

The following item was handed out at the December 6, 2018 NVTC Meeting.



ExpressLanes



Virginia Department of Rail and Public Transportation

395 Express Lanes Project Update

Northern Virginia Transportation Commission (NVTC)

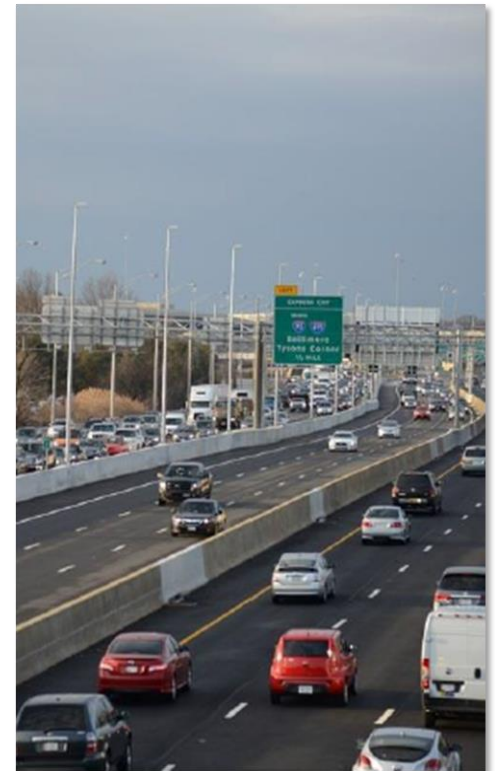
December 6, 2018

Susan Shaw, P.E., Megaprojects Director, VDOT



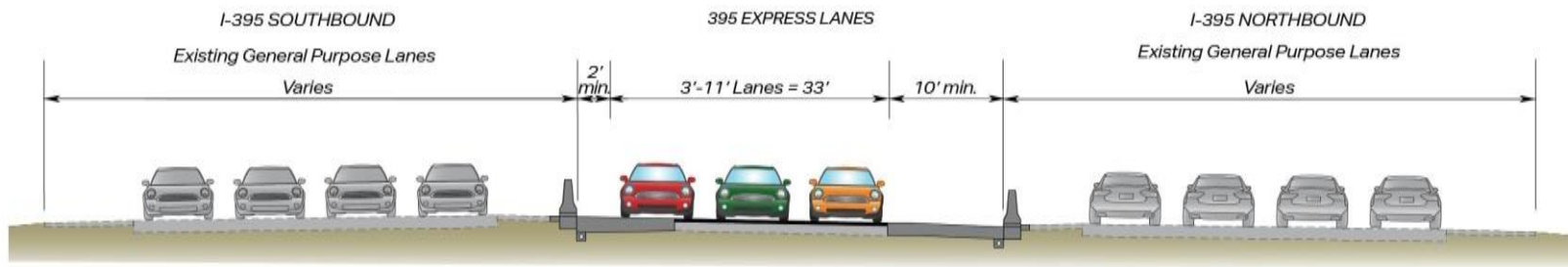
I-395 Project Partners

- **VDOT** is responsible for oversight of project and funding and operation of the VDOT components
- **95 Express Lanes LLC (Transurban-Concessionaire)** is responsible for development, financing and delivery of the project, and operation of the 395 Express Lanes
- **Lane Construction Corporation** is the Design-Builder and responsible for design and construction of project; **AECOM** is the designer for the Lane team
- **Transurban (USA) Inc.** is the TTMS Contractor and responsible for delivery of the Tolling and Traffic Management Systems for the Express Lanes portion of the project
- **Other key stakeholders:**
 - Virginia Department of Rail and Public Transportation
 - Federal Highway Administration
 - DoD-Washington HQ Services
 - Adjacent local jurisdictions



Express Lanes Scope

- Reconfiguration and reconstruction of two existing HOV lanes to three High Occupancy Toll (HOT) lanes, including traffic control, pavement modifications, structures, signage, pavement markings, and lighting
- No modifications to most interchanges



Typical Project Cross Sections

Express Lanes Project Benefits



TIME SAVINGS

- **Average 6 to 8 minute** travel time reduction in General Purpose Lanes
- **15% reduction** in travel times in General Purpose lanes



NOISE MITIGATION

- **Provide opportunities** along corridor to mitigate noise



SAFETY

- Increased capacity will **reduce** the potential for congestion-related crashes
- **Increase safety** at Eads Street interchange



TRANSIT/HOV BENEFITS

- **35 - 50% increase** in traffic volumes in HOT lanes; relieves General Purpose lanes
- Increasing capacity on I-395 **reduces diversion of traffic** to arterial roadways
- **Promote HOV** throughout the day (currently no incentive to HOV during off-peak)
- **Allow** all motorists to continue north on the HOT lanes at Turkeycock Run or enter the southbound HOT lanes exiting DC

Key Dates

Milestone	Date
Groundbreaking	August 2017
Cordon off eastern HOV shoulder	Late 2017
Cordon off western HOV shoulder	Fall 2018 – Winter 2019
Pentagon Parking Improvements Completion	Late Spring 2019
Service Commencement	Late Fall 2019
Final Completion	Summer 2020

Construction Status – Express Lanes

Work continues to progress in I-395 shoulder areas

- Storm drainage installation
- Light pole foundations, duct bank, overhead sign foundations, toll gantries
- Shoulder paving
- Replacement of old guardrails with concrete barriers
- 395 project remains on schedule for service commencement in late Fall 2019, within budget



Widen I-395 Southbound Duke Street to Edsall Road

Edsall Road Interchange

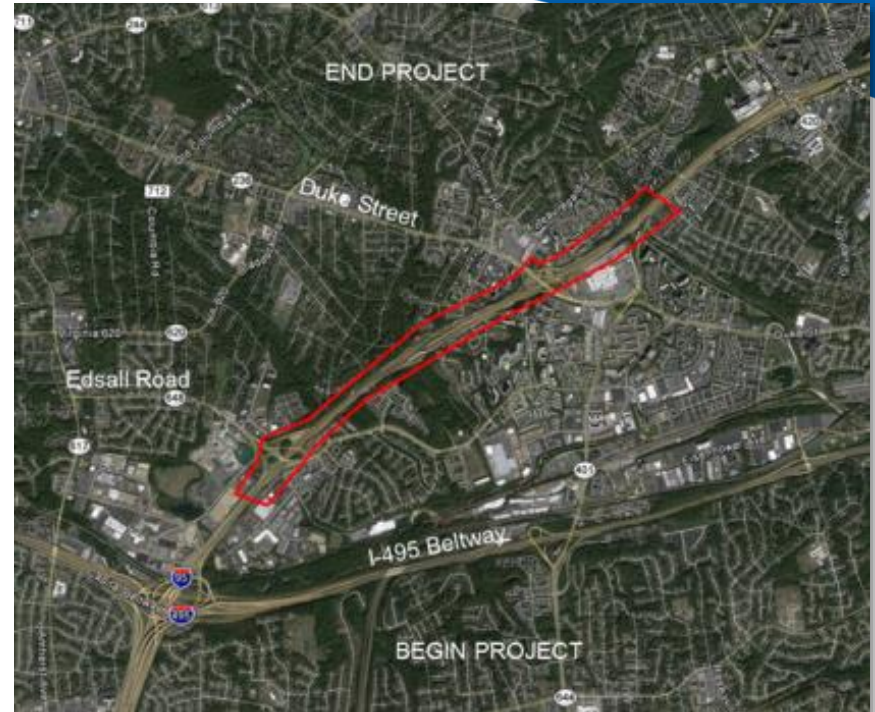
- Replace existing Edsall Westbound to I-395 Southbound Loop Ramp with new signalized intersection

Duke Street Interchange

- Replace existing I-395 Southbound to Duke Eastbound Loop Ramp with new signalized intersection

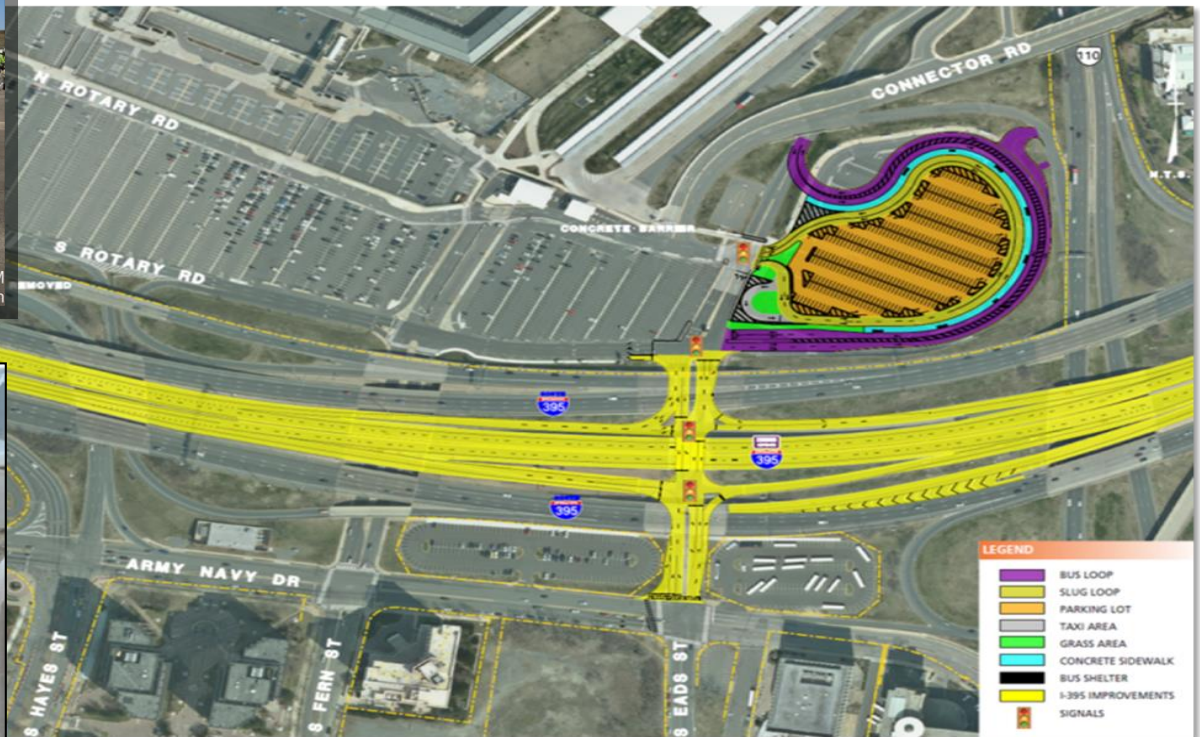
Construction Status

- Activities underway include drainage, grading, retaining walls and relocation of noise walls



Pentagon Parking and Eads Street Interchange Improvements

Reconfigure South Parking Area to enhance circulation for transit buses and carpools



Transportation Management Plan Update

Operations and Transit Service

- **Virginia State Police** supplemental support

Supplemental transit (Bus) Service

- **WMATA:** Burke Center to Pentagon, added 3 daily trips, more than 1,300 monthly riders past 6 months
- **WMATA:** Edsall Road/Landmark to Pentagon, added 4 daily trips, more than 600 monthly riders past 6 months
- **PRTC:** Dale City OmniRide, additional trips, more than 1,500 monthly riders past 6 months

INTERSTATE 395 CONSTRUCTION AHEAD

Rethink your Commute

The I-395 Express Lanes project is funding new transit and commuter options to ease congestion along the I-395 / I-95 corridor.

Check out these new options for a smoother commute.

TAKE THE BUS	JOIN A CARPOOL	START A VANPOOL	WORK REMOTELY
 Additional bus services during peak hours in Prince William, Fairfax, Arlington, and Alexandria	 Carpool with one or more people to be eligible for Commuter Connections "Pool Rewards" program	 Financial assistance and new rider matching is available to start new vanpools	 Up to \$10,000 in additional subsidies for qualified employers to encourage new teleworking programs

VDOT • DRPT For more information visit www.395expresslanes.com/commuter



Transportation Management Plan Update

Employer Telework Program Incentives

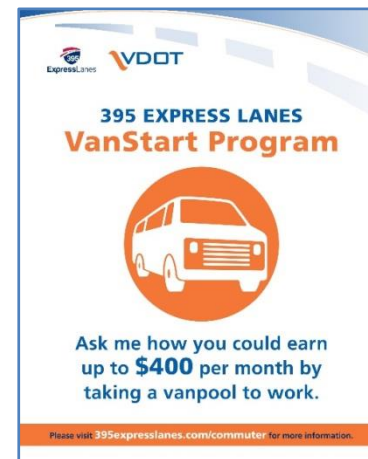
- Up to \$10,000 to businesses starting new telework programs

Permanent Pentagon Commuter Store

- Opened on Sept. 4, 2018 providing full time, weekday service
- More than 375 bus/rail ticket transactions
- Served more than 900 customers

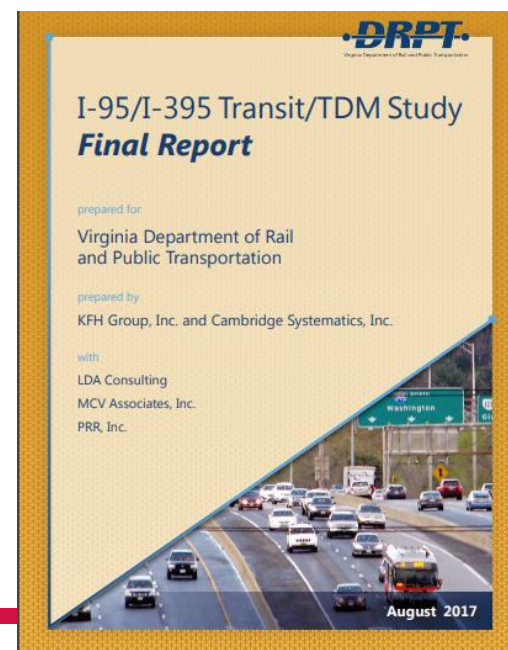
Vanpool and Carpool Incentives

- Monthly stepdown incentive for new vanpool and carpools



How Transit Investment Will Work

- Concessionaire (Transurban) will make annual payments to Commonwealth for transit improvements along the I-95/I-395 corridor
- Initial payment of \$15 million due when Express Lanes service begins in late fall 2019
- Annual payments escalated by 2.5% through year 2087 (term of ARCA)
- DRPT led I-95/I-395 Transit/Transportation Demand Management Study in coordination with key stakeholders to identify project priorities
- Agreement between NVTC, PRTC, VDOT and DRPT pending final signatures; will govern how transit improvements get selected and implemented
- Implementation process will involve input from local jurisdictions and transit agencies, project application process, and approval by Commonwealth Transportation Board



Thank you

For more information
and to sign up for updates, please visit

www.395expresslanes.com

or find us on Facebook at

www.facebook.com/395expresslanes

Questions or concerns should be directed to:

Michelle Holland, VDOT, michelle.holland@vdot.virginia.gov, 703-259-3378

Brent McKenzie, 95 Express Lanes, bmckenzie@transurban.com, 571-326-5609



Virginia Department of Rail and Public Transportation

I-95/I-395 Transit/TDM Study Summary

December 6, 2018

Todd Horsley
Director of
Northern Virginia
Transit Programs

Annual Transit Payment

- The Commonwealth has committed that at least \$15 million will be provided annually through toll revenues for multimodal improvements in the corridor (Annual Transit Payment)
 - **Annual Transit Payment will escalate each year**
- Multimodal Improvements funded with annual transit payment must benefit toll payers
- NVTC/PRTC to select projects for funding similar to I-66 Commuter Choice Program



Transit/TDM Study Purpose

- DRPT conducted a Transit/TDM Study to identify a comprehensive, *fiscally unconstrained*, set of transit and TDM investments on which future toll revenues could be invested

- Study conducted in 2016-17
- Final report in August 2017
- Most recent previous study completed in 2008

- Study & Executive Summary available at:

<http://drpt.virginia.gov/transit/planning/i-95i-395-transittdm-study-2017/>



Transit/TDM Study Stakeholders



DRPT coordinated the study with a ***Key Stakeholder Group*** consisting of representatives from:

City of Alexandria

Arlington County

Fairfax County

City of Fredericksburg

Prince William County

Spotsylvania County

Stafford County

NVTA

NVTC

PRTC

VRE

WMATA

Transit/TDM Study Process



- Project Team developed list of transit and TDM projects from meetings with local jurisdictions and transit providers and reviews of their TDPs & CIPs
 - Initial project list was reviewed and refined by the Key Stakeholder Group, but no projects were added that were not on then current TDPs & CIPs
- Study evaluated and rated individual projects on **Ridership Potential, Person Miles Traveled, Accessibility, Equity & Cost Effectiveness**
- Key Stakeholder Group did not make decisions on projects to be funded by annual transit payments

Study Area and Markets



- Study area extended from the Potomac River south along I-395 & I-95 to the southern terminus of the current I-95 Express Lanes (at Garrisonville Road)
 - **Projects as far south as Spotsylvania County were included in the study and will be eligible for funding**
- Transit/TDM services, programs and facilities that were studied included those that:
 - **Serve work destinations within the project study area inside the Beltway (including downtown DC) and**
 - **Directly use the I-395 Express Lanes or**
 - **Provide direct access to transit services in the corridor or increase person throughput or travel choices in the study area**

Transit/TDM Study Program Benefits



- Cumulative project list totaling \$6.6 billion in capital needs + \$140 million in annual operating costs (2016 dollars)
 - **\$3.1 billion of Metrorail improvements**
 - **\$2.2 billion of VRE improvements**
 - **\$829 million of Bus Service improvements**
 - **\$469 million of Transit Facilities and Park & Ride Lots**
 - **\$2.4 million in TDM capital (TDM costs primarily operating)**
- Compared with 2015 conditions, investment in the full \$6.6 billion Transit/TDM program would support growth and increase:
 - **Peak period transit throughput by 45%**
 - **Total peak period transit trips by 49%**
 - **Transit mode share from 18.7% to 21.9% for work trips**

Timeline (Study to Project Selection)

- Study period (*April 2016 – August 2017*)
- Most recent presentation to NVTC (*1-5-17*)
- Final Report (*August 2017*)
- Summary presentation to NVTC (*12-6-18*)
 - Presentation to PRTC (*Q1 2019*)
- I-395 Express Lanes open (*Q4 2019*)
- FY 2021 SYIP (including initial program) approved by CTB (*Spring 2020*)





Virginia Department of Rail and Public Transportation

I-95/I-395 Transit/TDM Study Summary

December 6, 2018

Todd Horsley
Director of
Northern Virginia
Transit Programs

Blue Item #8: Washington Metropolitan Area Transit Authority (WMATA)



TO: Chairman Smedberg and NVTC Commissioners

FROM: Kate Mattice and Andrew D'huyvetter

DATE: December 6, 2018

SUBJECT: Washington Metropolitan Area Transit Authority (WMATA) Updates

This is an addendum to Agenda Item #8. The October 2018 Parking utilization report was provided to NVTC by WMATA on November 28th. There are no updates to Metrorail and Metrobus ridership statistics.

1. Virginia Ridership and Parking Facility Utilization

The following tables show WMATA ridership by mode in Virginia for October 2018.

WMATA Virginia Ridership October 2017 and 2018			
	October 2017	October 2018	Percent Change (2017-2018)
Metrorail			
Total ¹	8,282,512	8,708,380	+5%
Weekday Average ²	292,870	298,791	+2%
Saturday Average ²	129,574	125,228	-3%
Sunday Average ²	107,597	120,843	+12%
Metrobus			
Total ¹	1,573,574	1,516,097	-4%
Weekday Average ¹	63,566	59,689	-6%
MetroAccess¹			
Total	30,395	32,616	+7%

1: Unlinked Passenger Trips

2: Based on station entries and exits

Source: WMATA

WMATA Virginia Parking Facility Usage (Weekday) October 2017 and 2018				
Station/Lot	Oct 2017	Y-T-D FY18	Oct 2018	Y-T-D FY19
Huntington*	73%	70%	87%	75%
West Falls Church	49%	46%	60%	55%
Dunn Loring**	75%	72%	47%	45%
Vienna	75%	73%	76%	72%
Franconia	58%	56%	60%	56%
Van Dorn	109%	105%	106%	103%
East Falls Church	117%	115%	117%	115%
Wiehle-Reston East	95%	91%	103%	96%
Northern Virginia Total	72%	69%	74%	68%

Source: WMATA

*The Huntington garage capacity was recently updated to reflect the closure of the south parking garage. The capacity changed from 3,175 spaces to 2,732 spaces. Transactions at Huntington have remained largely stable year over year, but the downward change in capacity caused increase in the utilization rate.

**The Dunn Loring garage capacity was updated in July 2018 after WMATA conducted a capacity verification: the capacity statistics changed from 1,326 in July 2017 to 1,964 in July 2018. Transactions at Dunn Loring have remained stable year over year, but the upward change in capacity caused a drop in the utilization rate.

Update on NVTC's Regional Bus Agenda

Presentation to the Commission
December 6, 2018

Presented by Dan Goldfarb, PE
Northern Virginia Transportation Commission





Northern Virginia bus systems provide **2.7 million annual revenue hours** of service

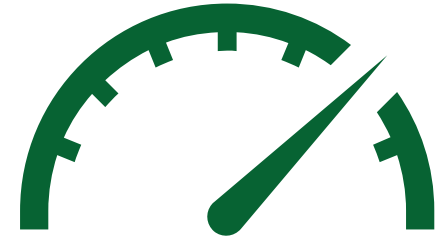


Non-Northern Virginia (combined) provide only 1.3 million annual revenue hours of service

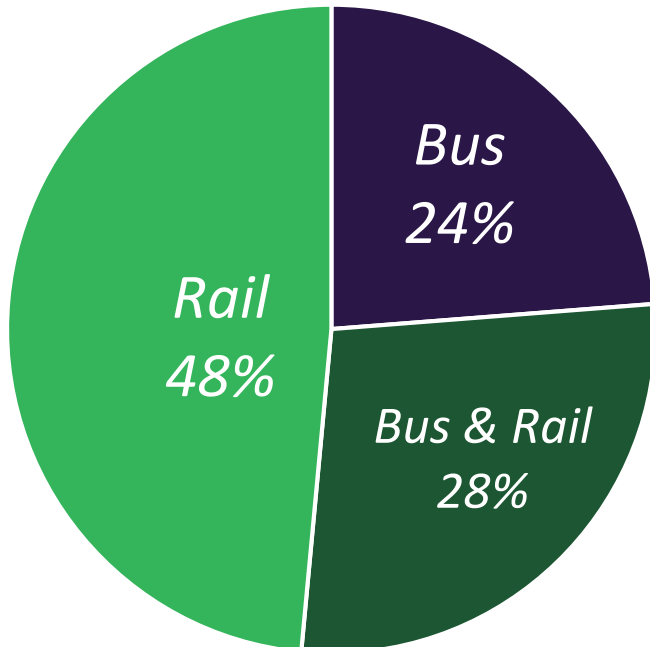
Service Efficiency
(boardings per revenue hour)

Northern Virginia
31.4

Richmond 22.1
Hampton Roads 19.3



Bus is a key transit mode connecting people to opportunities and other modes



212,000 average weekday bus boardings

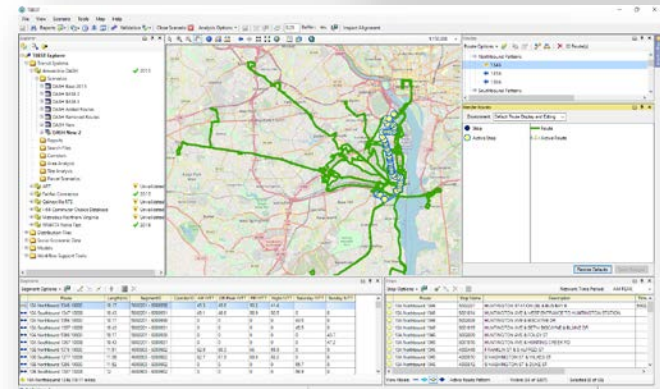
120,000 average weekday bus revenue miles

22,000 weekday buses maximum service

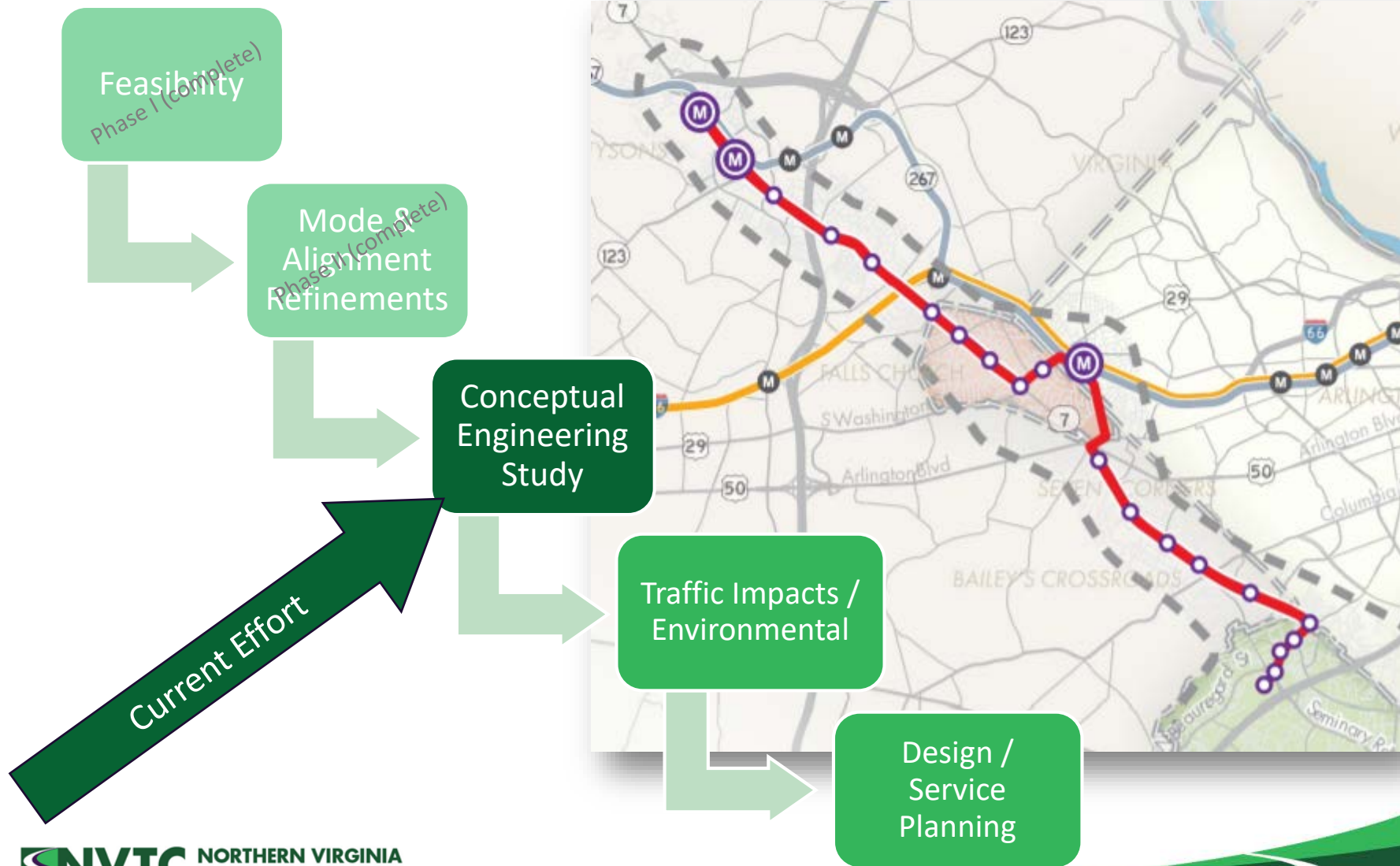
Source: NVTC Regional Bus Analysis 2017

NVTC's Regional Bus Agenda 2.0

- Builds on 2014-2017 Regional Bus Agenda efforts
- Three Initiatives
- Macro and Micro Analysis
- Regional in Scope



Envision Route 7 BRT

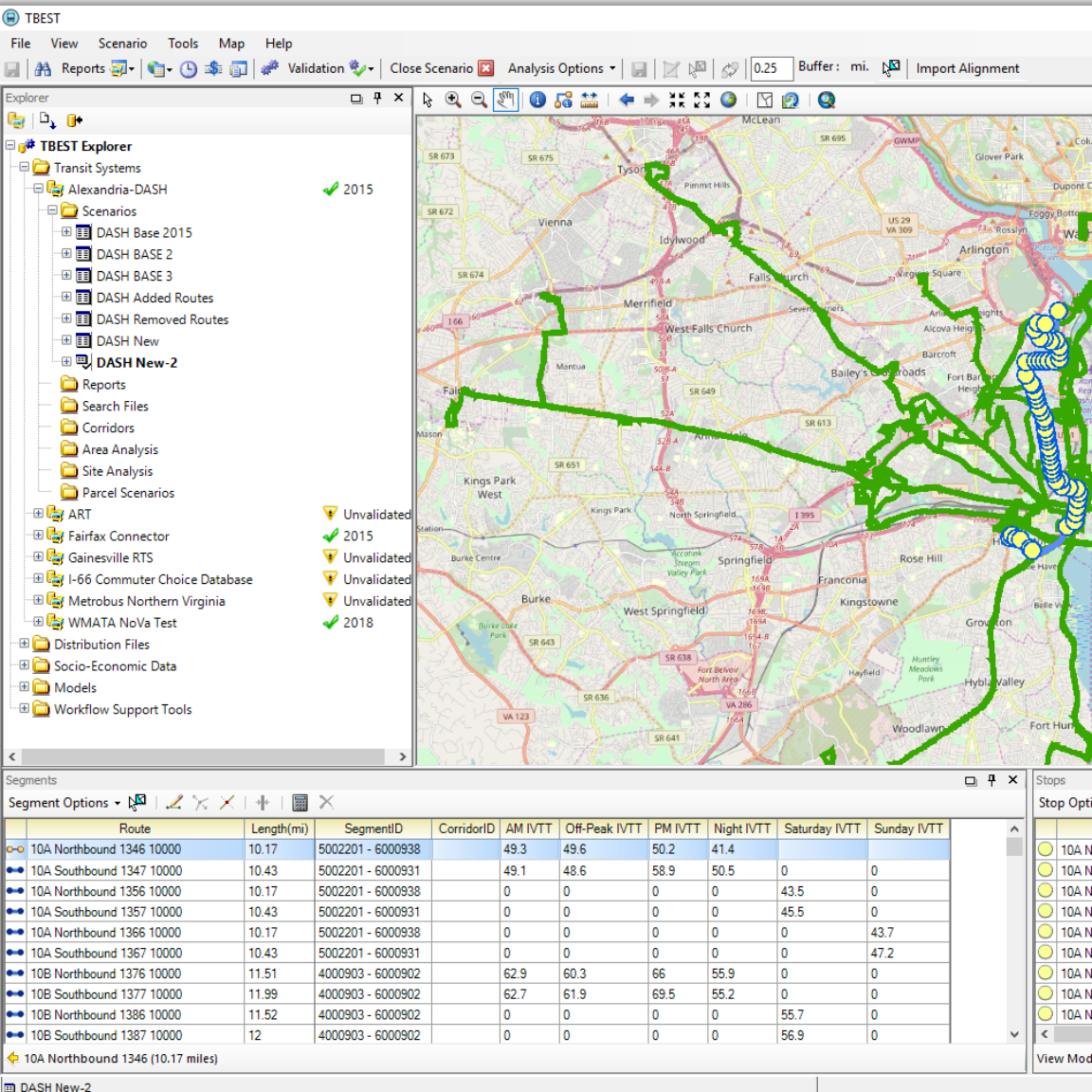


Regional BRT Analyses



- Identified corridors with greatest opportunity for BRT/high capacity bus
 - Included in TransAction
- Ongoing coordination with other regional jurisdictions (MD, DC and NOVA)
- Active participation on TPB Regional Public Transportation Subcommittee

Created NVTC Bus Transit Database

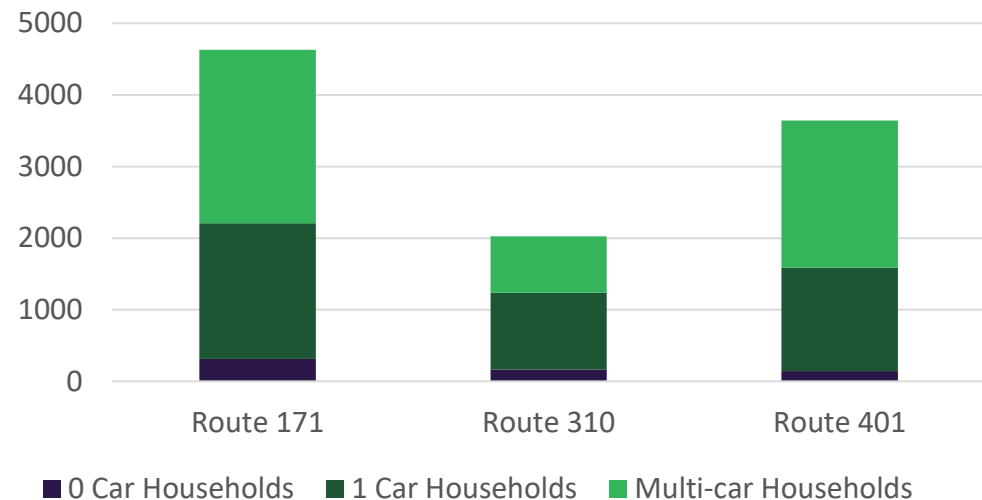


- Regional Database of all NVTC jurisdiction bus routes
 - ▶ Weekday, Saturday, and Sunday
 - ▶ Weekday AM, Midday, PM, Night
 - ▶ Stop Level Ridership
- Incorporated Ridership Model
- Leveraged TBEST – Transit Boarding Estimation and Simulation Tool

What is TBEST?

- Direct Demand Modeling Tool
- Short Range Forecasting
- Inputs – Bus Network, Land Use, Socio-Economic Data
- Evaluate Changes in Services
 - Ridership
 - Cost
 - Socio-Economic Analysis (Title VI Environmental Justice Impacts)

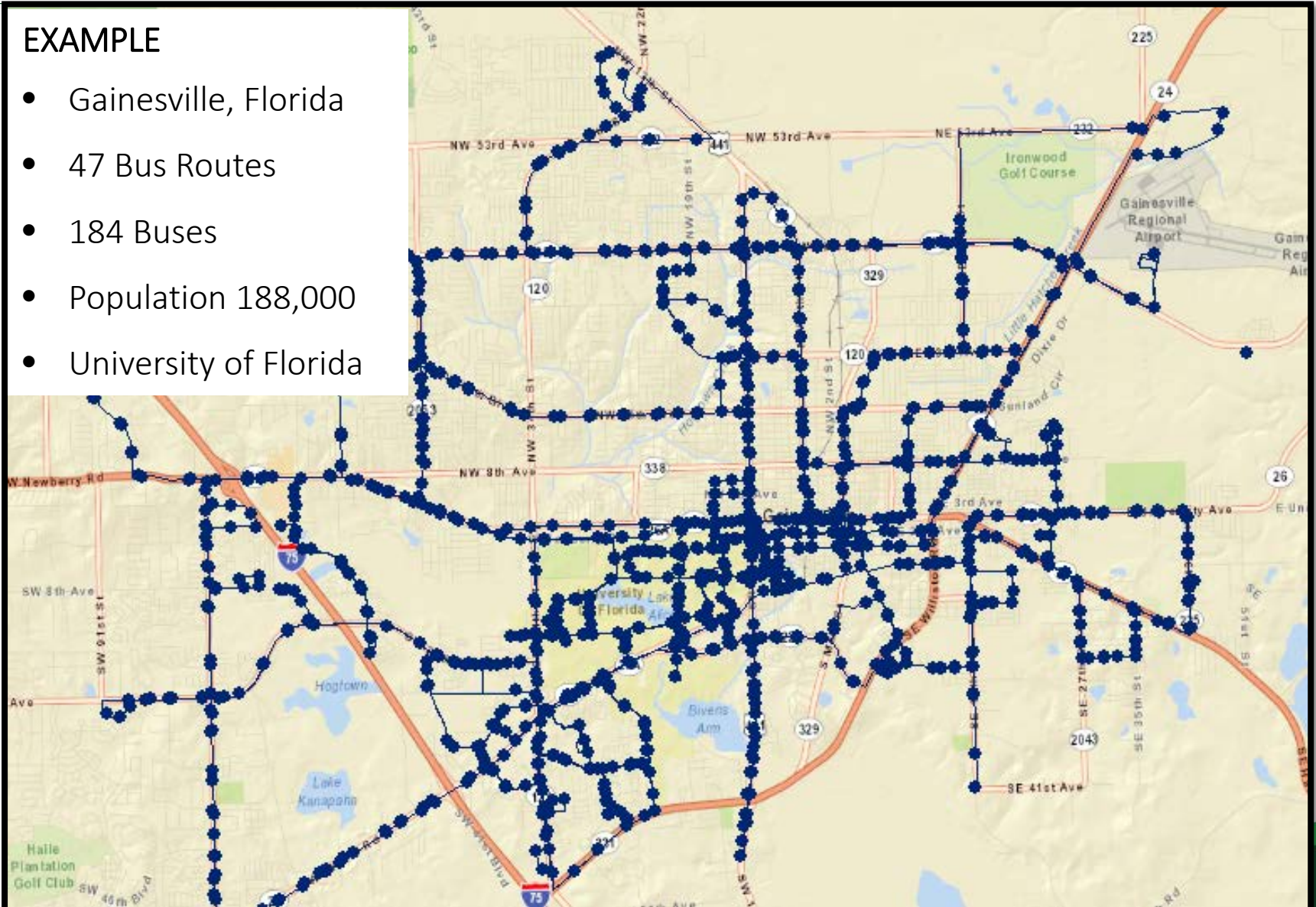
Households with ¼ Mile of Stops



How can it be used?

EXAMPLE

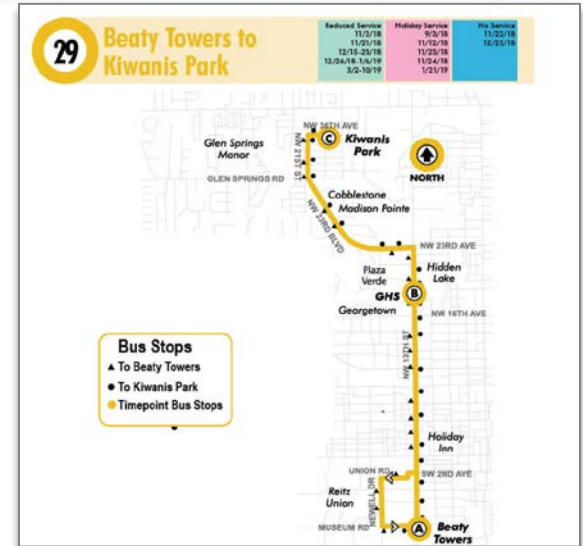
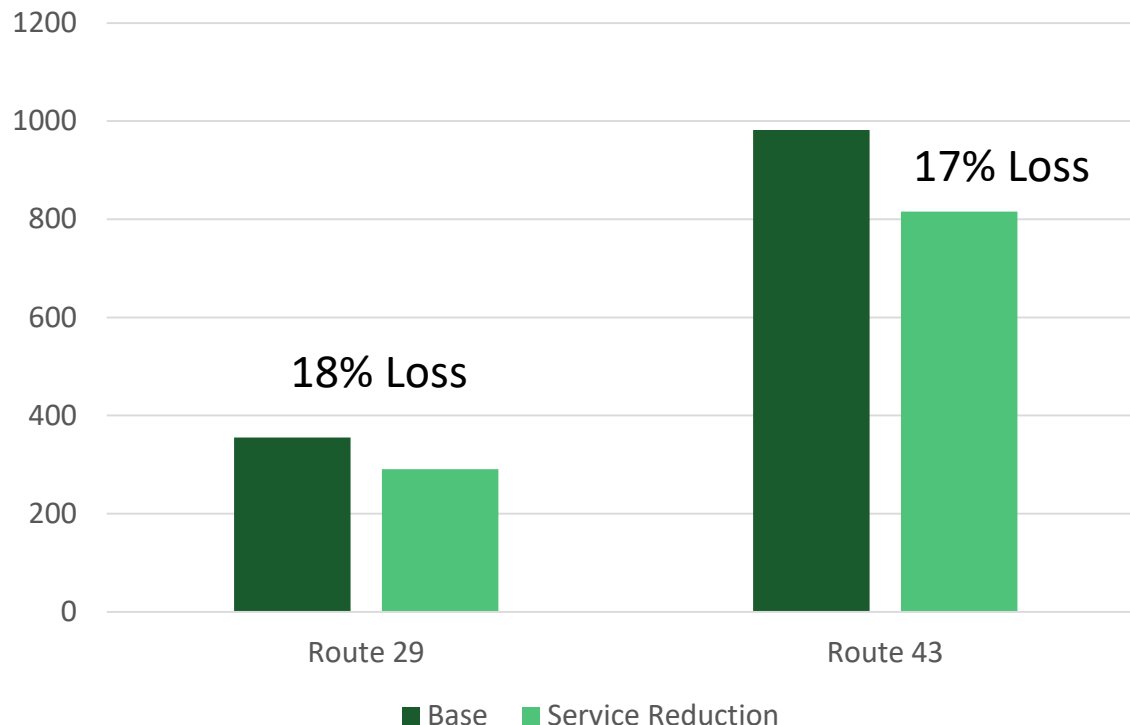
- Gainesville, Florida
- 47 Bus Routes
- 184 Buses
- Population 188,000
- University of Florida



What if....

25% Service Frequency Reduction Systemwide

Weekday Boardings



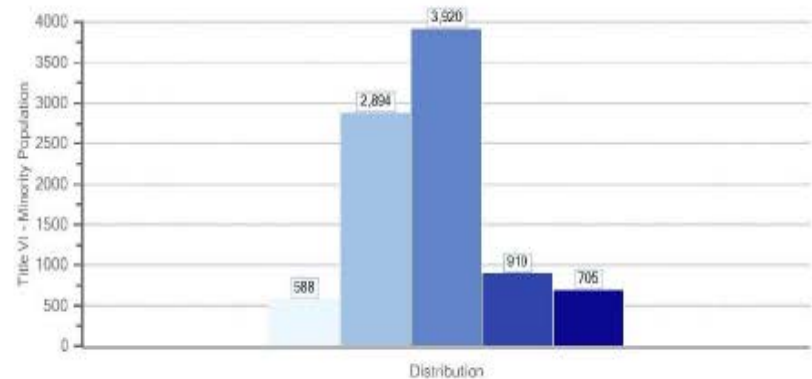
WMATA NoVa Test - 3T Extension

Market Variable Distribution - System-wide with 0.25 mile Walk Access

Minority Population Distribution	Population	% Market
0.0 - 20.0%	588	6.52%
20.0 - 40.0%	2,894	32.10%
40.0 - 60.0%	3,920	43.48%
60.0 - 80.0%	910	10.09%
80.0 - 100.0%	705	7.82%
Market Area Total	9,017	32.7%



- Quick Population Profiles
- Socio-Economic Analysis
- Increase or Decrease the Walk Distance

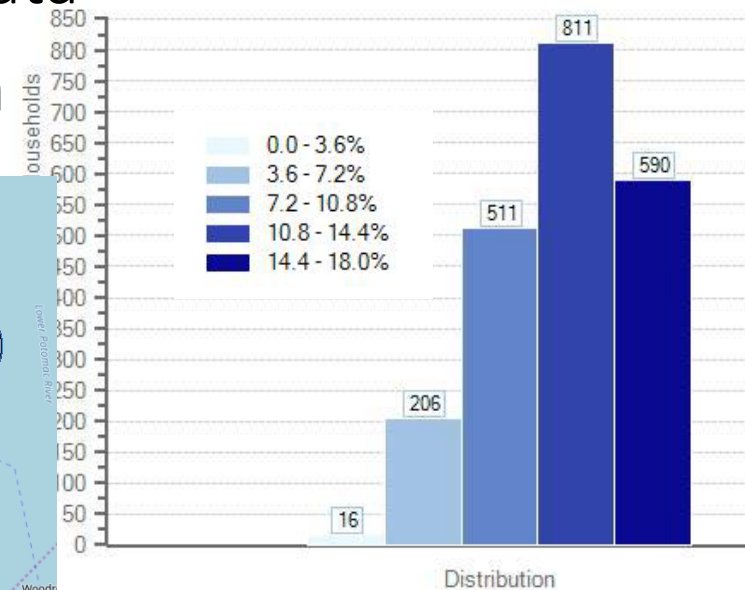
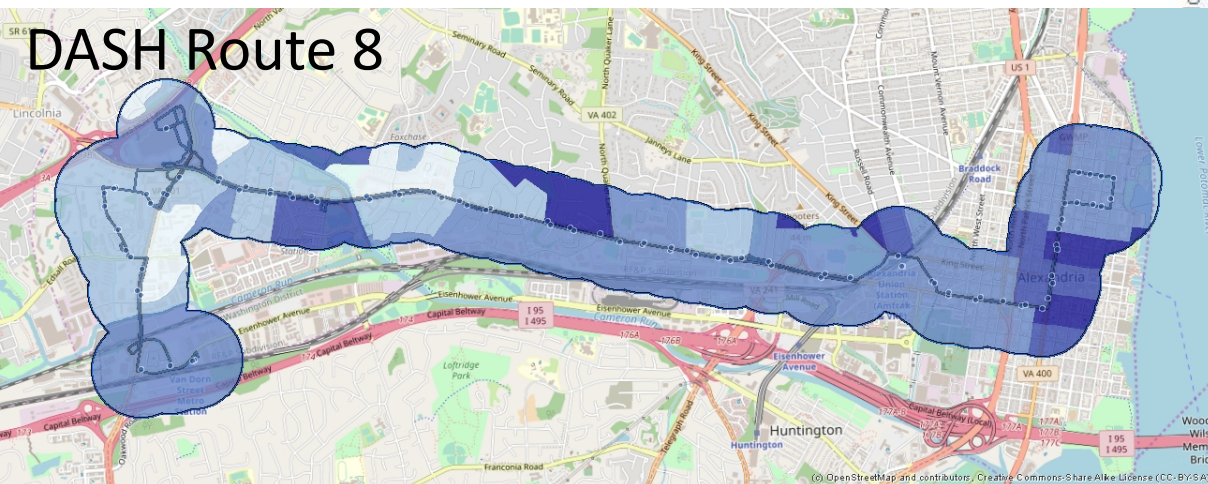


Population Data Source: Census and 5-Year American Community Survey data grown to represent 2018 conditions

Employment Data Source: Local Zonal Data file

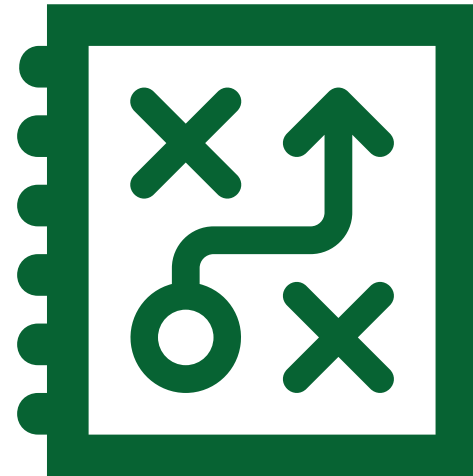
Real World Scenarios: Alexandria Transit Vision Plan

- Testing Scenarios
- Developing Ridership Forecast
- Title VI Impacts
- Provide Parcel Level Land Use Data
- Added Service to the Vision Plan



Next Steps

- ✓ Identify Funding Sources and/or Contracting Vehicle for Next Phases of Envision Route 7
- ✓ Continue Development of Data and Forecasting Tools
- ✓ Initiate a Preliminary Evaluation of Regional BRT Corridors



Agenda Item #12: FY2019 1st Quarter Transit Ridership Report

TO: Chairman Smedberg and NVTC Commissioners

FROM: Kate Mattice, Nobuhiko Daito, and Joey de St. Aubin

DATE: November 29, 2018

SUBJECT: FY2019 1st Quarter Transit Ridership Report

At the December meeting staff will present the FY2019 1st Quarter Transit Ridership Report, which shows that overall ridership among Northern Virginia transit agencies declined two percent in the 1st quarter of FY2019 (July through September 2018) when compared to the 1st quarter of FY2018. All agencies showed some level of decline in ridership, ranging from -1% (Metrorail) to -7% (Metrobus and Arlington Transit).

In August Metrorail saw a significant frequency reduction due to a maintenance program, resulting in a large drop in ridership that month compared to the same time the previous year. However, July 2018 experienced far greater ridership than July 2017, resulting in only a slight overall fall in ridership from quarter to quarter.

Ridership in Virginia by System: 1 st Quarter FY2019			
System	FY2018 Q1	FY2019 Q1	Percent Change (FY2018-19)
Arlington Transit	803,799	745,548	-7%
Alexandria DASH	1,046,294	1,022,348	-2%
Fairfax County Connector	2,186,629	2,162,978	-1%
Fairfax City CUE	157,392	150,233	-4%
Loudoun County Transit	440,006	439,333	0%
PRTC Omni Ride & Omni Link	629,512	613,959	-2%
Virginia Railway Express	1,197,707	1,155,492	-3%
Metrobus	4,607,003	4,301,263	-7%
Metrorail	23,172,631	23,036,104	-1%
Total	34,240,973	33,627,258	-2%

Source: WMATA, NVTC, and local and regional transit providers. Ridership is in unlinked passenger trips.

Average Weekday Ridership in Virginia: 1 st Quarter FY2019				
System	July FY2019	August FY2019	September FY2019	FY2019 Q1
Metrorail ¹	303,838	260,429	283,604	282,624
Metrobus ²	57,372	58,393	58,890	58,218

1: Based on station entries and exits

2: Unlinked Passenger Trips

Source: WMATA and NVTC.

Attached is a [detailed breakdown of ridership by Metrorail station in Virginia for the 1st quarter of FY2019](#).

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Metrorail Ridership by Station in Virginia 1st Quarter FY2019

NORTHERN VIRGINIA TRANSPORTATION COMMISSION						Percent Change FY18-19
Line/Station	Year	July	August	September	Q1 Total	
Silver						
Greensboro	FY18	60,233	62,006	57,071	179,310	7.0%
	FY19	69,666	62,502	59,718	191,886	
McLean	FY18	83,614	83,926	77,572	245,111	10.4%
	FY19	97,807	87,630	85,131	270,568	
Spring Hill	FY18	66,954	60,276	57,161	184,391	-6.4%
	FY19	63,870	55,762	53,019	172,652	
Tysons Corner	FY18	181,356	180,538	166,558	528,452	4.3%
	FY19	199,256	185,150	166,995	551,402	
Wiehle-Reston East	FY18	384,429	382,040	354,864	1,121,333	1.6%
	FY19	423,280	364,060	352,400	1,139,739	
Total Silver Line	FY18	776,585	768,786	713,225	2,258,596	3.0%
	FY19	853,879	755,104	717,264	2,326,247	
Orange						
Dunn Loring	FY18	183,436	185,296	178,271	547,003	-3.3%
	FY19	193,630	167,452	167,997	529,079	
West Falls Church	FY18	112,662	112,814	109,520	334,996	1.1%
	FY19	126,111	103,032	109,526	338,669	
Vienna	FY18	450,674	450,044	435,225	1,335,943	-4.3%
	FY19	471,467	398,028	408,941	1,278,437	
Total Orange Line	FY18	746,772	748,154	723,017	2,217,942	-3.2%
	FY19	791,208	668,512	686,464	2,146,184	
Silver/Orange						
Ballston	FY18	453,428	456,364	437,708	1,347,500	-6.1%
	FY19	462,454	394,434	409,046	1,265,933	
Clarendon	FY18	200,485	203,016	201,686	605,187	3.1%
	FY19	225,992	191,116	206,943	624,051	
Court House	FY18	306,695	312,130	301,695	920,520	-4.2%
	FY19	325,911	268,282	287,438	881,631	
East Falls Church	FY18	198,234	194,672	192,120	585,026	-4.2%
	FY19	208,822	173,822	178,095	560,739	
Rosslyn	FY18	636,442	627,576	599,592	1,863,609	-2.2%
	FY19	689,324	543,940	589,059	1,822,323	
Virginia Square	FY18	171,423	177,470	172,957	521,850	0.5%
	FY19	189,942	162,422	172,236	524,600	
Total	FY18	1,966,706	1,971,228	1,905,757	5,843,692	-2.8%
	FY19	2,102,444	1,734,016	1,842,818	5,679,278	

Source: WMATA. Ridership is based on station entries and exits



Line/Station	Year	July	August	September	Q1 Total	Percent Change FY18-19
Blue						
Arlington Cemetery	FY18	142,917	94,578	70,599	308,094	-13.6%
	FY19	130,805	74,158	61,169	266,132	
Franconia Springfield	FY18	322,529	310,608	282,178	915,315	-1.7%
	FY19	341,876	287,052	270,522	899,450	
Van Dorn	FY18	131,163	132,616	124,515	388,294	-4.3%
	FY19	133,351	120,054	118,160	371,564	
Total	FY18	596,609	537,802	477,291	1,611,703	-4.6%
	FY19	606,032	481,264	449,851	1,537,147	
Yellow						
Eisenhower Avenue	FY18	76,629	76,880	80,686	234,195	20.4%
	FY19	104,155	94,644	83,112	281,912	
Huntington	FY18	333,458	340,600	322,646	996,704	0.8%
	FY19	354,386	340,592	309,903	1,004,881	
Total	FY18	410,087	417,480	403,333	1,230,899	4.5%
	FY19	458,542	435,236	393,015	1,286,793	
Blue/Yellow						
Braddock Road	FY18	193,678	198,110	194,765	586,553	4.6%
	FY19	215,450	200,464	197,611	613,525	
Crystal City	FY18	525,194	513,738	499,979	1,538,911	0.9%
	FY19	564,068	501,618	487,307	1,552,993	
King Street	FY18	382,419	364,278	348,899	1,095,596	-4.1%
	FY19	391,112	340,272	319,384	1,050,768	
National Airport	FY18	310,686	334,912	314,510	960,108	0.1%
	FY19	352,507	315,782	292,795	961,084	
Pentagon	FY18	579,392	619,840	584,106	1,783,338	0.1%
	FY19	615,883	600,716	568,162	1,784,762	
Pentagon City	FY18	659,164	639,036	607,604	1,905,804	0.0%
	FY19	695,213	617,970	593,117	1,906,300	
Total	FY18	2,650,533	2,669,914	2,549,863	7,870,310	0.0%
	FY19	2,834,233	2,576,822	2,458,377	7,869,432	
Total Virginia Stations	FY18	7,147,292	7,113,364	6,772,486	21,033,142	-0.9%
	FY19	7,646,337	6,650,954	6,547,789	20,845,080	

Source: WMATA. Ridership is based on station entries and exits





NVTC/PRTC Annual Legislative Briefing

Join NVTC and PRTC Commissioners for an overview
of federal and state issues affecting transit in Northern Virginia

*Monday, December 10, 2018 from 9-11 a.m.
(Continental Breakfast Available at 8:30 a.m.)
Embassy Suites by Hilton, 8100 Loisdale Road, Springfield, VA*

Featuring

Remarks on the importance of transportation infrastructure in securing Amazon HQ2 for Northern Virginia
and the opportunities for innovation in project implementation

Matt Kelly, CEO, JBG Smith

What Recent Legislation Means for Transit in Northern Virginia

Paul Wiedefeld

*General Manager/CEO
WMATA*

Jennifer Mitchell

*Director
Dept. of Rail and Public Transportation*

Doug Allen

*CEO
VRE*

Kate Mattice

NVTC Executive Director

Bob Schneider

PRTC Executive Director

Remarks

Paul Smedberg

NVTC Chair

Ruth Anderson

PRTC Chair