen southbound between Duke Street and Edsall Road, reconstruction of bundary Channel Drive at 1-395, operational improvements and bridge repair on 1-395 at Seminary and and Shirlington Road, HOT Lanes					
onstruct I-395 ramps: HOV Ramps for I-395 at Seminary Road, Shirlington Circle, Edsall Road, and Eads reet. Metering on I-395 ramp between Edsall and Boundary Channel Dr. I-395 Reversible Lane Ramp					
Seminary Road Idening of Harry Mice Route 301 bridge ansit Improvements: construct Crystal City Transitway Northern Extension and Potomac Yard					
letrorall Station. rystal City Streets: 12th Street Transitway (South Eads-South Clark), Clark/Bell Realignment, tersection Improvements on 23rd Street.	Widening projects, building new ramps and improve traffic control devices can help				
UNFUNDED PIPELINE PROJECTS OVA55 - US1 improvements: Widen/Relocate US 1, Dumfries - SMART SCALE Round 2 Request, Route & 123 Interchange - SMART SCALE Round 2 Request, Widen US 1 between Route 234 and Neabsco	improve reliability and relief congestion. The corridor can benefit from improved transit service and managing truck movements.				
on 123 interchanger—sinvant JOLIC Would 2 Request, wheel of 3 December Route 234 and reasons of and - SmartScale 2016 request, Widen and Reconstruct US 1 Telegraph Road and VA235 and 235 North and 235 South, Widen US 1, Occoquan River Bridge to VA 235 North					
OVASS - Richmond Highway Widening: Mt Vernon Hwy to Napper Rd from 4 to 6 lanes – SMART - SALE Round 2 Request OVAS7 - Add a hard running shoulder on 1-95 between Route 17 to Occoquan					
OVAS8 - 1-95/I-395 ICM Program: Multimodal Traveler Information, Dynamic Ramp Metering, Parallel rterial Operations Improvements, Parking Management, Decision Support System					
OWAS9 - Flyower Ramps: - 195 from GP to Express Lanes and 1-395 from GP to Express Lanes at Duke St. OVA60 - 1-395 improvements: Widen 1-395 Express Lanes between Turkeycock Run and Eads Street, buthbound widening					
DVA61- I-395 and Boundary Channel Drive Interchange Improvements DVA62- I-95/Route 286 Northbound Flyover: SmartScale 2015 (not funded)					
OVA63 - West End Transitway: BRT line from Van Dom to Pentagon Metroral Stations OVA64 - West End Transitway: Southern Towers street network (SmartScale Round 2 request)					
Need N.25: Within the NVTA Region and cross-District, the I-S	25/US 1 corridor between Fredericksburg and Washington,	D.C. has multimodal accessibility and transit capacity needs.			
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS Instruct new Potomac Yard Metrorall Station on the blue/yellow lines		NOVA26 - Additional Park and Ride Spaces along I-95/I-395 corridor NOVA24 - Commuter Bus Services from Fredericksburg and Stafford County to DC			
etronal Blue Line Traction Power Upgrades ystal City Transitway Northern Extension UNFUNDED PIPELINE PROJECTS UNFUNDED PIPELINE PROJECTS	Accessibility to transit station could use additional attention. Multimodal across district projects and park and ride capacity should be addressed	NOVA16 - Route 1 BRT Richmond Highway Phase 1 NOVA03 - WMATA-Identified Pedestrian and Bicycle Project Priorities			
DVA63 - West End Transitway: BRT line from Van Dorn to Pentagon Metrorall Stations VAGA - West End Transitway: Souther Towers street network (Smart-Scale Round 2 request) VA65 - Duke Street Transitway in Alexandria (between Landmark Mall and Dilagonal Rd.)	and the support of the capacity strough the difference				
OVA02 - VRE Fredericksburg Enhancements: station improvements including platforms and parking					
Need N.3: Within the NVTA Region, the US 29, US 50, and I-66 regional corridor (Prince William, Fairfax, and Arlington) have congestion and mode choice needs.					
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS ansform 66 Outside the Beltway (SmartScale 2015)		NOVA10 - Conduct Access Management Study on Route 50 NOVA06 - Implementation of Fairfax Connector Route 610 and Service Improvements to I-66 Express Routes			
OM Strategies Serving I-66 Corridor: SmartScale 2015 66 capacity increases: Widening and HOV Lanes at Route 15, Widening between Route 267 and commer ST		NOVA07 - Improved Bus Service Frequency along Rosslyn-Ballston Corridor into DC NOVA03 - WMATA-Identified Pedestrian and Bicycle Project Priorities			
comore St Sinside Beltway: Transform 66 - Multimodal Improvements, Tolling Systems Integration, construction between George Mason Drive and Dulles Access Road Science State S	The highway resigner are stated as a second				
66 Corridor (outside the Beltway) Enhanced Bus Service andform 66 Congestion Militgation Plan ograde Traveler Information Systems on 1-95 and 1-66 Corridors	The highway projects provide congestion relief. In addition to transit in the express lanes outside the beltway, additional transit improvements inside and outside the beltway are needed.				
tension of Government Center Parkway from FFX County Boundary to Jermantown Rd: SmartScale 215 UNFUNDED PIPELINE PROJECTS					
DVA47 - Express Lanes on I-66 in Reverse Peak Direction - outside the Beltway DVA49 - I-66 integrated Corridor Management Program: Parallel Arterial Operations improvements DVA50 - U. 52 * Arterial Operations Improvements from Prince William/Pauquier CL to DC					
OVAGO - OV D.2.2- Wrear to Deperations in Informer mental on Information and Overland State (Informer String Road (III) Plane Windows (III) (III) OVAGO - Seven Corners Ring Road (III) planes, Phase1A is SmartScale 2015) OVA35 - VRE Manassas Line improvements					
Need N.17: Within the NVTA Region, the US 29, U	S 50, VA 28, and I-66 corridors have safety, congestion, reli	ability, mode choice, bicycle and pedestrian needs.			
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS ansform 66 Outside the Beltway (SmartScale 2015), including interchange at VA28		NOVADB - Improved Bus Service Frequency between Northern Virginia Jurisdictions NOVAD9 - Park-and-Ride/Slug Line Centers along 1-66 Corridor			
anstorm bo Outside the settivary (smarts.cate 2015.), including interchange at VA.28 idden and Add HOV Lanes on 1-66 between Route 15 and University Boulevard roulder Improvements at 1-66 Exit 538 (Spot 2)		NOVA10 - Access Management Study on Route 50 NOVA06 - Implementation of Fairfax Connector Route 610 and Service Improvements to I-66 Express			
iden US 50 between Route 28 and Route 659 UNFUNDED PIPELINE PROJECTS	Some of the roadway widening and interchange improvement benefits may spill over to transit; however, additional transit improvements are required. Pedestrian and bike	Routes			
DVA39 - 1-66 Express Lane Ramps at Balls Ford Road, Cushing Road, Route 234 Bypass, University oulevard and Flyover ramp from GP to Express Lanes DVA38 - Widen US 29 from flour to six lanes between Union Mill Road and Buckley's Gate Drive	improvement projects could use additional attention.				
DVA33 - New Interchange on US 50 at Loudoun County Parkway DVA36 - Construct and widen Northstar Blvd (Braddock Road to Shreveport Dr) – SMART SCALE Round Request					
Nuss- VIEL Manassas Line Improvements Need N.1: Within the NVTA Region, the VA 28, VA 234, and VA-659 regional corridors have congestion, mode choice, safety, connectivity and bicycle and pedestrian needs, and constrained access to					
veed N.1: Within the NVTA Region, the VA 25, VA 234, and VA-659 regional corridors have congestion, mode choice, safety, connectivity and dicycle and pedestrian needs, and constrained access to Dulles Airport					
	Danestinport				
KEY PROJECTS ADDRESSING THIS NEED	POTENTIAL GAPS	NEW PROJECT IDEAS			
FUNDED PROJECTS oute 28 widenings: Prince William County to 0ld Centreville Road, Godwin Drive and Manassas City		NEW PROJECT IDEAS NOVA14 - Managed Lanes Study along entirely of Route 28 NOVA15 - Transit Study on Route 28 (boath of 1-66)			
FUNDED PROJECTS Dutle 28 widenings: Prince William County to Old Centreville Road, Godwin Drive and Manassas City mis, Vint Hill Road and Fitzwater Drive Ott Improvements on Roate 28 in Loudouse County (reconstruction with added capacity)		NOVA14 - Managed Lanes Study along entirely of Route 28 NOVA15 - Transit Study on Route 28 (south of 1-66) NOVA15 - Transit Study on Route 28 (south of 1-66) NOVA12 - implementation of New Yarfax Connector Routes Serving Dulles Airport and Vicinity NOVA13 - implementation of select-fight priority projects from the Northern Virginia Regional Bikeway			
FUNDED PROJECTS Dute 28 widenings: Prince William County to Old Centreville Road, Godwin Drive and Manassas City mis, vint will Road and Fizzwater Drive of Improvements on Route 28 in Loudouer County Perconstruction with added capacity) Dute 659 Bridge over Dulles Greenway: interim widening dielig Rd Third Lane between Godwin Dr. and Dorsey Circle - SmartScale 2015 Winterchanges: Rout - & Route 659 and Route 28 & Inconvostion Avenue.		NOVA14 - Managed Lanes Study along entirely of Route 28 NOVA15 - Transit Study on Route 28 (south of I-66) NOVA12 - Implementation of New Tairlax Connector Routes Serving Dulles Airport and Vicinity			
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