



Draft TransAction Plan: Overview and Findings

Martin E. Nohe, Chairman
July 13, 2017

NVTA's Long Range Transportation Planning Responsibility

NVTA is legislatively required to prepare a long range regional transportation plan for Northern Virginia that includes transportation improvements of regional significance...

- **Northern Virginia 2020 Transportation Plan Adopted July 1999***
 - **Total Cost \$9.7B**
- **TransAction 2030 Adopted July 2007**
 - **Total Cost \$15.4B**
- **TransAction 2040 Adopted November 2012**
 - **Total Cost \$23.2B**

costs for capital investments only

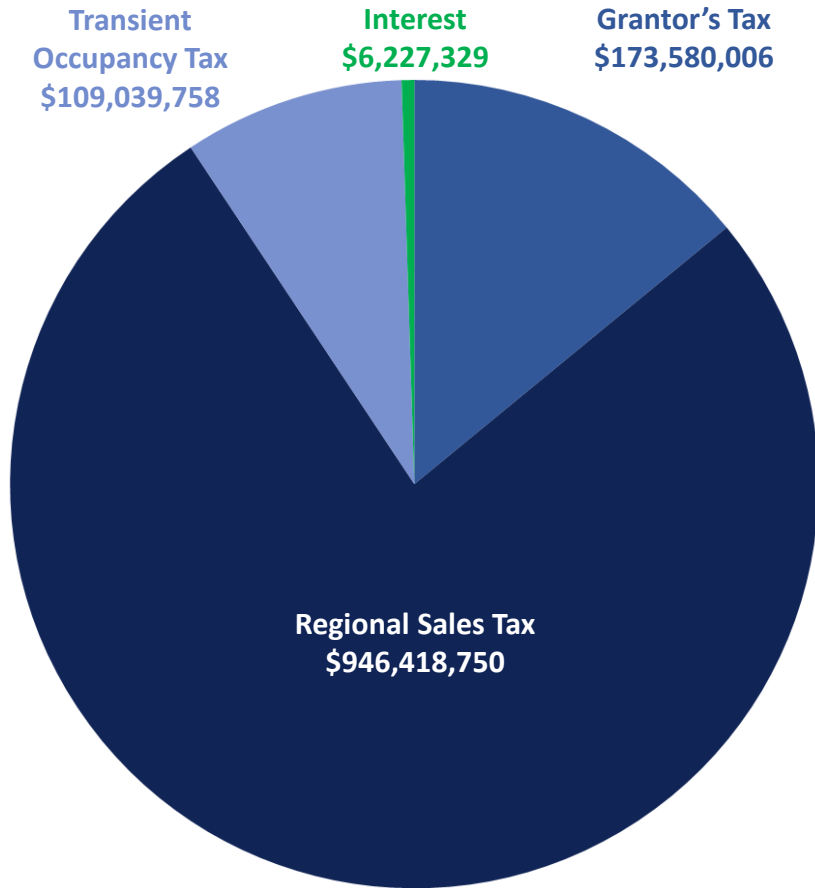
**developed by the Transportation Coordinating Council*

HB 2313 Provides Funding to NVRTA to Implement Long Range Transportation Plan

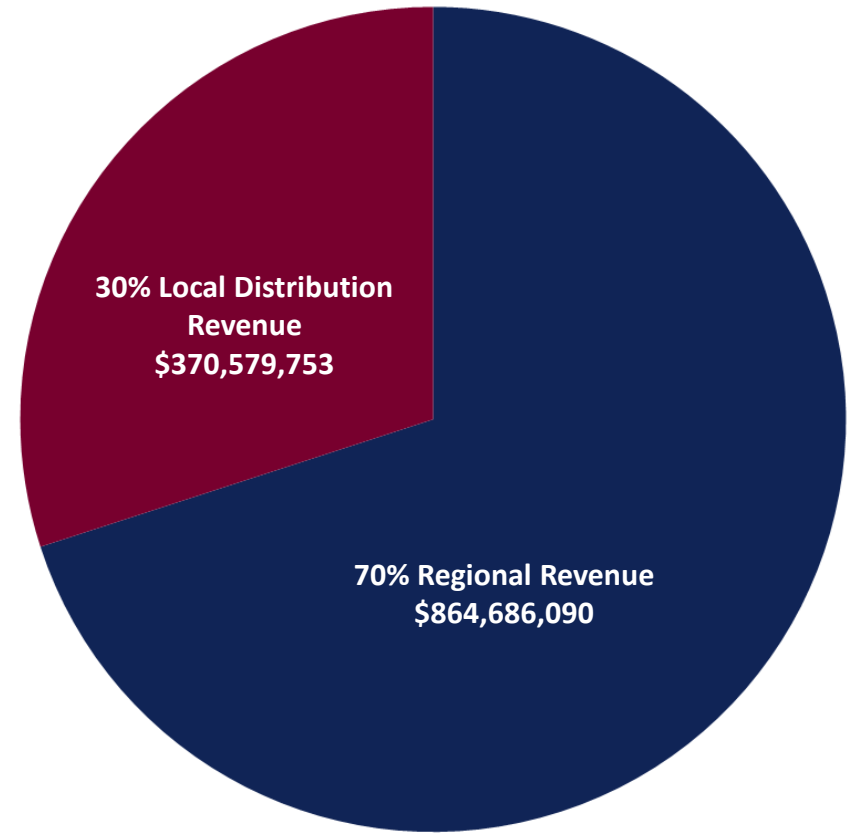
- **70% (Regional Revenue Funds) utilized for:**
 - Regional projects included in TransAction 2040, or updates, that have been evaluated by VDOT for congestion reduction (HB 599);
 - The Authority shall give priority to selecting projects that are expected to provide the greatest congestion reduction relative to the cost of the project.
- **30% (Local Distribution Funds) for cities and counties to utilize for their local transportation needs**
- *HB 2313 was estimated to generate approximately \$300 million annually. Current FY2017 to FY2023 estimate averages \$340 million per year*

NVTA HB 2313 Revenues Received and Projected through FYE June 30, 2017

NVTA TOTAL REVENUE RECEIVED BY TAX TYPE
\$1,235,265,843



NVTA TOTAL REVENUE RECEIVED
\$1,235,265,843



NVTA Funding Programs Since the Passage of HB 2313

- **FY2014 Program**
 - Adopted July 2013
 - Total Investments---\$187.0M
 - (includes inaugural bond issuance)
- **FY2015-2016 Program**
 - Adopted April 2015
 - Total Investments---\$336.9M
- **FY2017 Program**
 - Adopted July 2016
 - Total Investments---\$466.0M
 - Includes \$300M I-66/Rt. 28 Interchange (Transform 66)

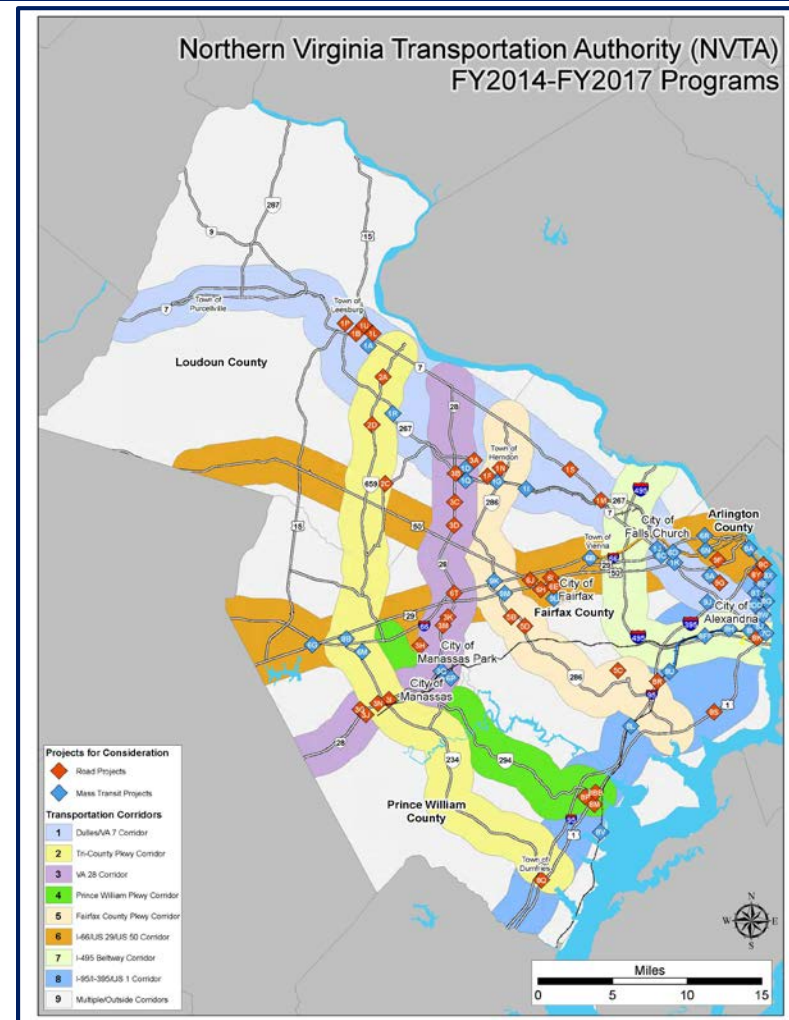
All Current Funding Programs Were Developed Under TransAction 2040

Regional Transportation Investments Adopted To Date

FY2014-2017 Programs

79 Projects

\$990 Million Total



HB 2313 Regional Investments

- **I-66/Route 28 Interchange Improvements**
- **Route 28 Widening in Fairfax, Loudoun and Prince William Counties, and the Cities of Manassas and Manassas Park**
- **Route 1 Widening in Fairfax and Prince William Counties**
- **Route 7 Widening in Fairfax County and the Town of Leesburg**
- **Loudoun County Parkway Widening**
- **Fairfax County Parkway Widening**
- **Columbia Pike Multimodal Improvements**
- **Belmont Ridge Road Widening**

HB 2313 Regional Investments

- **\$175M in Capital Investments in Metro**
 - 2 New Metro Stations (Innovation & Potomac Yard)
 - Metrorail Traction Power Upgrades (Orange & Blue Lines)
 - Ballston Station Second Entrance
- **Envision Route 7 Transit Study**
- **8 VRE Infrastructure Expansions**
- **34 New Bus Purchases**
 - Providing 20 new and/or expanded bus service/routes
- **2 Bus Garage Facilities**
- **New 300 Space Park & Ride Facility**
- **New Crystal City Multimodal Center**

Draft TransAction Plan: Planning for Next Round of Investments

- **First update since the passage of HB 2313**
- **Approximately 358 multi-modal candidate projects across 11 regional corridors/28 corridor segments**
- **Continuous public engagement**
- **MWCOG Round 9.0 forecasts and 2040 planning horizon used as baseline**
- **Unconstrained financially---not enough \$\$ to fund all of the region's transportation needs**

Draft TransAction Plan: Planning for Next Round of Investments

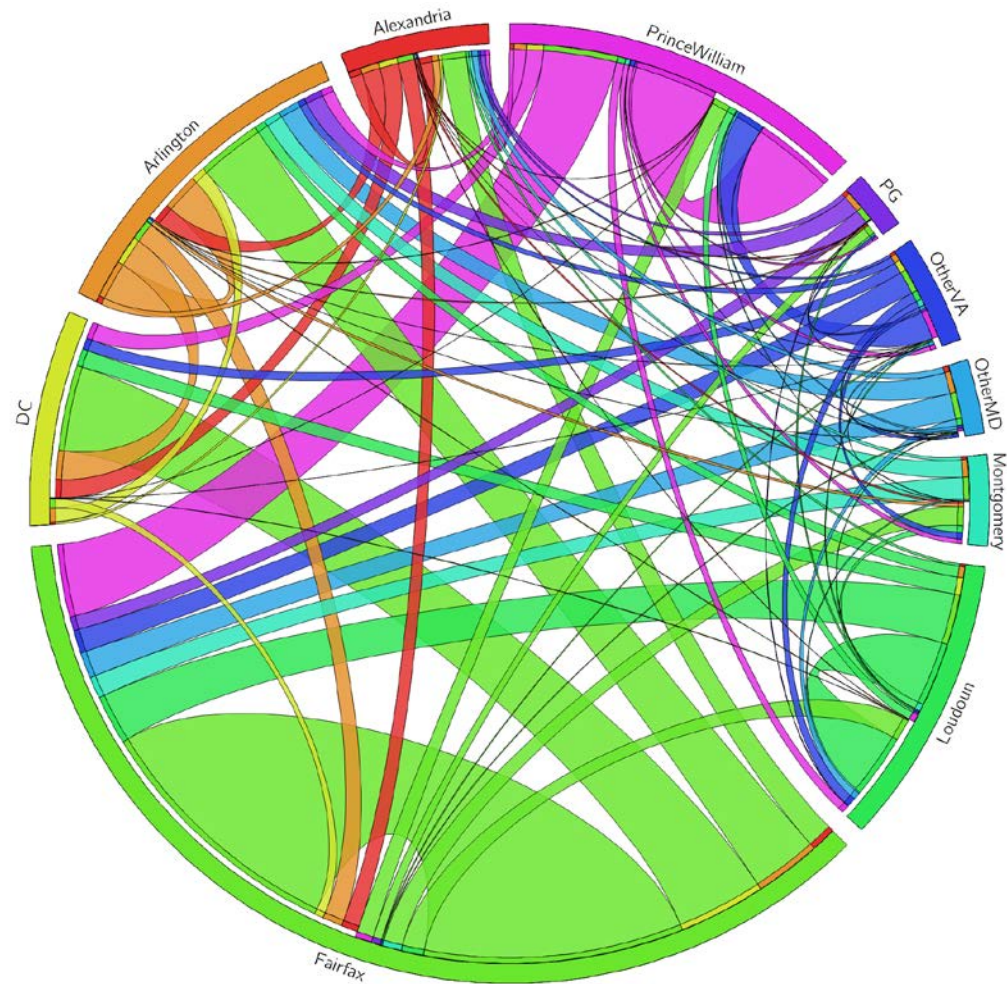
- **15 weighted performance measures (congestion reduction weighted at 45%), incorporation of HB 599**
- **Multi-Modal Corridors and Segments**
- **No singular focus on one project or one mode**
- **Performance Based Evaluation**
- **Scenario (sensitivity) analysis**

Jurisdiction Origins and Destinations

2040 Commute Patterns

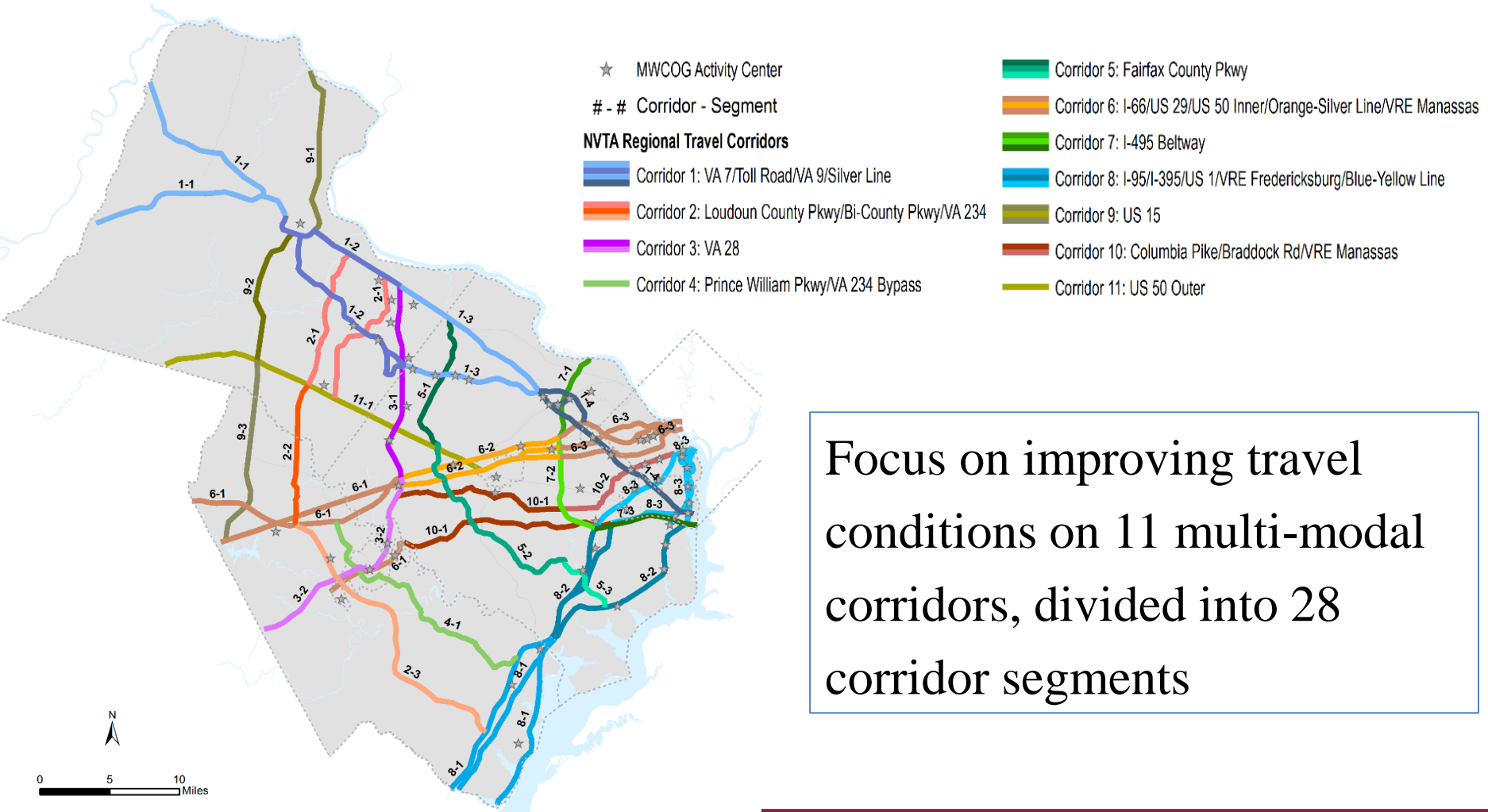
- The origins and destinations noted on the right graphically show commuting patterns and provide a sense of volume.
- The patterns and volume defines the need for the multimodal investments in corridors and segments.

- *24% increase in Population
- *37% increase in Employment
- *2x increase in Transit Crowding
- *3x increase in Person Hours of Delay



Source: MWCOG 2040 Travel Forecasts, Round 9.0 Land Use

Evaluation of Corridors and Segments



Focus on improving travel conditions on 11 multi-modal corridors, divided into 28 corridor segments

Draft TransAction Plan

Total Projects in Draft Plan		Draft Plan Cost Estimate including ROW (\$B)*
358		\$44.1***
Project Type	Total Projects**	Project Cost FY17 (\$M)
Roadway	239	\$19,831
Transit	99	\$23,293
Non-motorized	51	\$3,543
ITS ¹ / ICM ²	15	\$1,570
TDM ³	3	\$170

* Cost estimates are for entire projects, regardless of potential funding sources

** Projects can be categorized as multiple types

*** Includes \$10-\$13B extra-territorial project costs

¹ ITS: Intelligent Transportation Systems

² ICM: Integrated Corridor Management

³ TDM: Transportation Demand Management

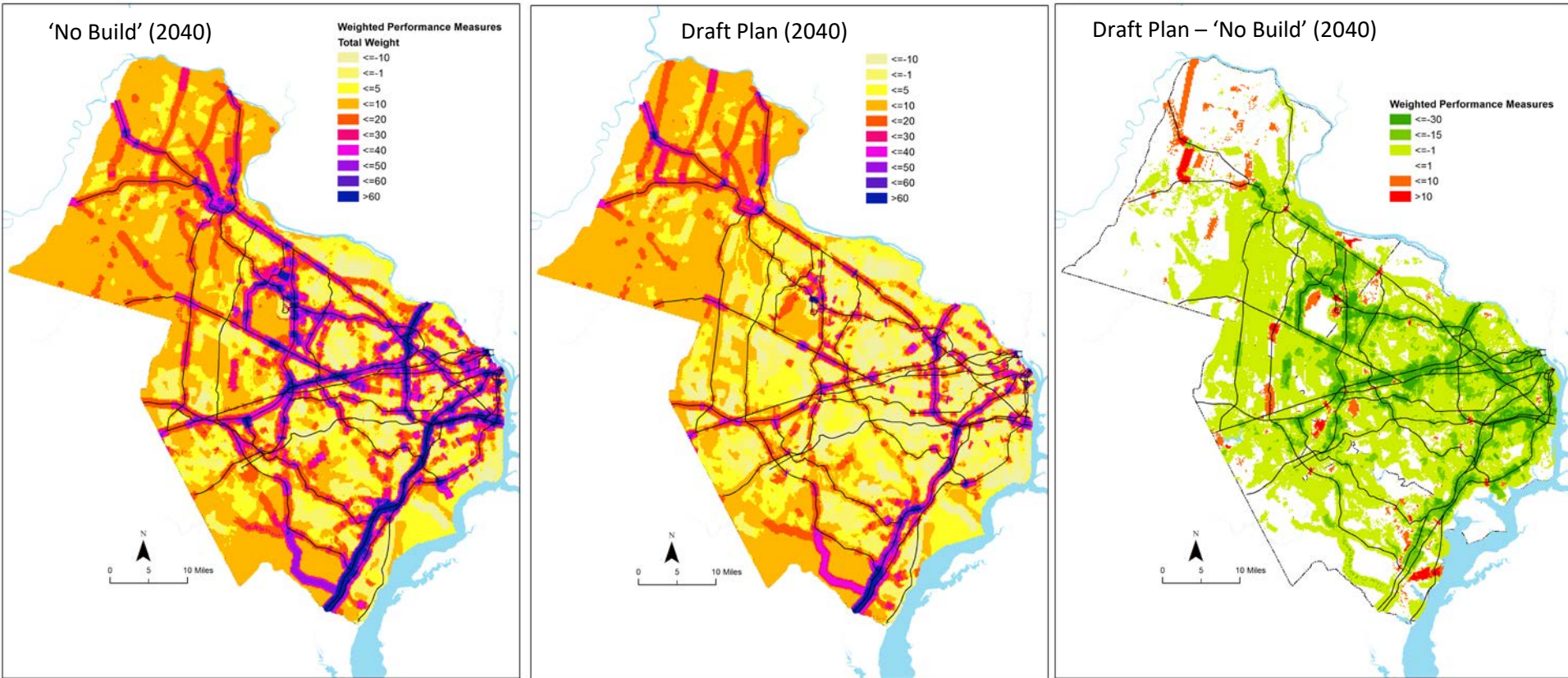
Findings: Selected Measures

Measures (Weekday)	Current Conditions (2016)	'No Build' (2040)	Draft Plan (2040)	% Change
Motorized Trips	8,737,000	10,462,000	10,565,000	1.0%
Auto Trips	7,862,000	9,432,000	9,442,000	0.1%
Transit Trips	876,000	1,030,000	1,122,000	9.0%
Transit Share	10.0%	9.8%	10.6%	8.2%
Transit Boardings	1,002,000	1,359,000	1,551,000	14.1%
Miles of Travel	104,839k	125,379k	124,869k	-0.4%
Hours of Travel	3,298,000	5,811,000	4,446,000	-23.5%
Hours of Delay	1,007,000	3,030,000	1,704,000	-43.8%
Transit Crowding	10,800	20,100	7,200	-64.4%

***24% Population Increase & 37% Employment Increase**

Impact of Draft Plan

Draft Plan (2040) compared to 'No Build' (2040)



Segment Level Analysis

Corridor Segment	NVTA Performance Rating
Segment 8-3: I-395/US 1/VRE Fredericksburg/Blue-Yellow Line – I-495 to Potomac River	65.8
Segment 7-3: I-495 – I-95 to Woodrow Wilson Bridge	59.2
Segment 6-2: I-66/US 29/US 50/Orange-Silver Line – Rt. 28 to I-495	58.1
Segment 1-4: Rt. 7/Dulles Toll Road/Silver Line – Tysons to US 1	54.7
Segment 8-2: I-95/US 1/VRE Fredericksburg – Prince William County line to I-495	54.6
Segment 6-3: I-66/US 29/US 50/Orange-Silver Line – I-495 to Potomac River	49.5
Segment 8-1: I-95/US 1/VRE Fredericksburg – Stafford County line to Fairfax County line	48.5
Segment 10-1: Braddock Road/VRE Manassas – Rt. 28 to I-495	45.4
Segment 2-1: Loudoun County Parkway/Belmont Ridge Road – Rt. 7 to US 50	43.9
Segment 11-1: US 50 – Fauquier County line to City of Fairfax	42.3
Segment 3-1: Rt. 28 – Rt. 7 to I-66	40.7
Segment 6-1: I-66/US 29/VRE Manassas – Prince William County line to Rt. 28	40.5
Segment 1-3: Rt. 7/Dulles Toll Road/Silver Line – Rt. 28 to Tysons	39.9
Segment 7-1: I-495 – American Legion Bridge to I-66	39.6
Segment 10-2: Columbia Pike/Braddock Road – I-495 to Pentagon	35.8
Segment 1-2: Rt. 7/Dulles Greenway – Town of Leesburg to Rt. 28	34.5
Segment 4-1: Prince William Parkway – I-66 to I-95	34.2
Segment 7-2: I-495 – I-66 to I-395	33.0
Segment 5-2: Fairfax County Parkway – US 50 to Rolling Road	31.0
Segment 5-1: Fairfax County Parkway – Rt. 7 to US 50	27.0
Segment 5-3: Fairfax County Parkway – Rolling Road to US 1	26.4
Segment 3-2: Rt. 28 – I-66 to Fauquier County line	24.9
Segment 2-3: Rt. 234 – I-66 to I-95	21.0
Segment 1-1: Rt. 7/Rt. 9 – West Virginia state line to Town of Leesburg	15.8
Segment 9-2: US 15 – Rt. 7 to US 50	13.6
Segment 9-1: US 15 – Potomac River to Rt. 7	11.8
Segment 2-2: North-South Corridor/Bi-County Parkway – US 50 to I-66	7.7
Segment 9-3: US 15 – US 50 to US 29	5.8

Alternate Futures

- Four Alternate Futures tested:
 - Scenario A: Technology makes driving easier
 - Scenario B: Changes in travel behavior
 - Scenario C: Dispersed land use growth
 - Scenario D: Concentrated land use growth
- Scenarios are ‘plausible’ alternate futures, but are neither ‘predicted’ nor ‘preferred’; hybrid scenarios are ‘probable’
- Scenario (sensitivity) analysis provides an understanding of the robustness of TransAction findings and recommendations

Findings

- NVTA should:
 - Pursue targeted, multi-modal, regionally-coherent strategies to address the region's transportation needs, consistent with the region's priorities and the varying geographies of the region.
 - Work with member jurisdictions and regional stakeholders (including extra-territorial partners) to work across jurisdictional boundaries, wherever possible, to address the region's transportation needs.
- No single project, program, or policy will address all the region's transportation needs.
- Projected regional revenues through 2040 would only fund less than a quarter of the total estimated cost of the 358 candidate regional projects in the Draft Plan.
- Emerging trends in technology and travel preferences may improve travel conditions in 2040

Next Steps

Public Hearing & Open House: July 13, 2017

Public Comment Period: June 9 – July 23, 2017

TransAction Update Adoption: October 12, 2017

Call for Regional Projects for FY2018-2023 Six Year Program:
October 12, 2017

Public Comment Period: Spring 2018

Adoption of the FY2018-2023 Six Year Program: June 2018

Public Input Needed

The Draft TransAction Plan and Project List are presented for your consideration and comment.

In addition to this evening, comments can be provided through midnight July 23, 2017 by:

- On-line: NVTATransAction.org/comment
- E-mail: TransActionUpdate@NVTATransAction.org
- Mail: 3040 Williams Drive, Suite 200, Fairfax, VA 22031