



# **Northern Virginia Transportation Authority**

*The Authority for Transportation in Northern Virginia*

## **TECHNICAL ADVISORY COMMITTEE**

**Wednesday, January 21, 2015, 7:00pm**

**NVTA Offices**

**3040 Williams Drive, Suite 200**

**Fairfax, Virginia 22031**

## **AGENDA**

**I. Call to Order/Welcome** Chairman Boice

**II. Meeting Summary of December 17, 2014, Meeting**  
*Recommended action: Approval [with abstentions  
from those who were not present].*

## **Discussion/Information**

**III. Presentation of HB599 Evaluation and Rating Study** VDOT

**IV. Presentation of NVTA FY2015-16 Two Year Program Initial Results** Mr. Jasper

**V. NVTA Update** Ms. Backmon

## **Adjournment**

**VI. Adjourn**

**Next Meeting: February 18, 2015**



## Northern Virginia Transportation Authority

*The Authority for Transportation in Northern Virginia*

### TECHNICAL ADVISORY COMMITTEE

Wednesday, December 17, 2014, 7:00pm

NVTA Office

3040 Williams Drive, Suite 200

Fairfax, Virginia 22031

### SUMMARY NOTES

#### I. Call to Order/Welcome

Vice Chairman Fahl

- Vice Chairman Fahl called the meeting to order at 7:01pm.
- Attendees:
  - Members: Vice Chairman Doug Fahl; Pat Turner; Agnes Artemel; Shanjiang Zhu; Bob Dunphy; Armand Ciccarelli.
  - NVTA Staff: Keith Jasper (Program Coordinator).
  - Other Staff: James Davenport (Prince William County).
  - Other: Maria Sinner, Valerie Pardo, Bob Josef (VDOT); David Roden (AECOM); Tania Cunha (Travesky and Associates); David Birtwistle (Northern Virginia Transportation Alliance.)

#### II. Meeting Summary of October 15, 2014, Meeting

- Mr. Ciccarelli moved to approve the minutes of October 15, 2014; seconded by Mr. Dunphy. Motion carried unanimously (with an abstention from Ms. Artemel who was not present at the October 15, 2014 meeting.)

### Discussion/Information

#### III. Presentation of MOEs used in HB599 Rating Study

VDOT

- Ms. Pardo introduced Mr. Roden, who gave the presentation on HB599 MOEs.
- Mr. Fahl asked how any coding issues had been addressed. Mr. Roden responded that they had corrected any issues when identified by AECOM or the stakeholders, during input and output phases.
- Ms. Turner asked who the stakeholders were, and Mr. Fahl asked how they had participated. Mr. Roden clarified the stakeholders are staff at the jurisdictions who proposed the projects. They have been involved in defining the projects, checking inputs, and reviewing outputs.
- Mr. Dunphy noted that the congestion measures appeared similar. Mr. Roden responded that the measures considered congestion in three ways – duration, severity, and total. The reason for not looking at just total delay is that this

approach takes into account the impact of proposed projects on facilities with heavy or severe congestion, i.e. 2x and 3x uncongested journey time.

- Dr. Zhu asked whether heavy congestion (2x uncongested journey time) is equivalent to level of service (LOS) F. Mr. Roden confirmed this is the case.
- Mr. Fahl asked how projects with new alignments were evaluated. Mr. Roden explained that new facilities were coded into the 'after' network which was then compared to the 'before' network. Congestion impacts were assessed across each project's primary impact area, which includes any parallel routes likely to be affected by the project. Any changes in system performance outside the primary impact area were not considered in the evaluation of the project.
- Mr. Ciccarelli asked why safety and environmental impacts were not included. Mr. Roden responded that the HB599 process was limited to congestion impacts only. However, the HB2 process would include a broader range of impacts (effective July 1, 2016.)
- Ms. Sinner added that HB599 is only required in Northern Virginia, while HB2 will be applied statewide, including Northern Virginia. NVTa has raised concerns about the possible implications of this for Northern Virginia projects that are subject to HB599 and HB2. At this stage it is unclear how this will be resolved.
- Dr. Zhu mentioned that safety is indirectly a factor in congestion.
- Mr. Ciccarelli asked whether freight movements were considered. Mr. Roden confirmed that freight is included in auto-related measures for modelling purposes but is not explicitly called out.
- Mr. Fahl asked about the development of the weights shown on page 5 of the presentation. Mr. Roden explained these were developed by the stakeholders through a voting process that reflected the relative size of each jurisdiction.
- Mr. Rodin added that the technical approach for the HB599 has included an independent peer review group comprising three out-of-state entities. A final peer review group meeting is planned for mid-January 2015.
- Dr. Zhu enquired about model stability/convergence. Mr. Rodin stated that the regional (MwCOG) travel demand model was used with fixed travel demand patterns. The model is generally stable.
- Mr. Ciccarelli suggested that project impacts should be monitored to enhance future project selection, possibly using vehicle probe data. Dr. Zhu added that one advantage of these data is the ability to conduct before and after analysis.

#### IV. NVTa Update

Mr. Jasper

- Mr. Jasper provide the NVTa update on behalf of Ms. Backmon who had been called to another meeting.
- **NVTa Credit Rating**—NVTa received a highly coveted rating of AA+, Aa1 and AA+ respectively from Fitch, Moody's and Standard for the Authority's Inaugural Bond Issuance. All ratings include a stable outlook.

- **The Authority's Bond Settlement-** process was executed on Monday, December 15, 2014. All bond proceeds are available to complete the FY2014 bond projects approved by the Authority.
- **NVTA Meeting Schedule for CY 2015--**NVTA will meet the 4<sup>th</sup> Thursday of the month at 6:00pm with the exception of August (no meeting), November and December. For the months of November and December, the Authority will meet the 2<sup>nd</sup> Thursday of the month.
- **FY 15/16 Two Year Program-**VDOT is scheduled to present the results of the HB 599 rating and evaluation analysis at the January 22<sup>nd</sup> NVTA meeting. The Two Year program is scheduled for release for public comment in February with NVTA approval of the Program scheduled for April 2015.
- **TransAction 2040 Update**—working with TAC, PCAC and JACC to develop scope of work and schedule for NVTA consideration and approval in the spring.
- **Mapping-** NVTA staff has developed an interactive map of the FY14 approved projects using Google Earth. The map will be an important visual tool for the public and anyone interested in monitoring the progress of the NVTA funded projects. The map shows which corridor the project is located (per the corridors identified in TransAction 2040), the locality in which the project is located, project type, project description and the NVTA approved funding for the project. Google Earth Map of FY14 Projects

#### V. 2015 Committee Work Plan

- Not discussed

#### VI. Election of Chair and Vice-Chair for CY2015

- Ms. Artemel moved to recommend that Mr. Boice continue as Chair of the TAC in 2015, with Mr. Fahl continuing as Vice Chair; seconded by Dr. Zhu. Motion carried unanimously.

#### VII. CY2015 Meeting Schedule

- The TAC will continue to meet at 7:00 pm on the third Wednesday of the month at NVTA's new offices (3040 Williams Drive, Suite 200.) The next meeting will be January 21, 2015.

### Adjournment

#### VIII. Adjourn

- Meeting adjourned at 8:30pm.



# **Evaluation of Significant Transportation Projects in Northern Virginia Transportation District**

## **HB 599 Study Overview**

**Technical Advisory Group**

**January 21, 2015**

## Detailed Ratings

- Detailed ratings based on seven performance measures selected in cooperation with stakeholders and NVTA (January-February 2014)
- Prepared detailed ratings of 37 nominated projects using TRANSIMS model and local/regional networks and travel demand based on 2013 CLRP assumptions and Round 8.2 land uses
- Model run for 2020 and 2040 study years with and without each project
- Change in performance measures scored and weighted using stakeholder decision process

## Performance Measure Summary

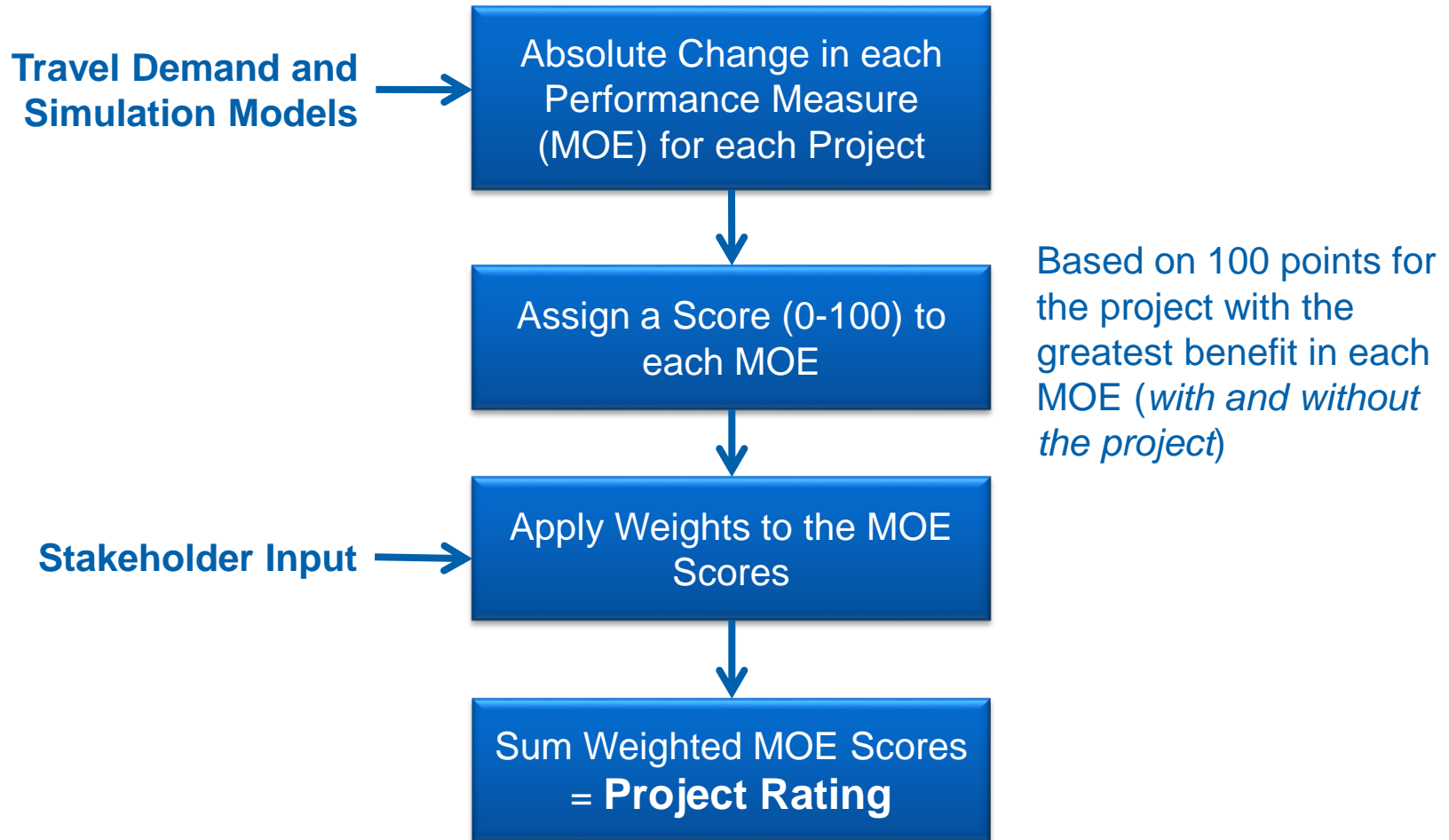
- **Transit Crowding** = reduction in the number of transit route miles experiencing crowded conditions (local bus > 1.0; express bus and commuter rail > 0.9; Metrorail > 100 passengers/car).
- **Congestion Duration** = reduction in the number of hours of the day auto and transit passengers experience heavily congested travel conditions.
- **Person Hours of Delay** = reduction in the number of person hours of travel time above free flow travel time.
- **Person Hours of Congested Travel in Automobiles** = reduction in the number of person hours of travel in automobiles and trucks on heavily congested facilities.
- **Person Hours of Congested Travel in Transit Vehicles** = reduction in the number of person hours of travel in buses and trains on heavily congested facilities or in crowded vehicles.
- **Accessibility to Jobs** = increase in the number of jobs that can be reached from each household based on a 45 minute travel time by automobile and a 60 minute travel time by transit.
- **Emergency Mobility** = increase in the person hours of travel time resulting from a 10 percent increase in peak hour trip making.

## Nominated Projects

- 37 projects nominated (32 NVTA, 5 NoVA CTB)
  - 25 roadway improvements/widenings
  - 5 interchange construction
  - 5 intersection improvements
  - 2 ITS traveler information / traffic management projects
  - No transit projects
    - NVTA decided against nominating transit project for the first round of analysis



## Evaluation and Rating Process



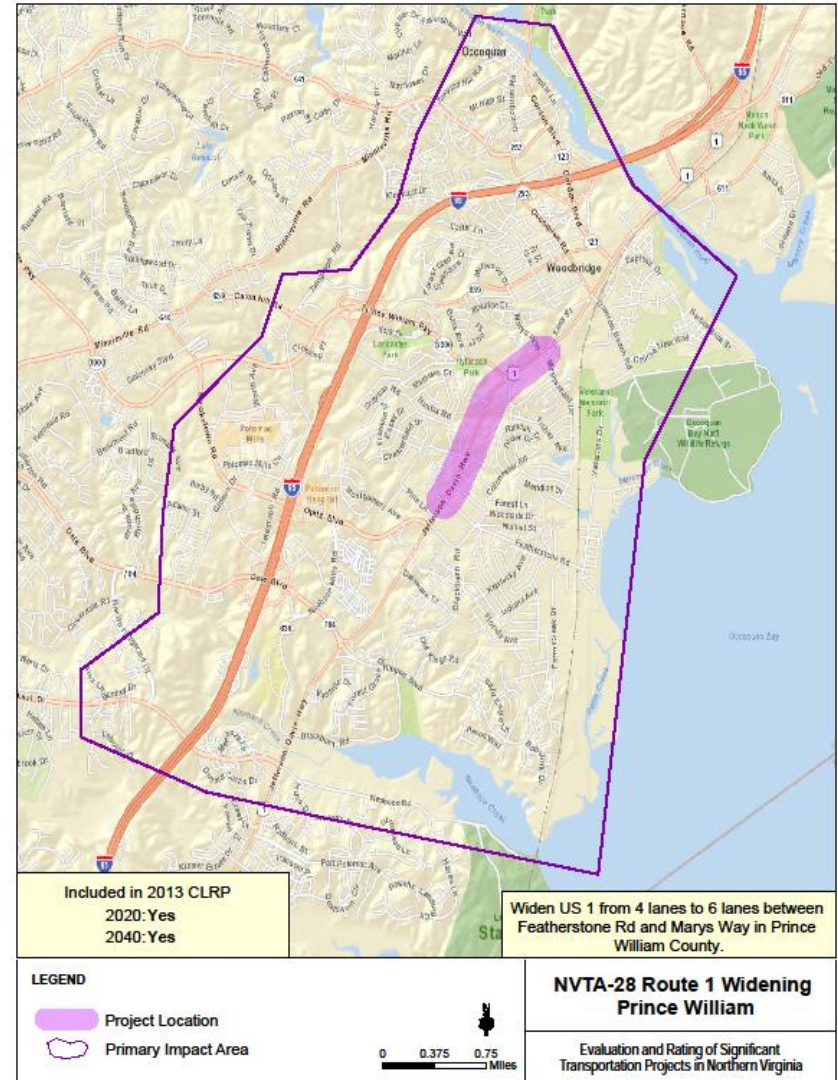
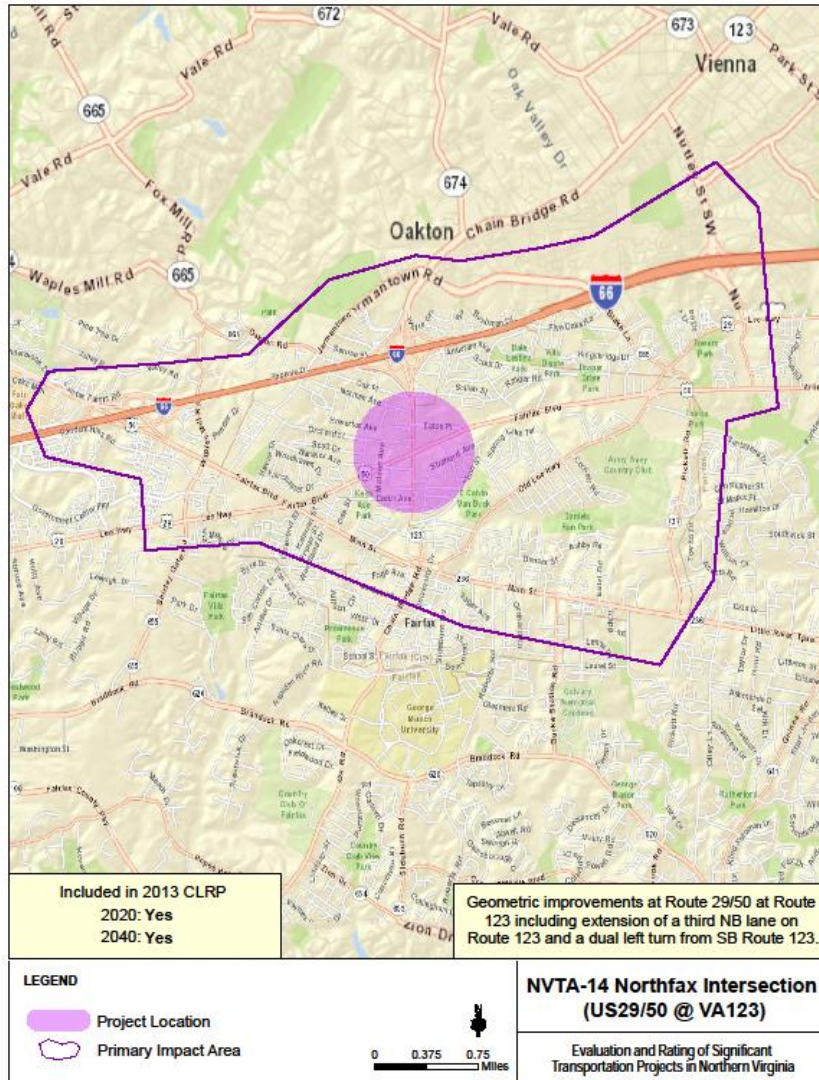
## Impact or Influence Area Definition

- **Impact areas were used for the interim and detailed ratings to minimize any distortions in the performance measures related to random effects that are unrelated to the project improvement**
- **2020 and 2040 TPB model results were used to identify the impact area for each project as part of the interim rating**
  - Change in peak period volume > 250 vehicles or 20% (100+ vehicles)
  - The area was defined using TAZ boundaries
- **The original impact areas were modified for the detailed analysis to more effectively capture links and alternate routes that could potentially be effected by project-related changes**

## Impact Area Applications

- The final assignment with and without the project was conducted using any link within or crossing the impact area boundary
- All trips to and from the impact area plus all trips traveling through the impact area in the Northern Virginia baseline simulation are included in the project analysis
- The project ratings are based on changes in the performance measures for any link within or crossing the impact area boundary

# Sample Impact Area Maps



## Locality Meetings

- **Met with localities in late August to review project network coding details**
  - Provided maps showing lanes and free flow speeds in the impact area and lane connection details for project intersections
  - Opportunity to modify/make corrections to project coding and influence areas prior to detailed modeling runs
- **Met with localities in early December to review model results**
  - Proposed a modified influence area for reporting MOEs
  - Shared information on travel time ratios, speeds and volumes with and without the project
  - Opportunity to modify/make corrections to project coding and influence areas prior to final modeling runs and ratings



# 2020 Performance Measures

2020 Performance Measures (1/9/15 Update)		Reduce Congestion Duration (hrs*In-mi)	Reduce Person Hours of Delay	Reduce Congested Person Hours in Autos	Reduce Congested Person Hours in Transit	Reduce Transit Crowding (PMT)	Increase Access to Jobs (45 min by auto)	Improve Emergency Mobility (hours)
Project Name (* = new facilities)	Location	27.9%	20.3%	15.4%	11.8%	11.5%	9.5%	3.6%
NoVA-0 Northern Virginia Totals	NoVA	6,698	919,508	806,597	44,452	301,301	1,316,974	398,966
NVTA-1 Columbia Pike Multimodal Streets in Arlington	Arlington	(12.5)	(1,134)	(1,525)	(54)	-	658	(3,159)
NVTA-2 Rolling Road Widening near Springfield	Fairfax	(40.8)	(5,163)	(6,965)	(102)	-	4,150	(2,195)
NVTA-3 US 29 Widening near Centreville	Fairfax	(17.7)	(1,309)	(1,682)	(7)	-	466	(573)
NVTA-4 Braddock Road Widening near I-495	Fairfax	(11.6)	(2,760)	(3,100)	(56)	-	2,071	(1,009)
NVTA-5 South Van Dorn St & Franconia Rd Interchange	Fairfax	(9.4)	(556)	(690)	(19)	-	1,897	(416)
NVTA-6 Frontier Dr Extension in Springfield*	Fairfax	(2.5)	(57)	(222)	(1)	-	14	30
NVTA-7 Fairfax County Pkwy Improvements	Fairfax	(185.3)	(17,236)	(22,641)	(95)	-	19,563	(8,731)
NVTA-8 Belmont Ridge Rd widening near Broadlands	Loudoun	(12.1)	(566)	(655)	0	-	145	(203)
NVTA-9 Loudoun County Parkway extension to US 50*	Loudoun	(102.3)	(18,638)	(22,163)	(15)	-	1,389	(6,998)
NVTA-10 Route 7 Bridge Widening near Tysons Corner	Fairfax	(9.1)	(2,571)	(3,076)	(50)	-	432	(1,134)
NVTA-11 US 1 Widening and Relocation - Dumfries	Dumfries	(17.9)	(2,343)	(2,748)	(1)	-	334	(1,206)
NVTA-12 US 1 Widening near Ft. Belvoir	Fairfax	(13.9)	(1,492)	(1,085)	(45)	-	2,553	(677)
NVTA-13 Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	(3.4)	(964)	(434)	(1)	-	126	(349)
NVTA-14 Northfax Intersection (US29/50 @ VA123)	City of Fairfax	(1.8)	(72)	(181)	4	-	83	(36)
NVTA-15 Jermantown/US 50 Roadway Improvements	City of Fairfax	(5.3)	(376)	(506)	(9)	-	33	(157)
NVTA-16 Frying Pan Road Widening near Herndon	Fairfax	(11.5)	(417)	(656)	(19)	-	405	(172)
NVTA-17 Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	(4.7)	(606)	(724)	(12)	-	162	(317)
NVTA-18 Real-Time Adaptive Traffic Control & Management	Alexandria	(7.7)	(1,400)	(1,525)	(84)	-	1,241	(670)
NVTA-19 Glebe Rd Corridor ITS Improvements	Arlington	(14.4)	(2,169)	(2,390)	(282)	-	1,933	(1,034)
NVTA-20 Pohick Road Widening near Lorton	Fairfax	(1.8)	(226)	(165)	(2)	-	164	(161)
NVTA-21 Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	(3.4)	(207)	(114)	(1)	-	366	(27)
NVTA-22 Northstar Blvd Extension near Brambleton*	Loudoun	(40.7)	(4,644)	(5,793)	(1)	-	2,566	(1,921)
NVTA-23 Construct Route 7/690 Interchange near Purcellville	Loudoun	(14.1)	(1,416)	(1,265)	-	-	41	(387)
NVTA-24 Route 234/Grant Avenue Reconstruction in Manassas	Manassas	(2.7)	(405)	(201)	(0)	-	141	(168)
NVTA-25 Main St & Maple Ave Intersection in Purcellville	Purcellville	(0.1)	(104)	(10)	-	-	23	(35)
NVTA-26 Route 7/Battlefield Pkwy Interchange	Leesburg	(23.0)	(1,538)	(1,795)	(1)	-	35	(575)
NVTA-27 East Elden Street Widening in Herndon	Herndon	0.1	(60)	(24)	0	-	134	(23)
NVTA-28 US 1 Widening near Woodbridge	Prince William	(23.7)	(1,993)	(2,368)	(20)	-	2,973	(430)
NVTA-29 Route 15 Widening near Gainesville	Prince William	(0.9)	(125)	(103)	-	-	9	(83)
NVTA-30 Route 28 Widening near Centreville	Fairfax	(60.2)	(9,136)	(11,436)	(6)	-	4,869	(2,250)
NVTA-31 Route 28 Widening near Manassas	Prince William	(2.2)	(393)	(172)	-	-	181	(85)
NVTA-32 Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	(85.5)	(10,858)	(13,217)	(14)	-	3,564	(2,826)
CTB-1 Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	(2.2)	(940)	(208)	(1)	-	540	(393)
CTB-2 Route 7 Widening from Tysons Corner to Reston	Fairfax	(80.9)	(10,584)	(12,830)	(68)	-	1,614	(3,651)
CTB-3 I-395 Southbound Widening	Alexandria	(26.1)	(7,611)	(8,526)	(133)	-	322	(5,347)
CTB-4 Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	(13.6)	(4,173)	(3,979)	(41)	-	300	(1,273)
CTB-5 Fairfax County Pkwy - I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	(11.3)	(4,333)	(3,924)	(41)	-	275	(1,175)

## Projects Sorted by 2020 Ratings

2020 Draft Final Project Ratings (1/9/15 Update)			Project Rating
Project Name (* = new facilities)		Location	
NVTA-7	Fairfax County Pkwy Improvements	Fairfax	79.1
NVTA-9	Loudoun County Parkway extension to US 50*	Loudoun	55.0
CTB-2	Route 7 Widening from Tysons Corner to Reston	Fairfax	37.6
NVTA-32	Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	37.2
NVTA-30	Route 28 Widening near Centreville	Fairfax	30.3
CTB-3	I-395 Southbound Widening	Alexandria	25.9
NVTA-2	Rolling Road Widening near Springfield	Fairfax	23.7
NVTA-19	Glebe Rd Corridor ITS Improvements	Arlington	19.3
NVTA-22	Northstar Blvd Extension near Brambleton*	Loudoun	17.2
CTB-4	Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	11.7
CTB-5	Fairfax County Pkwy – I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	11.4
NVTA-4	Braddock Road Widening near I-495	Fairfax	10.6
NVTA-28	US 1 Widening near Woodbridge	Prince William	9.8
NVTA-10	Route 7 Bridge Widening near Tysons Corner	Fairfax	9.0
NVTA-18	Real-Time Adaptive Traffic Control & Management	Alexandria	8.1
NVTA-1	Columbia Pike Multimodal Streets in Arlington	Arlington	8.0
NVTA-12	US 1 Widening near Ft. Belvoir	Fairfax	7.9
NVTA-11	US 1 Widening and Relocation - Dumfries	Dumfries	7.8
NVTA-26	Route 7/Battlefield Pkwy Interchange	Leesburg	6.7
NVTA-3	US 29 Widening near Centreville	Fairfax	6.0
NVTA-23	Construct Route 7/690 Interchange near Purcellville	Loudoun	4.7
NVTA-5	South Van Dorn St & Franconia Rd Interchange	Fairfax	4.4
NVTA-16	Frying Pan Road Widening near Herndon	Fairfax	3.7
NVTA-8	Belmont Ridge Rd widening near Broadlands	Loudoun	3.0
NVTA-17	Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	2.6
NVTA-13	Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	2.1
NVTA-15	Jermantown/US 50 Roadway Improvements	City of Fairfax	2.0
CTB-1	Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	2.0
NVTA-24	Route 234/Grant Avenue Reconstruction in Manassas	Manassas	1.1
NVTA-21	Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	1.0
NVTA-31	Route 28 Widening near Manassas	Prince William	1.0
NVTA-20	Pohick Road Widening near Lorton	Fairfax	0.8
NVTA-6	Frontier Dr Extension in Springfield*	Fairfax	0.6
NVTA-14	Northfax Intersection (US29/50 @ VA123)	City of Fairfax	0.5
NVTA-29	Route 15 Widening near Gainesville	Prince William	0.4
NVTA-27	East Elden Street Widening in Herndon	Herndon	0.2
NVTA-25	Main St & Maple Ave Intersection in Purcellville	Purcellville	0.2

# 2040 Performance Measures

2040 Performance Measures (1/9/15 Update)		Reduce Congestion Duration (hrs*In-mi)	Reduce Person Hours of Delay	Reduce Congested Person Hours in Autos	Reduce Congested Person Hours in Transit	Reduce Transit Crowding (PMT)	Increase Access to Jobs (45 min by auto)	Improve Emergency Mobility (hours)
Project Name (* = new facilities)	Location	27.9%	20.3%	15.4%	11.8%	11.5%	9.5%	3.6%
NoVA-0 Northern Virginia Totals	NoVA	11,380	1,682,538	1,654,989	71,313	538,939	1,818,061	683,974
NVTA-1 Columbia Pike Multimodal Streets in Arlington	Arlington	(20.1)	(6,952)	(7,699)	(102)	-	2,741	(446)
NVTA-2 Rolling Road Widening near Springfield	Fairfax	(51.2)	(6,767)	(8,863)	(100)	-	3,325	(2,891)
NVTA-3 US 29 Widening near Centreville	Fairfax	(45.8)	(5,371)	(5,363)	0	-	4,826	(2,445)
NVTA-4 Braddock Road Widening near I-495	Fairfax	(23.8)	(3,177)	(4,145)	(91)	-	1,899	(1,223)
NVTA-5 South Van Dorn St & Franconia Rd Interchange	Fairfax	(14.8)	(839)	(1,123)	(9)	-	2,675	(536)
NVTA-6 Frontier Dr Extension in Springfield*	Fairfax	(4.3)	(594)	(782)	(84)	-	370	(254)
NVTA-7 Fairfax County Pkwy Improvements	Fairfax	(350.1)	(53,175)	(65,930)	(610)	-	23,269	(21,994)
NVTA-8 Belmont Ridge Rd widening near Broadlands	Loudoun	(25.7)	(1,035)	(1,679)	-	-	353	(401)
NVTA-9 Loudoun County Parkway extension to US 50*	Loudoun	(122.2)	(27,219)	(32,524)	(13)	-	2,082	(10,979)
NVTA-10 Route 7 Bridge Widening near Tysons Corner	Fairfax	(13.3)	(2,796)	(3,501)	(56)	-	1,138	(954)
NVTA-11 US 1 Widening and Relocation - Dumfries	Dumfries	(52.6)	(14,415)	(17,579)	(3)	-	986	(2,166)
NVTA-12 US 1 Widening near Ft. Belvoir	Fairfax	(48.6)	(3,569)	(4,562)	(201)	-	3,724	(1,543)
NVTA-13 Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	(10.7)	(1,469)	(1,191)	(1)	-	140	(668)
NVTA-14 Northfax Intersection (US29/50 @ VA123)	City of Fairfax	0.1	(91)	(66)	(5)	-	28	(32)
NVTA-15 Jermantown/US 50 Roadway Improvements	City of Fairfax	(7.1)	(425)	(589)	(15)	-	163	(203)
NVTA-16 Frying Pan Road Widening near Herndon	Fairfax	(10.0)	(914)	(1,167)	(26)	-	1,725	(411)
NVTA-17 Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	(19.5)	(1,655)	(2,149)	(29)	-	256	(1,198)
NVTA-18 Real-Time Adaptive Traffic Control & Management	Alexandria	(7.5)	(2,168)	(2,250)	(114)	-	642	(1,007)
NVTA-19 Glebe Rd Corridor ITS Improvements	Arlington	(15.0)	(1,839)	(1,908)	(285)	-	1,417	(757)
NVTA-20 Pohick Road Widening near Lorton	Fairfax	(6.6)	(973)	(1,370)	(21)	-	440	(179)
NVTA-21 Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	(5.2)	(247)	371	(2)	-	662	(506)
NVTA-22 Northstar Blvd Extension near Brambleton*	Loudoun	(78.8)	(9,754)	(12,729)	(1)	-	2,035	(4,048)
NVTA-23 Construct Route 7/690 Interchange near Purcellville	Loudoun	(38.1)	(5,209)	(5,325)	-	-	26	(1,049)
NVTA-24 Route 234/Grant Avenue Reconstruction in Manassas	Manassas	(9.4)	(828)	(963)	(1)	-	312	(350)
NVTA-25 Main St & Maple Ave Intersection in Purcellville	Purcellville	-	9	(0)	-	-	11	3
NVTA-26 Route 7/Battlefield Pkwy Interchange	Leesburg	(14.7)	(858)	(1,144)	(0)	-	33	(329)
NVTA-27 East Elden Street Widening in Herndon	Herndon	(0.7)	(106)	(20)	(5)	-	296	(62)
NVTA-28 US 1 Widening near Woodbridge	Prince William	(50.6)	(6,356)	(8,633)	(88)	-	870	(1,382)
NVTA-29 Route 15 Widening near Gainesville	Prince William	(3.3)	(243)	(239)	-	-	45	(197)
NVTA-30 Route 28 Widening near Centreville	Fairfax	(68.9)	(15,805)	(18,649)	(0)	-	2,410	(2,635)
NVTA-31 Route 28 Widening near Manassas	Prince William	(54.1)	(5,599)	(6,189)	-	-	1,009	(2,172)
NVTA-32 Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	(142.3)	(21,820)	(27,320)	(18)	-	5,300	(4,501)
CTB-1 Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	(3.8)	(2,028)	(1,224)	(10)	-	820	(769)
CTB-2 Route 7 Widening from Tysons Corner to Reston	Fairfax	(77.9)	(25,647)	(28,016)	(70)	-	1,700	(6,835)
CTB-3 I-395 Southbound Widening	Alexandria	(27.0)	(8,001)	(8,872)	(111)	-	1,718	(3,378)
CTB-4 Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	(23.8)	(8,979)	(9,072)	(225)	-	274	(4,025)
CTB-5 Fairfax County Pkwy - I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	(23.3)	(9,043)	(9,053)	(230)	-	323	(4,004)



# Projects Sorted by 2040 Ratings

2040 Draft Final Project Ratings (1/9/15 Update)			Project Rating
Project Name (* = new facilities)		Location	
NVTA-7	Fairfax County Pkwy Improvements	Fairfax	88.5
NVTA-9	Loudoun County Parkway extension to US 50*	Loudoun	30.6
NVTA-32	Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	29.3
CTB-2	Route 7 Widening from Tysons Corner to Reston	Fairfax	25.7
NVTA-30	Route 28 Widening near Centreville	Fairfax	17.3
NVTA-11	US 1 Widening and Relocation - Dumfries	Dumfries	14.6
NVTA-22	Northstar Blvd Extension near Brambleton*	Loudoun	14.5
CTB-5	Fairfax County Pkwy – I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	12.7
CTB-4	Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	12.6
NVTA-2	Rolling Road Widening near Springfield	Fairfax	12.5
NVTA-12	US 1 Widening near Ft. Belvoir	Fairfax	12.0
NVTA-28	US 1 Widening near Woodbridge	Prince William	10.8
CTB-3	I-395 Southbound Widening	Alexandria	10.7
NVTA-3	US 29 Widening near Centreville	Fairfax	9.3
NVTA-1	Columbia Pike Multimodal Streets in Arlington	Arlington	9.2
NVTA-31	Route 28 Widening near Manassas	Prince William	8.7
NVTA-19	Glebe Rd Corridor ITS Improvements	Arlington	8.6
NVTA-4	Braddock Road Widening near I-495	Fairfax	6.8
NVTA-23	Construct Route 7/690 Interchange near Purcellville	Loudoun	6.4
NVTA-10	Route 7 Bridge Widening near Tysons Corner	Fairfax	4.6
NVTA-18	Real-Time Adaptive Traffic Control & Management	Alexandria	4.6
NVTA-17	Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	3.5
NVTA-5	South Van Dorn St & Franconia Rd Interchange	Fairfax	3.1
NVTA-8	Belmont Ridge Rd widening near Broadlands	Loudoun	3.0
NVTA-16	Frying Pan Road Widening near Herndon	Fairfax	2.7
NVTA-6	Frontier Dr Extension in Springfield*	Fairfax	2.6
CTB-1	Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	2.0
NVTA-13	Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	1.9
NVTA-26	Route 7/Battlefield Pkwy Interchange	Leesburg	1.8
NVTA-20	Pohick Road Widening near Lorton	Fairfax	1.8
NVTA-24	Route 234/Grant Avenue Reconstruction in Manassas	Manassas	1.5
NVTA-15	Jermantown/US 50 Roadway Improvements	City of Fairfax	1.3
NVTA-21	Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	0.9
NVTA-29	Route 15 Widening near Gainesville	Prince William	0.5
NVTA-27	East Elden Street Widening in Herndon	Herndon	0.3
NVTA-14	Northfax Intersection (US29/50 @ VA123)	City of Fairfax	0.2
NVTA-25	Main St & Maple Ave Intersection in Purcellville	Purcellville	0.0

## 2020 and 2040 Project Ratings

Project Description (* = new facilities)		Location	Project Rating	
			2020	2040
NVTA-1	Columbia Pike Multimodal Streets in Arlington	Arlington	8.0	9.2
NVTA-2	Rolling Road Widening near Springfield	Fairfax	23.7	12.5
NVTA-3	US 29 Widening near Centreville	Fairfax	6.0	9.3
NVTA-4	Braddock Road Widening near I-495	Fairfax	10.6	6.8
NVTA-5	South Van Dorn St & Franconia Rd Interchange	Fairfax	4.4	3.1
NVTA-6	Frontier Dr Extension in Springfield*	Fairfax	0.6	2.6
NVTA-7	Fairfax County Pkwy Improvements	Fairfax	79.1	88.5
NVTA-8	Belmont Ridge Rd widening near Broadlands	Loudoun	3.0	3.0
NVTA-9	Loudoun County Parkway extension to US 50*	Loudoun	55.0	30.6
NVTA-10	Route 7 Bridge Widening near Tysons Corner	Fairfax	9.0	4.6
NVTA-11	US 1 Widening and Relocation - Dumfries	Dumfries	7.8	14.6
NVTA-12	US 1 Widening near Ft. Belvoir	Fairfax	7.9	12.0
NVTA-13	Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	2.1	1.9
NVTA-14	Northfax Intersection (US29/50 @ VA123)	City of Fairfax	0.5	0.2
NVTA-15	Jermantown/US 50 Roadway Improvements	City of Fairfax	2.0	1.3
NVTA-16	Frying Pan Road Widening near Herndon	Fairfax	3.7	2.7
NVTA-17	Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	2.6	3.5
NVTA-18	Real-Time Adaptive Traffic Control & Management	Alexandria	8.1	4.6
NVTA-19	Glebe Rd Corridor ITS Improvements	Arlington	19.3	8.6
NVTA-20	Pohick Road Widening near Lorton	Fairfax	0.8	1.8
NVTA-21	Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	1.0	0.9
NVTA-22	Northstar Blvd Extension near Brambleton*	Loudoun	17.2	14.5
NVTA-23	Construct Route 7/690 Interchange near Purcellville	Loudoun	4.7	6.4
NVTA-24	Route 234/Grant Avenue Reconstruction in Manassas	Manassas	1.1	1.5
NVTA-25	Main St & Maple Ave Intersection in Purcellville	Purcellville	0.2	0.0
NVTA-26	Route 7/Battlefield Pkwy Interchange	Leesburg	6.7	1.8
NVTA-27	East Elden Street Widening in Herndon	Herndon	0.2	0.3
NVTA-28	US 1 Widening near Woodbridge	Prince William	9.8	10.8
NVTA-29	Route 15 Widening near Gainesville	Prince William	0.4	0.5
NVTA-30	Route 28 Widening near Centreville	Fairfax	30.3	17.3
NVTA-31	Route 28 Widening near Manassas	Prince William	1.0	8.7
NVTA-32	Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	37.2	29.3
CTB-1	Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	2.0	2.0
CTB-2	Route 7 Widening from Tysons Corner to Reston	Fairfax	37.6	25.7
CTB-3	I-395 Southbound Widening	Alexandria	25.9	10.7
CTB-4	Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	11.7	12.6
CTB-5	Fairfax County Pkwy – I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	11.4	12.7

## Projects Sorted by 2020+2040 Ratings

Project Description (* = new facilities)		Location	Project Rating		
			2020	2040	Combined
NVTA-7	Fairfax County Pkwy Improvements	Fairfax	79.1	88.5	167.6
NVTA-9	Loudoun County Parkway extension to US 50*	Loudoun	55.0	30.6	85.6
NVTA-32	Route 28 - Godwin Drive Extension near Manassas*	Manassas/PW	37.2	29.3	66.5
CTB-2	Route 7 Widening from Tysons Corner to Reston	Fairfax	37.6	25.7	63.3
NVTA-30	Route 28 Widening near Centreville	Fairfax	30.3	17.3	47.6
CTB-3	I-395 Southbound Widening	Alexandria	25.9	10.7	36.6
NVTA-2	Rolling Road Widening near Springfield	Fairfax	23.7	12.5	36.2
NVTA-22	Northstar Blvd Extension near Brambleton*	Loudoun	17.2	14.5	31.7
NVTA-19	Glebe Rd Corridor ITS Improvements	Arlington	19.3	8.6	27.9
CTB-4	Fairfax County Pkwy - I-95 to US1 near Ft. Belvoir	Fairfax	11.7	12.6	24.2
CTB-5	Fairfax County Pkwy - I 95 to US 1 near Ft. Belvoir (County Alt)	Fairfax	11.4	12.7	24.1
NVTA-11	US 1 Widening and Relocation - Dumfries	Dumfries	7.8	14.6	22.4
NVTA-28	US 1 Widening near Woodbridge	Prince William	9.8	10.8	20.6
NVTA-12	US 1 Widening near Ft. Belvoir	Fairfax	7.9	12.0	19.8
NVTA-4	Braddock Road Widening near I-495	Fairfax	10.6	6.8	17.4
NVTA-1	Columbia Pike Multimodal Streets in Arlington	Arlington	8.0	9.2	17.2
NVTA-3	US 29 Widening near Centreville	Fairfax	6.0	9.3	15.3
NVTA-10	Route 7 Bridge Widening near Tysons Corner	Fairfax	9.0	4.6	13.7
NVTA-18	Real-Time Adaptive Traffic Control & Management	Alexandria	8.1	4.6	12.7
NVTA-23	Construct Route 7/690 Interchange near Purcellville	Loudoun	4.7	6.4	11.2
NVTA-31	Route 28 Widening near Manassas	Prince William	1.0	8.7	9.7
NVTA-26	Route 7/Battlefield Pkwy Interchange	Leesburg	6.7	1.8	8.5
NVTA-5	South Van Dorn St & Franconia Rd Interchange	Fairfax	4.4	3.1	7.5
NVTA-16	Frying Pan Road Widening near Herndon	Fairfax	3.7	2.7	6.4
NVTA-17	Kamp Washington Intersection (US 50/29 @ VA236)	City of Fairfax	2.6	3.5	6.1
NVTA-8	Belmont Ridge Rd widening near Broadlands	Loudoun	3.0	3.0	6.1
NVTA-13	Route 15 Bypass/Edwards Ferry Road Interchange	Leesburg	2.1	1.9	4.0
CTB-1	Route 294 (PW Pkwy) Grade Separation near Woodbridge	Prince William	2.0	2.0	4.0
NVTA-15	Jermantown/US 50 Roadway Improvements	City of Fairfax	2.0	1.3	3.3
NVTA-6	Frontier Dr Extension in Springfield*	Fairfax	0.6	2.6	3.2
NVTA-20	Pohick Road Widening near Lorton	Fairfax	0.8	1.8	2.7
NVTA-24	Route 234/Grant Avenue Reconstruction in Manassas	Manassas	1.1	1.5	2.6
NVTA-21	Shirley Gate Road Extension to Fairfax County Parkway*	Fairfax	1.0	0.9	1.9
NVTA-29	Route 15 Widening near Gainesville	Prince William	0.4	0.5	0.8
NVTA-14	Northfax Intersection (US29/50 @ VA123)	City of Fairfax	0.5	0.2	0.7
NVTA-27	East Elden Street Widening in Herndon	Herndon	0.2	0.3	0.5
NVTA-25	Main St & Maple Ave Intersection in Purcellville	Purcellville	0.2	0.0	0.2

## Next Steps

- **Present final ratings to NVTA on January 22<sup>nd</sup>**
- **Post final ratings to VDOT website on January 23<sup>rd</sup>**
- **Final report documenting the analysis process and modeling results in February**
- **Discuss lessons learned with VDOT and stakeholders to identify ways the process could be improved**



**THANKS!**

[www.virginiadot.org/projects/northernvirginia/evaluating\\_significant\\_projects.asp](http://www.virginiadot.org/projects/northernvirginia/evaluating_significant_projects.asp)

Evaluation and Rating of Transportation Projects in Northern Virginia Transportation District

# NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

## Project Implementation Working Group

1/8/15 Version

### Draft FY2015-16 Two Year Program: Summary of Project Evaluations

#### I. Background

In December 2013, NVTA issued a call for projects for the HB 599 process as part of the first 2.5 years of its Six Year Program, now referred to as the FY2015-16 Two Year Program. The FY2015-16 Two Year Program will contain the regional projects that will be funded by NVTA's regional (70%) funds.<sup>1</sup> The FY2015-16 Two Year Program does not include projects funded by member jurisdictions using their local (30%) funds from NVTA.

A total of 52 regional projects were nominated for funding consideration:

- 33 highway projects, including two intelligent transportation system (ITS) projects
- 19 mass transit projects
- Includes 6 (out of 15) 'Carryover' projects from FY2014
- Four counties, three cities, four towns, and three transit agencies responded.

#### II. Funding Requests

NVTA estimates that approximately \$373 million will be available from regional revenues thru FY2016 to fund regional projects, assuming PayGo funding only. The original funding requests thru FY2016 associated with the 52 highway and mass transit projects totaled nearly \$770 million:

- |                         |                      |
|-------------------------|----------------------|
| • Highway projects      | \$423,452,810        |
| • Mass Transit projects | <u>\$346,166,000</u> |
| • Total                 | \$769,618,810        |

During NVTA's review process, several sponsoring organizations provided revised funding requests:

- 8-Car Train Traction Power Upgrades (WMATA); funding request reduced from \$44,416,000 to \$17,061,000
- Franconia-Springfield to Woodbridge 3<sup>rd</sup> Track (VRE); project withdrawn (\$50,000,000)

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<sup>1</sup> Funding based on FY2015/16 revenue and FY2014 remaining balances

- Franconia-Springfield Platform Extension (VRE); funding request increased from \$5,000,000 to \$13,000,000 due to revised scope

### **III. Overall Approach to Project Selection**

At its meeting on October 9, 2014, the Authority approved an overall approach (including project selection criteria) to facilitate its decision-making process for determining which projects will receive NVTAs funding in the FY2015-16 Two Year Program. This approach uses three types of screening.

- Preliminary Screening: this is a pass/fail filter. Each project must pass all applicable criteria to be considered for funding.
- Detailed Screening: projects that pass Preliminary Screening are then evaluated in more detail using a combination of quantitative and qualitative criteria in parallel:
  - Quantitative Score: a composite score is calculated for each project, using weighted selection criteria. Eleven selection criteria are used, based on criteria from the TransAction 2040 long range transportation plan; the FY2014 project selection methodology, and (for highway projects only) the legislatively required HB599 (2012) Evaluation and Rating Study.<sup>2</sup>
  - Qualitative Considerations: projects are assessed using qualitative factors and considerations that do not lend themselves to be scored quantitatively.

The highest quantitative score that can be achieved using this approach is 100.0, for both highway and transit projects. The lowest score that can be achieved varies between highway and transit projects, because of the different approaches used for the congestion reduction criteria. For highway projects, the lowest quantitative score is 21.7. For transit projects, the lowest quantitative score is 33.3.

Appendix A provides full details of the project selection criteria for each type of screening.

### **IV. HB599 Evaluation and Rating Study**

The HB599 process provided a detailed and objective evaluation of highway projects. While NVTAs and its member jurisdictions were stakeholders in this process, the study was conducted independently by a consultant team managed by the Virginia Department of Transportation (VDOT).

The final HB599 rating for each highway project was used by NVTAs as one criterion (representing congestion reduction), and was weighted highest of all eleven selection criteria used by NVTAs to determine each project's quantitative score. The HB599 rating itself is a composite of seven different measures, encompassing congestion (three

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<sup>2</sup> See VDOT website: [http://www.virginiadot.org/projects/northernvirginia/evaluating\\_significant\\_projects.asp](http://www.virginiadot.org/projects/northernvirginia/evaluating_significant_projects.asp)

measures), transit (two measures), accessibility (one measure), and emergency evacuation (one measure).

The HB599 study, which used the TRANSIMS micro-simulation modeling tool, evaluated the operational impacts of highway projects during typical morning and afternoon peak periods, and for typical workdays. However ratings were based on daily impacts, including peak period impacts.

The HB599 study compared transportation system performance (using each of the seven HB599 measures) with and without each project on a digital representation of the expected transportation networks in 2020 and 2040. For consistency with NVTa's evaluation of mass transit projects, only the HB599 project ratings for 2040 were used for NVTa's evaluation of highway projects.

The definition of each project was based on information provided to the VDOT consultant team by the project sponsor. The HB599 ratings were calculated assuming the projects were fully operational in each of the evaluation years – 2020 and 2040 – regardless of the current status of the project (study, design, right of way acquisition, etc.) The HB599 study was not required to take into account factors such as project cost, environmental impacts, or funding availability.

Two adjacent highway projects under consideration by NVTa for the FY2015-16 Two Year Program were grouped together for the HB599 process (Route 28 improvements in Prince William County and the City of Manassas.) For the most part however, the HB599 process considered projects on a standalone basis, rather than packaged together in a way that might generate synergistic benefits. NVTa's approach to project selection also considers projects on a standalone basis.

Theoretically, HB599 ratings could range from a maximum possible 100.0 (greatest congestion relief) to 0.0 or lower (least congestion relief.) In practice, one of the seven performance measures (reduce transit crowding) was not calculated because only highway projects were evaluated. As this performance measure accounted for 11.5 percent of the overall HB599 rating, the effective maximum rating is 88.5.

The composite HB599 rating for each project reflects modeled absolute changes for each criterion, within an agreed 'influence area.' Larger projects had larger influence areas. Consequently, the HB599 process rated projects with new or improved highway segments higher than projects featuring a new or improved highway intersection or interchange. This was especially so for longer distance projects on routes with high demand and severe congestion. This approach also tended to favor broadly defined studies over projects that are at a more advanced phase of development, which tend to be more narrowly defined.



## V. Project Evaluation Activity

During October and November 2014, NVTA staff evaluated each of the 52 highway and mass transit projects using the approach approved by the Authority. As part of this approach, staff reviewed the NVTA project evaluations with the respective sponsoring organizations. In December 2014, NVTA staff observed a series of briefings by VDOT's consultant team with individual project sponsors regarding their respective HB599 highway project evaluations.

On January 6, 2015, VDOT presented the draft detailed ratings from the HB599 Evaluation and Rating Study to project sponsors. NVTA staff incorporated the HB599 ratings into its evaluation of the 52 highway and mass transit projects. The evaluation results are provided in Table 1 (mass transit projects) and Table 2 (highway projects.) Table 2 also includes the corresponding 2040 HB599 rating for each highway project.

An NVTA score of 0.0 indicates the project did not pass preliminary screening.

**Table 1: Quantitative Scores for Mass Transit Projects**

Project	Agency	Project Description	NVTA Score
1	Alexandria	Potomac Yard Metrorail Station	83.3
2	Alexandria	Van Dorn - Beauregard Transitway	88.3
3	City of Fairfax	CUE 35-foot Bus Acquisition	63.3
4	Fairfax	Richmond Highway Transit Center	0.0
5	Fairfax	West Ox Bus Garage	61.7
6	Fairfax	Connector Bus Service Expansion – Capital Purchase 22 Buses	66.7
7	Fairfax	Innovation Center Metrorail Station Construction	76.7
8	Loudoun	Acquisition of 4 Buses	71.7
9	PRTC	Western Bus Maintenance and Storage Facility	80.0
10	WMATA	New Buses (20) and Bus Infrastructure Improvements	75.0
11	WMATA	8-Car Train Traction Power Upgrades Located in Virginia	83.3
12	Alexandria	Duke Street Transit Signal Priority	68.3
13	VRE	Franconia-Springfield to Woodbridge 3rd Track	0.0
14	VRE	Manassas Park Station Parking Expansion	63.3
15	VRE	Slaters Lane Crossover	61.7
16	VRE	Franconia-Springfield Platform Expansion	68.3
17	VRE	Crystal City Platform Extension Study	43.3
18	VRE	Rippon Station Expansion and Second Platform	68.3
19	Arlington	Ballston Metrorail Station West Entrance	66.7

**Table 2: Quantitative Scores for Highway Projects**

Project	Agency	Project Description	NVTA Score	HB599 Rating
1	Arlington	Route 244 Columbia Pike Street Improvements (S. Gate Road to the Pentagon)	51.6	9.2
2	Fairfax	Rolling Road Widening from Old Keene Mill Road to Franconia Springfield Pkwy	32.7	12.5
3	Fairfax	US 29 Lee Highway (from west of Union Mill Road to Buckley's Gate Drive)	28.3	9.3
4	Fairfax	Braddock Road HOV Widening	39.0	6.8
5	Fairfax	South Van Dorn Street and Franconia Road Interchange	31.1	3.1
6	Fairfax	Frontier Drive Extension & Braided Ramps	38.4	0.2
7	Fairfax	Fairfax County Parkway Improvements (Study)	54.3	88.5
8	Loudoun	Belmont Ridge Road (VA Route 659)- Turo Parish Road to Croson Ln	49.4	3.0
9	Loudoun	Loudoun County Parkway (VA Route 607) – U.S. 50 to Creighton Rd.	64.0	30.6
10	Fairfax	Route 7 Widening – Dulles Toll Road Bridge	49.9	4.6
11	Dumfries	Widen Route 1 (Fraley Boulevard) Brady's Hill Road to Route 234 (Dumfries Road)	45.1	14.6
12	Fairfax	US 1 Richmond Highway (from Mt. Vernon Memorial Highway to Napper Road)	29.2	12.0
13	Leesburg	Route 15 Bypass at Edwards Ferry Road Interchange	39.0	1.9
14	City of Fairfax	Northfax - Intersection and drainage improvements at Route 29/50 and Route 123	51.7	0.2
15	City of Fairfax	Jermantown / Route 50 Roadway Improvements	48.8	1.3
16	Fairfax	Frying Pan Road (VA 28 to Centreville Road)	25.9	2.7
17	City of Fairfax	Kamp Washington Intersection Improvements	52.9	3.5
18	Alexandria	Real-Time Adaptive Traffic Control and Data Management System	34.9	4.6
19	Arlington	Glebe Road Corridor Intelligent Transportation System (ITS) Improvements	53.0	8.6
20	Fairfax	Pohick Rd - US 1 (Richmond Hwy) to I-95 - 2 to 4 Lanes	0.0	1.8
21	Fairfax	Shirley Gate Rd. from Braddock Rd. to Fairfax County Parkway/Popes Head Rd.	0.0	0.9
22	Loudoun	Northstar Blvd. (VA Rte. 659 Reloc) – U.S. 50 to Evergreen Mills Rd. (VA Rte. 621)	0.0	14.5
23	Loudoun	Route 7 / 690 Interchange	0.0	6.4
24	Manassas	Route 234 Grant Avenue Study	0.0	1.5
25	Purcellville	Main Street and Maple Avenue Intersection Improvements	38.3	0.0
26	Leesburg	Route 7 (East Market Street)/Battlefield Parkway Interchange	50.6	1.8
27	Herndon	East Elden Street Improvements & Widening Project (UPC 50100)	41.8	0.3
28	Prince William	Route 1 Widening from Featherstone Road to Marys Way	52.1	10.8
29	Prince William	Route 15 Widening (Route 29 to Route 55), including RR Overpass	40.2	0.5
30	Fairfax	VA Route 28 Widening (Prince William County Line to Route 29)	34.4	17.3
31 (G)	Manassas	Route 28 Widening South to the City Limits	49.7	8.7
32	Manassas	Route 28 (Manassas Bypass) Study - Godwin Drive Extension	55.3	29.3
33 (G)	Prince William	Route 28 Widening from Route 234 Bypass to Linton Hall Road	48.0	8.7

## Highway versus Transit Projects

Although most of the selection criteria used to evaluate highway and transit projects are the same, the use of HB599 ratings for highway projects complicates direct comparisons between the quantitative scores for the two types of projects. This is compounded by the higher emphasis associated with the congestion reduction criterion. Consequently, it is recommended that highway projects only be compared to other highway projects for the FY2015-16 Two Year Program. Similarly, it is recommended that transit projects only be compared to other transit projects.

The evaluation results are provided in Table 3 (mass transit projects) and Table 4 (highway projects) with projects ranked from high to low. Table 4 also includes the corresponding 2040 HB599 rating for each highway project.

Projects highlighted in green represent the initial NVT staff recommendations for project selection. Projects highlighted in red represent the initial NVT staff recommendations for projects that should not be selected.

**Table 3: Quantitative Scores for Mass Transit Projects (Ranked by NVT Score)**

Project	Agency	Project Description	NVT Score
2	Alexandria	Van Dorn - Beauregard Transitway	88.3
1	Alexandria	Potomac Yard Metrorail Station	83.3
11	WMATA	8-Car Train Traction Power Upgrades Located in Virginia	83.3
9	PRTC	Western Bus Maintenance and Storage Facility	80.0
7	Fairfax	Innovation Center Metrorail Station Construction	76.7
10	WMATA	New Buses (20) and Bus Infrastructure Improvements	75.0
8	Loudoun	Acquisition of 4 Buses	71.7
12	Alexandria	Duke Street Transit Signal Priority	68.3
16	VRE	Franconia-Springfield Platform Expansion	68.3
18	VRE	Rippon Station Expansion and Second Platform	68.3
6	Fairfax	Connector Bus Service Expansion – Capital Purchase 22 Buses	66.7
19	Arlington	Ballston Metrorail Station West Entrance	66.7
3	City of Fairfax	CUE 35-foot Bus Acquisition	63.3
14	VRE	Manassas Park Station Parking Expansion	63.3
5	Fairfax	West Ox Bus Garage	61.7
15	VRE	Slaters Lane Crossover	61.7
17	VRE	Crystal City Platform Extension Study	43.3
4	Fairfax	Richmond Highway Transit Center	0.0
13	VRE	Franconia-Springfield to Woodbridge 3rd Track	0.0

**Table 4: Quantitative Scores for Highway Projects (Ranked by NVTA Score)**

Project	Agency	Project Description	NVTA Score	HB599 Rating
9	Loudoun	Loudoun County Parkway (VA Route 607) – U.S. 50 to Creighton Rd.	64.0	30.6
32	Manassas	Route 28 (Manassas Bypass) Study - Godwin Drive Extension	55.3	29.3
7	Fairfax	Fairfax County Parkway Improvements (Study)	54.3	88.5
19	Arlington	Glebe Road Corridor Intelligent Transportation System (ITS) Improvements	53.0	8.6
17	City of Fairfax	Kamp Washington Intersection Improvements	52.9	3.5
28	Prince William	Route 1 Widening from Featherstone Road to Marys Way	52.1	10.8
14	City of Fairfax	Northfax - Intersection and drainage improvements at Route 29/50 and Route 123	51.7	0.2
1	Arlington	Route 244 Columbia Pike Street Improvements (S. Gate Road to the Pentagon)	51.6	9.2
26	Leesburg	Route 7 (East Market Street)/Battlefield Parkway Interchange	50.6	1.8
10	Fairfax	Route 7 Widening – Dulles Toll Road Bridge	49.9	4.6
31 (G)	Manassas	Route 28 Widening South to the City Limits	49.7	8.7
8	Loudoun	Belmont Ridge Road (VA Route 659)- Turo Parish Road to Croson Ln	49.4	3.0
15	City of Fairfax	Jermantown / Route 50 Roadway Improvements	48.8	1.3
33 (G)	Prince William	Route 28 Widening from Route 234 Bypass to Linton Hall Road	48.0	8.7
11	Dumfries	Widen Route 1 (Fraley Boulevard) Brady's Hill Road to Route 234 (Dumfries Road)	45.1	14.6
27	Herndon	East Elden Street Improvements & Widening Project (UPC 50100)	41.8	0.3
29	Prince William	Route 15 Widening (Route 29 to Route 55), including RR Overpass	40.2	0.5
4	Fairfax	Braddock Road HOV Widening	39.0	6.8
13	Leesburg	Route 15 Bypass at Edwards Ferry Road Interchange	39.0	1.9
6	Fairfax	Frontier Drive Extension & Braided Ramps	38.4	0.2
25	Purcellville	Main Street and Maple Avenue Intersection Improvements	38.3	0.0
18	Alexandria	Real-Time Adaptive Traffic Control and Data Management System	34.9	4.6
30	Fairfax	VA Route 28 Widening (Prince William County Line to Route 29)	34.4	17.3
2	Fairfax	Rolling Road Widening from Old Keene Mill Road to Franconia Springfield Pkwy	32.7	12.5
5	Fairfax	South Van Dorn Street and Franconia Road Interchange	31.1	3.1
12	Fairfax	US 1 Richmond Highway (from Mt. Vernon Memorial Highway to Napper Road)	29.2	12.0
3	Fairfax	US 29 Lee Highway (from west of Union Mill Road to Buckley's Gate Drive)	28.3	9.3
16	Fairfax	Frying Pan Road (VA 28 to Centreville Road)	25.9	2.7
20	Fairfax	Pohick Rd - US 1 (Richmond Hwy) to I-95 - 2 to 4 Lanes	0.0	1.8
21	Fairfax	Shirley Gate Rd. from Braddock Rd. to Fairfax County Parkway/Popes Head Rd.	0.0	0.9
22	Loudoun	Northstar Blvd. (VA Rte. 659 Reloc) – U.S. 50 to Evergreen Mills Rd. (VA Rte. 621)	0.0	14.5
23	Loudoun	Route 7 / 690 Interchange	0.0	6.4
24	Manassas	Route 234 Grant Avenue Study	0.0	1.5

## VI. Summary of Results

Highway and mass transit projects have each been allocated to one of three groups:

- **Group 1: Projects recommended for funding (see Appendix B)** – includes 11 mass transit and 16 highway projects that passed the preliminary screening and performed best in the detailed screening. The total funding requirement of projects in this group is \$341,005,000, approximately 91.4 percent of the estimated available PayGo funds. Generally (but with some exceptions) this group includes:
  - projects with the highest quantitative scores;
  - ongoing projects that received FY2014 NVTa regional funds.
- **Group 2: Projects not recommended for funding (see Appendix C)** – includes two mass transit and 7 highway projects:
  - projects that failed preliminary screening;
  - projects with low congestion relief relative to cost.
- **Group 3: Projects requiring further consideration (see Appendix D)** – includes six mass transit and ten highway projects that passed the preliminary screening, but require further evaluation (both individually and as a group) before a funding recommendation is made. Some of the projects in this group could be funded using the remaining \$31,995,000 of the estimated available funds, approximately 8.6 percent of the total, taking into account qualitative considerations such as the overall geographic and modal balance of the FY2015-16 Two Year Program.

To facilitate a review of geographic and modal balance, Table 5 summarizes the allocation of funding by jurisdiction and mode associated with the initial NVTa staff project selection recommendations.

The 2015-16 Two Year Program will, when approved by the Authority, include the projects selected for NVTa regional funds. These projects will be funded to the full extent requested by sponsoring organizations. In the event that any of the selected projects are subsequently unable to advance, other projects from the third group described above will be considered as replacement projects. Any uncommitted FY2015-16 funds will automatically be carried forward to FY2017.

Average funding per project for the initial project selection recommendations for the FY2015-16 Two Year Program is \$12.6 million. For the approved FY2014 projects, average funding per project was \$5.9 million.

**Table 5: Summary of Funding Allocations (Initial Recommendation)**

Sponsor	Mass Transit		Highway		Total	
	Projects	Funding	Projects	Funding	Projects	Funding
<b>Counties</b>						
Arlington	0		2	\$12,000,000	2	\$12,000,000
Fairfax	1	\$48,000,000	2	\$33,900,000	3	\$81,900,000
Loudoun	1	\$ 1,860,000	2	\$50,500,000	3	\$52,360,000
Prince William	0		2	\$66,100,000	2	\$66,300,000
<b>Cities</b>						
Alexandria	3	\$ 4,090,000	0		3	\$ 4,090,000
Fairfax	0		3	\$12,000,000	3	\$12,000,000
Manassas	0		2	\$ 3,794,000	2	\$ 3,794,000
<b>Towns</b>						
Dumfries	0		1	\$ 6,900,000	1	\$ 6,900,000
Herndon	0		0		0	n/a
Leesburg	0		2	\$14,000,000	2	\$14,000,000
Purcellville	0		0		0	n/a
<b>Transit Agencies</b>						
PRTC	1	\$16,000,000	0		1	\$16,000,000
VRE	3	\$30,000,000	0		3	\$30,000,000
WMATA	2	\$41,861,000	0		2	\$41,861,000
<b>Total</b>						
	11	\$141,811,000	16	\$199,194,000	27	\$341,005,000
<b>Proportion of Estimated Available Funding (\$373,000,000)</b>						
		38.0%		53.4%		91.4%

Note: the Cities of Falls Church and Manassas Park, and the Town of Vienna did not submit project funding requests for the FY2015-16 Two Year Program.

## VII. Next Steps

Following the PIWG meeting on January 12, 2015, an updated version of this report (to reflect initial PIWG inputs) will be shared with the PCAC, TAC, and the JACC, and discussed at their upcoming meetings as follows:

- TAC: January 21
- JACC: February 12
- PCAC: February 19

In order to maintain the overall schedule for development of the FY2015-16 Two Year Program, it is planned to schedule the next PIWG meeting between the JACC and PCAC meetings in February 2015. Inputs from the TAC and JACC will be addressed at this PIWG meeting in February. These, and any additional comments from the PCAC, will be considered by the Authority at its meeting on February 26, 2015. The intent of the February meeting of the PIWG is twofold:

- Develop a draft policy for projects not advancing (based on the policy framework discussed with the PIWG at its meeting on October 2, 2014, and presented to the PCAC at its meeting on November 20, 2014.

- Finalize a report to the Authority for its meeting on February 26, 2015. This report will request the Authority's approval to seek public inputs to the draft FY2015-16 Two Year Program.

Assuming this approval is granted, the Public Hearing will be held on a Tuesday, Wednesday, or Thursday evening in March 2015 (date TBD) at the NVTa offices. At least one snow date will also be scheduled. It is envisioned that all 52 highway and mass transit projects will be featured in the Public Hearing material.

Following the Public Hearing, public inputs will be summarized by NVTa staff, and reviewed at a subsequent PIWG meeting in late March/early April 2015 (date TBD). The intent of this meeting of the PIWG is to prepare a report seeking approval from the Authority at its meeting on April 23, 2015 for:

- A recommended policy for projects not advancing;
- The final FY2015-16 Two Year Program.

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## Appendix A: Project Selection Criteria

### Preliminary Screening: Pass/Fail Assessment

Screening Criteria
<b>All projects</b>
Contained in NVTa's regional transportation plan (TransAction 2040), or included in the Transportation Planning Board's 2010 Constrained Long Range Plan
Reduces congestion
Within locality embraced by the Authority or in adjacent localities but only to the extent that such extension is an insubstantial part of the project and is essential to the viability of the project within the localities embraced by the Authority.
<b>Highway projects only</b>
Rated in the HB599 Project Evaluation and Rating Study.
<b>Mass Transit projects only</b>
Mass Transit project that increases capacity.



## Detailed Screening: Quantitative Scores

TransAction 2040 Goal: Provide responsive transportation service to customers			
Topic	Selection Criteria	Rating Scale (unless indicated otherwise, High = 1, Medium = 2/3, Low = 1/3)	Weighting (75 points)
Reduce Roadway Congestion (Highway projects)	Project reduces roadway congestion	HB599 detailed rating will be on a continuous scale of 0 (least congestion relief) to 100 (greatest congestion relief) <b>Rating:</b> HB599 detailed rating ÷ 100	35
Reduce Roadway Congestion (Transit projects)	Project reduces roadway congestion	<b>High:</b> Project will significantly improve traffic flow. <b>Medium:</b> Project will moderately improve traffic flow. <b>Low:</b> Project will have minimal to no effect on traffic flow.	
Project Readiness	Project is in advanced phase of development	<b>High:</b> Project is in the ROW or construction phase. <b>Medium:</b> Project is in the design phase. <b>Low:</b> Project is in the study or planning phase.	15
	Project is able to be readily implemented <sup>3</sup>	<b>High:</b> Project can be implemented in the near term (<6 years). <b>Medium:</b> Project can be implemented in the short term (6-12 years). <b>Low:</b> Project can be implemented in the long term (>12 years).	10
Urgency	Project addresses existing significant level of service (LOS) deficiencies for all modes of transportation	<b>High:</b> Project addresses existing LOS F condition. <b>Medium:</b> Project addresses existing LOS E condition. <b>Low:</b> Project addresses existing LOS A, B, C, or D condition.	5
Reduce VMT	Project reduces vehicle-miles traveled	<b>High:</b> Project directly reduces VMT (i.e., transit project, park-and-ride lot, new HOV lane(s), new pedestrian and bicycle trail). <b>Medium:</b> Project indirectly or through expansion reduces VMT (i.e., expansion of HOV, transit improvement, or expansion). <b>Low:</b> Project does not reduce VMT.	5
Safety	Project improves the safety of the transportation system	<b>High:</b> Project designed to specifically improve system safety and/or address an existing safety deficiency. <b>Medium:</b> Project will generally result in a safety improvement. <b>Low:</b> Project will have no discernible positive effect on safety.	5

<sup>3</sup> Definition of 'implemented' refers to the point in time when the intended transportation functionality of a project is fully available to users, e.g. completion of the construction phase, operation of a new transit service.

TransAction 2040 Goal: Maximize community connectivity by addressing transportation and land use together			
Topic	Selection Criteria	Rating Scale (High = 1, Medium = 2/3, Low = 1/3)	Weighting (10 points)
Activity Center Connections	Project improves connections between multiple Activity Centers	<b>High:</b> Project improves connectivity between three or more activity centers. <b>Medium:</b> Project improves connectivity between two activity centers. <b>Low:</b> Project improves connectivity to one activity center only.	5
Regional Connectivity and modal integration	Project connects jurisdictions and modes	<b>High:</b> Project connects jurisdictions and modes. <b>Medium:</b> Project connects jurisdictions. <b>Low:</b> Project does not connect jurisdictions or modes.	5

TransAction 2040 Goal: Provide an integrated, multimodal transportation system			
Topic	Selection Criteria	Rating Scale (High = 1, Medium = 2/3, Low = 1/3)	Weighting (5 points)
Improved Bicycle and Pedestrian Travel Options	Project supports multiple use development patterns in a walkable/bikeable environment	<b>High:</b> Project adds or extends non-motorized facility to and within activity center. <b>Medium:</b> Project improves existing non-motorized facility to and within activity center. <b>Low:</b> Project does not improve or provide a non-motorized facility to and within activity center.	5

TransAction 2040 Goal: Incorporate the benefits of technology			
Topic	Selection Criteria	Rating Scale (High = 1, Medium = 2/3, Low = 1/3)	Weighting (5 points)
Management and Operations	Project improves the management and operation of existing facilities through technology applications	<b>High:</b> Project improves technological management and operations of an existing transportation facility. <b>Medium:</b> Project improves technological management and operations of an expansion of an existing transportation facility. <b>Low:</b> No improvement to management and operations of a facility.	5

TransAction 2040 Goal: Identify funding and legislative initiatives needed to implement the Plan			
Topic	Selection Criteria	Rating Scale (High = 1, Medium = 2/3, Low = 1/3)	Weighting (5 points)
Cost Sharing	Project leverages private or other outside funding	<b>High:</b> Project leverages private or other outside funding. <b>Medium:</b> Project leverages modest private or other outside funding. <b>Low:</b> Project has no leveraged private or other outside funding.	5

## Detailed Screening: Qualitative Considerations

Screening Criteria
<b>Priority given to greatest congestion reduction relative to cost:</b> the Authority is required to give priority to such projects. Benefit/cost analysis included in the TransAction 2040 long range transportation plan will be reviewed.
<b>Continuity of project funding:</b> In general, NVTa funding approval for most project phase(s) infers a commitment to fund the remainder of that phase (or phases), provided that the likely total commitment is reasonably known at the time of original funding approval. Funding decisions will continue to be based on the prevailing project selection criteria, subject to funding availability at the time of request. However, funding continuity decisions will be considered on a case-by-case basis. One exception to this is that NVTa funding approval for studies does not infer a commitment to fund any subsequent project phase, including additional studies. Continuity of funding commitments requires compliance with all terms and conditions associated with approved SPAs, and any requirements imposed by NVTa.  Approved FY2014 projects that are now requesting FY2015-16 funds that meet the above requirements will have first call on available FY2015-16 funds.
<b>Cost sharing:</b> while cost sharing is included as a criterion for quantitative scoring, it is also included as a qualitative consideration to take account of any conditions associated with other funds, e.g. federal, state, local, and NVTa local (30%) funds.
<b>Geographic balance:</b> a policy consideration for the Authority when finalizing the FY2015-16 Two Year Program.
<b>Modal balance:</b> a policy consideration for the Authority when finalizing the FY2015-16 Two Year Program.
<b>Additional supporting information</b>

## Appendix B: Group 1 – Projects Recommended for Funding

Project	Agency	FY2015-16 Funding Requested	Notes
<b>Highway Projects (HB599 Identifier)</b>			
Route 244 Columbia Pike Street Improvements (NVTA-1)	Arlington	\$10,000,000	Continuation of approved FY2014 project Previously approved amount – \$12 million, further funding requests unknown
Fairfax County Parkway Improvements (Study) (NVTA-7)	Fairfax	\$20,000,000	Study Further funding requests unknown, potential HB2 impact
Belmont Ridge Road (VA Route 659)- Turo Parish Road to Croson Ln (NVTA-8)	Loudoun	\$19,500,000	No further funding requests
Loudoun County Parkway (VA-607) from US-50 to Creighton Road (NVTA-9)	Loudoun	\$31,000,000	No further funding requests
Route 7 Widening – Dulles Toll Road Bridge (NVTA-10)	Fairfax	\$13,900,000	No further funding requests
Widen Route 1 (Fraley Boulevard) Brady's Hill Road to Route 234 (Dumfries Road) (NVTA-11)	Dumfries	\$6,900,000	Study/scoping phase Further funding requests unknown Potential HB2 impact
Route 15 Bypass at Edwards Ferry Road Interchange (NVTA-13)	Leesburg	\$1,000,000	Study, continuation of approved FY2014 project, affected by HB2 Previously approved amount – \$1 million, further funding requests unknown
Northfax – Improvements at Route 29/50 and Route 123 (NVTA-14)	City of Fairfax	\$10,000,000	Continuation of approved FY2014 project Previously approved amount – \$5 million, no further funding requests
Jermantown / Route 50 Roadway Improvements (NVTA-15)	City of Fairfax	\$1,000,000	No further funding requests
Kamp Washington Intersection Improvements (NVTA-17)	City of Fairfax	\$1,000,000	No further funding requests
Glebe Road Corridor Intelligent Transportation System (ITS) Improvements (NVTA-19)	Arlington	\$2,000,000	No further funding requests
Route 7 (East Market Street)/Battlefield Parkway Interchange (NVTA-26)	Leesburg	\$13,000,000	Affected by HB2 Further funding requests unknown
Route 1 Widening from Featherstone Road to Marys Way (NVTA-28)	Prince William	\$49,400,000	Continuation of approved FY2014 project Previously approved amount – \$3 million, no further funding requests
Route 28 Widening South to the City Limits (NVTA-31)	Manassas	\$3,294,000	Complementary to adjacent PWC project No further funding requests

Project	Agency	FY2015-16 Funding Requested	Notes
Route 28 (Manassas Bypass) Study - Godwin Drive Extension (NVTA-32)	Manassas	\$500,000	Study Affected by HB2, further funding requests unknown
Route 28 Widening from Route 234 Bypass to Linton Hall Road (NVTA-31)	Prince William	\$16,700,000	Complementary to approved FY2014 project and adjacent Manassas project No further funding requests
<b>Subtotal (16 Recommended Projects)</b>		<b>\$199,194,000</b>	
<b>Transit Projects</b>			
Potomac Yard Metrorail Station	Alexandria	\$1,500,000	Continuation of approved FY2014 project Previously approved amount – \$2 million, further funding requests unknown
Van Dorn - Beauregard Transitway	Alexandria	\$2,400,000	Further funding requests unknown
Innovation Center Metrorail Station Construction	Fairfax	\$48,000,000	Corresponding FY2014 approved project has not yet advanced to SPA Previously approved amount – \$41 million, no further funding requests
Acquisition of 4 Buses	Loudoun	\$1,860,000	No further funding requests
Western Bus Maintenance and Storage Facility	PRTC	\$16,000,000	No further funding requests
New Buses (20) and Bus Infrastructure Improvements	WMATA	\$24,800,000	Corresponding FY2014 approved project has not yet advanced to SPA Previously approved amount – \$7 million, further funding requests unknown
8-Car Train Traction Power Upgrades Located in Virginia	WMATA	\$44,416,000 -\$27,355,000	Corresponding FY2014 approved project has not yet advanced to SPA Previously approved amount – \$5 million, further funding requests unknown
Duke Street Transit Signal Priority	Alexandria	\$190,000	Continuation of approved FY2014 project Previously approved amount – \$660,000, no further funding requests
Slaters Lane Crossover	VRE	\$7,000,000	Continuation of approved FY2014 project (Alexandria Station Tunnel) Previously approved amount – \$1,300,000, no further funding requests
Franconia-Springfield Platform Expansion	VRE	\$5,000,000 +\$8,000,000	No further funding requests
Rippon Station Expansion and Second Platform	VRE	\$10,000,000	No further funding requests
<b>Subtotal (11 Recommended Projects)</b>		<b>\$141,811,000</b>	
<b>Total (27 Recommended Projects)</b>		<b>\$341,005,000</b>	

### Appendix C: Group 2 – Projects Not Recommended for Funding

Project	Agency	FY2015-16 Funding Requested	Notes
<b>Highway Projects (HB599 Identifier)</b>			
Pohick Rd - US 1 (Richmond Hwy) to I-95 - 2 to 4 Lanes (NVTA-20)	Fairfax	\$5,000,000	Project not included in TransAction 2040 or 2010 CLRP
Shirley Gate Rd. from Braddock Rd. to Fairfax County Parkway/Popes Head Rd. (NVTA-21)	Fairfax	\$6,000,000	Project not included in TransAction 2040 or 2010 CLRP
Northstar Blvd. (VA Rte. 659 Reloc) – U.S. 50 to Evergreen Mills Rd. (VA Rte. 621) (NVTA-22)	Loudoun	\$9,400,000	Project not included in TransAction 2040 or 2010 CLRP
Route 7 / 690 Interchange (NVTA-23)	Loudoun	\$6,000,000	Project not included in TransAction 2040 or 2010 CLRP
Route 234 Grant Avenue Study (NVTA-24)	Manassas	\$235,000	Project not included in TransAction 2040 or 2010 CLRP
Main Street and Maple Avenue Intersection Improvements (NVTA-25)	Purcellville	\$2,793,810	Per HB599 project generates no congestion relief relative to cost
Route 15 Widening (Route 29 to Route 55), including RR Overpass (NVTA-29)	Prince William	\$96,030,000	Study, per HB599 project generates minimal congestion relief relative to cost
<b>Subtotal (7 Projects)</b>		<b>\$125,458,810</b>	
<b>Transit Projects</b>			
Richmond Highway Transit Center	Fairfax	\$24,000,000	Project not included in TransAction 2040 or 2010 CLRP
Franconia-Springfield to Woodbridge 3rd Track	VRE	\$50,000,000 -\$8,000,000	Project not included in TransAction 2040 or 2010 CLRP. Part of this project added to Franconia-Springfield Platform Expansion project
<b>Subtotal (2 Projects)</b>		<b>\$66,000,000</b>	
<b>Total (9 Not Recommended Projects)</b>		<b>\$191,458,810</b>	

## Appendix D: Group 3 – Projects Requiring Further Consideration

Project	Agency	FY2015-16 Funding Requested	Notes
<b>Highway Projects (HB599 Identifier)</b>			
Rolling Road Widening from Old Keene Mill Road to Franconia Springfield Pkwy (NVTA-2)	Fairfax	\$27,700,000	
US 29 Lee Highway (from west of Union Mill Road to Buckley's Gate Drive) (NVTA-3)	Fairfax	\$10,000,000	Study
Braddock Road HOV Widening (NVTA-4)	Fairfax	\$10,000,000	Study
South Van Dorn Street and Franconia Road Interchange (NVTA-5)	Fairfax	\$4,000,000	Study
Frontier Drive Extension & Braided Ramps (NVTA-6)	Fairfax	\$9,450,000	Enhances highway access to Franconia-Springfield Metrorail/VRE stations
US 1 Richmond Highway (from Mt. Vernon Memorial Highway to Napper Road) (NVTA-12)	Fairfax	\$13,500,000	Study
Frying Pan Road (VA 28 to Centreville Road) (NVTA-16)	Fairfax	\$6,150,000	Study
Real-Time Adaptive Traffic Control and Data Management System (NVTA-18)	Alexandria	\$500,000	Study
East Elden Street Improvements & Widening Project (UPC 50100) (NVTA-27)	Herndon	\$10,400,000	
VA Route 28 Widening (Prince William County Line to Route 29) (NVTA-30)	Fairfax	\$7,100,000	Study
<b>Subtotal (10 Projects)</b>		<b>\$98,800,000</b>	
<b>Transit Projects</b>			
CUE 35-foot Bus Acquisition	City of Fairfax	\$3,000,000	
West Ox Bus Garage	Fairfax	\$20,000,000	
Connector Bus Service Expansion – Capital Purchase 22 Buses	Fairfax	\$11,000,000	

Project	Agency	FY2015-16 Funding Requested	Notes
Manassas Park Station Parking Expansion	VRE	\$19,000,000	Study
Crystal City Platform Extension Study	VRE	\$2,000,000	Study
Ballston Metrorail Station West Entrance	Arlington	\$56,000,000	Arlington County will consider subdividing this funding request between design/ROW acquisition and construction
<b>Subtotal (6 Projects)</b>		<b>\$111,000,000</b>	
<b>Total (16 Projects)</b>		<b>\$209,800,000</b>	