



# COMMONWEALTH of VIRGINIA

## Commonwealth Transportation Board

Aubrey L. Layne, Jr.  
Chairman

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*Agenda Item #2*

### RESOLUTION OF THE COMMONWEALTH TRANSPORTATION BOARD

July 28, 2016

#### MOTION

**Made By: Ms. Hynes, Seconded By: Mr. Kasprovicz  
Action: Motion Carried, Unanimously As Amended**

**Title: Approval of Transform I-66: Inside the Beltway Multimodal Program Components and Inclusion into FY 2017- FY 2022 Six-Year Improvement Program**

**WHEREAS**, the Commonwealth Transportation Board (CTB) approved a Memorandum of Agreement (MOA) between the CTB, the Virginia Department of Transportation (VDOT) and the Northern Virginia Transportation Commission (NVTC) relating to implementation of the Transform 66: Inside the Beltway Project (the "Project") on December 9, 2015; and,

**WHEREAS**, the goals of the Project are to (1) move more people; (2) enhance transportation connectivity; (3) improve transit service; (4) reduce roadway congestion; and (5) increase travel options (collectively, the "Improvement Goals"), all of which are reasonably expected to benefit the users of the portion of I-66 beginning at the Beltway and ending at U.S. Route 29 in the Rosslyn area of Arlington County, Virginia (the "Facility"); and,

**WHEREAS**, the Project will facilitate implementation of recommendations from VDOT's June 2012 *Final Report of the I-66 Multimodal Study Inside the Beltway*, and the further refinements found in the *August 2013 Supplemental Report*, as well as recommendations from the Department of Rail and Public Transportation's (DRPT) 2009 Transportation Demand Management/Transit Report, and projects in the region's constrained long range plan, as such plan may be updated from time to time, including but not limited to multimodal transportation improvements to the roadways and associated transportation and transit facilities in the vicinity of the Facility ("Components") as described in the aforesaid VDOT and DRPT reports; and,

**WHEREAS**, the MOA delegated to NVTC the authority to select and administer the implementation of Components designed specifically to attain the Improvement Goals to be financed from a portion of the toll revenues of the Facility; and,

Resolution of the Board

Approval of Transform I-66: Inside the Beltway Multimodal Program Components and inclusion into FY 2017-2022 Six-Year Improvement Program

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**WHEREAS**, such Components shall be selected by NVTC in accordance with a process established by NVTC pursuant to the MOA; and,

**WHEREAS**, the CTB shall approve the Components selected by NVTC and allocate toll revenues for them, provided the Components meet the criteria specified in the MOA and are selected in accordance with NVTC's selection process described in the MOA; and,

**WHEREAS**, VDOT, on behalf of the CTB, will control and manage tolling on the Facility, with the toll revenues being utilized and distributed according to the MOA, to support the tolling operations and tolling maintenance of the Facility, and to fund the Components selected by NVTC and approved by the CTB for the Project designed specifically to attain the Improvement Goals; and,

**WHEREAS**, pursuant to the MOA, as part of the Six Year Improvement Program presented to the CTB for approval in June of each year, NVTC shall submit to the CTB, Components to be funded in whole or in part with Toll Revenues from the Facility, to be paid to NVTC as provided therein; and,

**WHEREAS**, pursuant to the MOA, the Board has approved advance funding for this effort from the Toll Revolving Account pursuant to Section 33.2-1529 of the Code of Virginia and from other sources in the sum total of \$10,000,000; and,

**WHEREAS**, NVTC approved a program of Components, attached hereto, in the amount of \$9,800,675 at its meeting on June 2, 2016; and,

**WHEREAS**, DRPT recommends that the CTB approve the Components, attached hereto, and allocate funding for the Components in the Six Year Improvement Program for FY 2017- FY 2022.

**NOW THEREFORE, BE IT RESOLVED** that the Board approves the I-66 Inside the Beltway Project Components, attached hereto, that have been previously approved by NVTC; and,

**BE IT FURTHER RESOLVED** that the Board allocates \$9,800,675 in funding for the I-66 Inside the Beltway Project Components in the Six Year Improvement Program for FY 2017- FY 2022.

####

## CTB Decision Brief

### **Title: Approval of Transform I-66: Inside the Beltway Multimodal Program Components and Inclusion into FY 2017-2022 Six-Year Improvement Program**

**Issue:** On June 2, 2016 the Northern Virginia Transportation Commission (NVTC) approved an initial Multimodal Program for the Transform 66: Inside the Beltway Project (Project) that requires CTB approval and inclusion into the Six Year Improvement Program (SYIP) for FY 17- FY 22. DRPT and NVTC staff briefed the CTB on the NVTC Multimodal Program development process at the CTB workshops on May 17, 2016 in Staunton and on June 14, 2016 in Richmond. The Multimodal Program includes 10 components to be implemented by five separate entities for a total of \$9,800,675. A list of the components approved for funding by NVTC is attached.

**Facts:** A Memorandum of Agreement (MOA) between the CTB, VDOT and NVTC relating to the implementation of the Project was approved by the CTB on December 9, 2015 and executed on January 5, 2016. The MOA delegates to NVTC the authority to select and administer the implementation of multimodal components designed specifically to attain the improvement goals for the Project and to be financed from a portion of the toll revenues from the facility. The MOA outlines the process to be used by NVTC for selecting multimodal components to be funded with toll revenues and it requires the CTB to give final approval to the program of multimodal components by allocating funding for the components in the SYIP. The Commonwealth notified NVTC that it would provide up to \$10 million in funding in the FY 17- FY 22 SYIP for an initial program of multimodal components that can be implemented in conjunction with or in advance of the beginning of tolling of the facility in 2018. Following execution of the MOA, NVTC issued a call for projects, received project applications, developed a proposed multimodal program (with input and guidance from DRPT), received public input and, on June 2, approved a program of multimodal components for funding. The initial Multimodal Program includes 10 components to be implemented by five separate entities for a total of \$9,800,675. A list of the components approved for funding by NVTC is attached.

**Recommendation:** DRPT recommends that the Board approve the initial NVTC Multimodal Program and amend the FY 17-FY22 SYIP to include funding for the program components. DRPT staff provided input and guidance to NVTC throughout the development of the initial NVTC Multimodal Program. DRPT is satisfied that the NVTC Multimodal Program was developed in compliance with the MOA and that the selected components meet the improvement goals of Project.

**Action Required by CTB:** Approval of the attached resolution to allocate \$9,800,675 in funding for the 10 identified multimodal components in the SYIP for FY 17 - FY 22.

**Options:** Approve, Deny or Defer.



**TO:** Nick Donohue, Deputy Secretary of Transportation  
Jennifer Mitchell, Director of the Virginia Department of Rail and Public Transportation

**FROM:** Kate Mattice, Acting Executive Director

**DATE:** July 6, 2016

**SUBJECT:** Transform 66 Inside the Beltway Multimodal Components

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On June 2, 2016, NVTC approved a list of multimodal components designed to move more people more efficiently through the I-66 corridor inside the Beltway. The list of components includes 10 distinct efforts, totaling \$9.8 million in requested funding. Components include three new bus routes, two enhanced bus routes, bus stop improvements, three transit information and incentive programs, and a transit access project.

#### FY2017 Transform 66 Multimodal Component List

##### Characteristics

- **77.7 percent** of the funding requested (\$7.6 million) is for **new or enhanced bus service**.
- **12.5 percent** of the funding requested (\$1.2 million) will provide **travel information or transit incentives to travelers**.
- **9.8 percent** of the funding requested (\$0.96 million) will **improve access to Metrorail and bus services**.

##### Collective Benefits

- **Move an additional 5,000+ people** daily through the corridor in the morning peak period within the first year of operation;
- **Save approximately 370,000 hours** of travel delay per year;
- **Connect 20 activity centers** across Northern Virginia and the District;
- Provide **three new bus routes** and **increase service on two existing routes**; and,
- **Allow the corridor to operate more efficiently** by providing traveler information and transportation demand management services.

NVTC received \$42.7 million in funding requests for 19 components from Arlington County, the City of Alexandria, Fairfax County, the City of Falls Church, Loudoun County, and the Potomac and Rappahannock Transportation Commission (PRTC).

Based upon the evaluation conducted by NVTC in cooperation with the jurisdictional Multimodal Working Group, these components provide strong benefits, are cost effective, can be ready by toll day one (Summer 2017), and reflect jurisdictional priorities. Each application demonstrated that the component will benefit toll payers by moving more people through this corridor on transit and vanpools and carpools, reducing the congestion-based tolls drivers will pay.

Attached are additional background materials including profiles on each of selected components. Additional information can be found at <http://www.novatransit.org/i66multimodal/>



**Transform 66 Multimodal Project**  
**Project Overview**



## Transform 66 Inside the Beltway Partnership

### NVTC will:

Plan and select multimodal improvements

Issue grants to and coordinate with agencies to ensure efficient delivery of selected projects

Monitor effectiveness of projects

### VDOT will:

Widen I-66 eastbound between exits 67 and 71

Manage the design, construction, maintenance, and operations of I-66 Inside the Beltway tolls

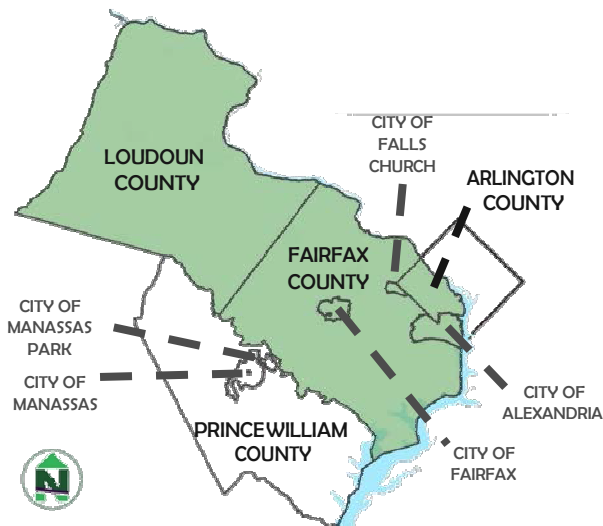
- 40-year agreement between the Commonwealth and Northern Virginia Transportation Commission
- Initial program to provide new transportation choices for when tolling starts



**Transform 66 Multimodal Project**



## Eligible Applicants



- Virginia Planning District 8 jurisdictions
- Agencies providing public transportation within those jurisdictions

## Eligible Component Types

New or enhanced local and commuter bus service, including capital and operating expenses

Vanpool, and formal and informal carpooling programs and assistance

Capital improvements for Washington Metropolitan Area Transit Authority rail and bus service, including capital and operating expenses

Park and ride lot(s) and access or improved access thereto

Roadway improvements to address impacts from the dynamic tolling of the Facility on roadways in the Corridor

Roadway operational improvements in the Corridor

Transportation Systems Management and Operations as defined in 23 U.S.C. § 101(a)(30).

Projects identified in previous studies (VDOT's June 2012/August 2013 Reports on I-66 Inside the Beltway, DRPT's 2009 Transportation Demand Management/Transit Report)

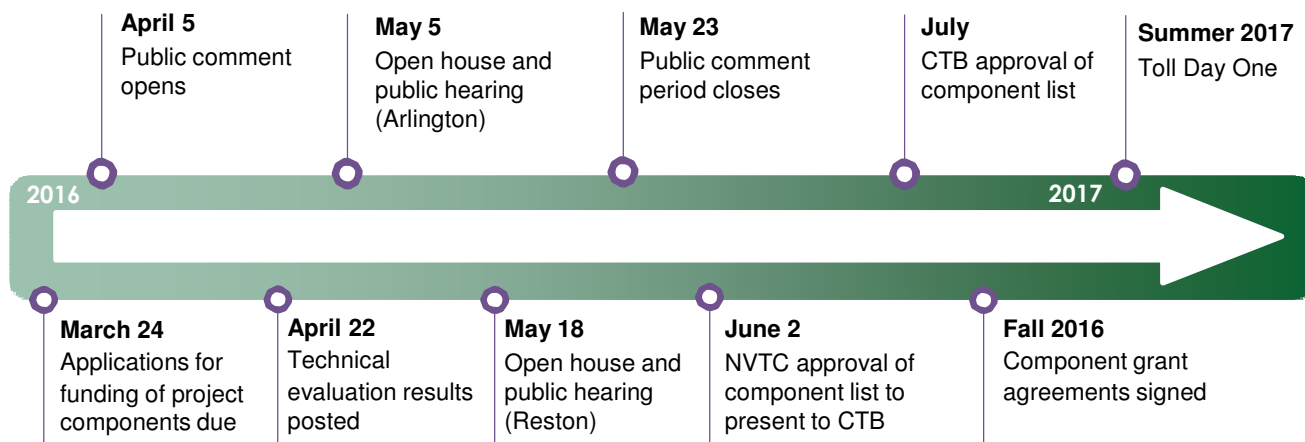


**Transform 66 Multimodal Project**





# Timeline



## Transform 66 Multimodal Project



## Approved Components

Approved Component	Applicant	Total Funding Request
Fairfax Connector Express Service from Government Center to State Department/Foggy Bottom	Fairfax	\$3,336,836
Loudoun County Stone Ridge Enhanced Transit	Loudoun	\$1,940,939
PRTC Gainesville to Pentagon Commuter Service	PRTC	\$887,900
Peak Period Service Expansion to Metrobus Route 2A Washington Blvd-Dunn Loring	Arlington	\$1,000,000
ART Bus Route 55 Peak Period Service Expansion	Arlington	\$450,000
Bus Stop Consolidation and Accessibility Improvements Lee Highway and Washington Blvd	Arlington	\$462,000
Expanded Transit Access through Capital Bikeshare	Falls Church	\$500,000
Multimodal Real-Time Transportation Information Screens	Arlington	\$250,000
Loudoun County Transportation Demand Management Transit Subsidy	Loudoun	\$623,000
Arlington County Expanded TDM Outreach to the I-66 Corridor	Arlington	\$350,000
	<b>Total</b>	<b>\$9,800,675</b>

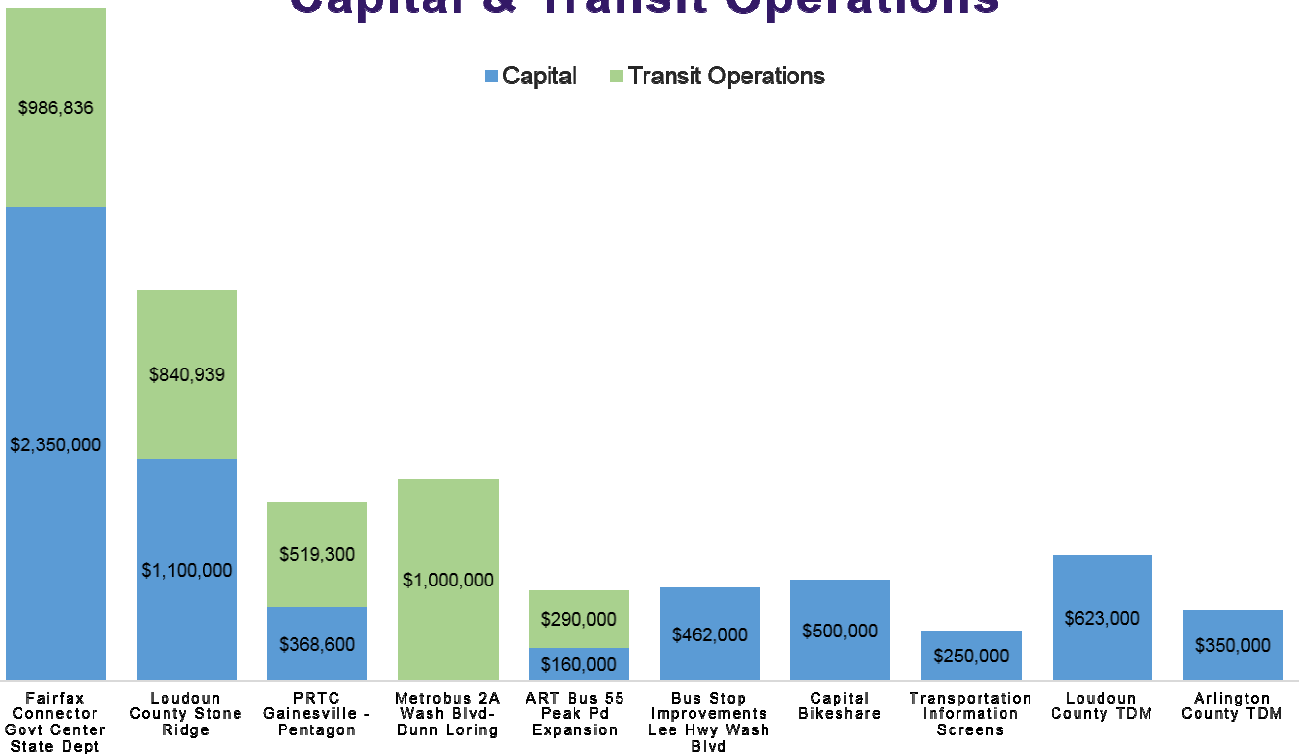


**Transform 66 Multimodal Project**



# Approved Components Capital & Transit Operations

■ Capital ■ Transit Operations



Transform 66 Multimodal Project



Investing in Multimodal Solutions

# Transform 66 Multimodal Project FY2017 Component Profiles



NORTHERN VIRGINIA TRANSPORTATION COMMISSION



## Fairfax Connector Express Service from Government Center to State Department/Foggy Bottom

**Applicant:**  
 Fairfax County

**Proposed Opening Date:**  
 July 1, 2017

**Description:**  
 This project includes the creation of a new weekday, peak-period Fairfax Connector Express bus service route between the Fairfax County Government Center park-and-ride facility, and the State Department and the Foggy Bottom neighborhood in Washington, DC.

The project application will support the capital costs of purchasing six new buses and support operational assistance to provide two years of new weekday, peak-period Fairfax Connector Express bus service.

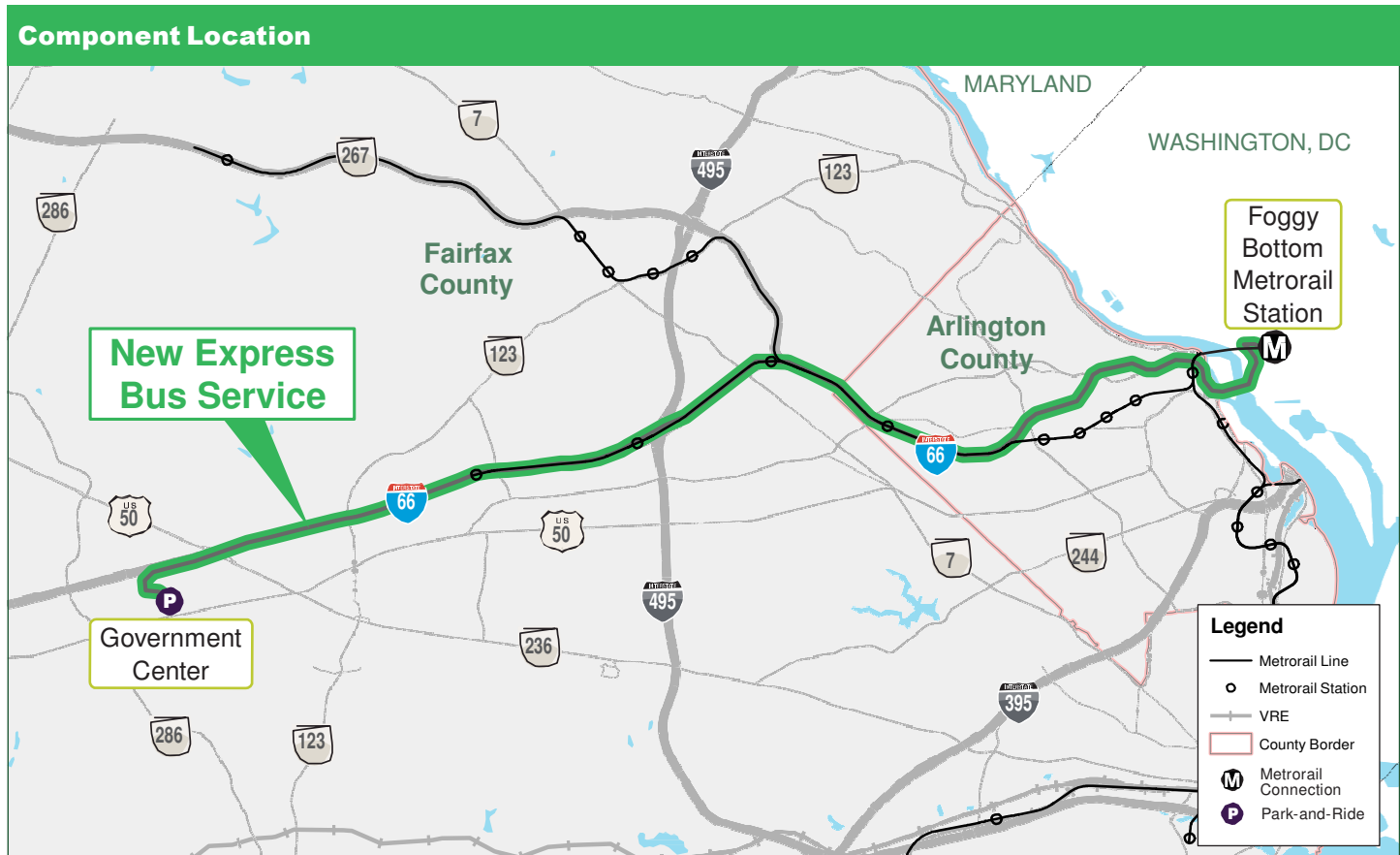
**Multimodal Transportation Improvement Type:**



New  
 Bus Service

**Benefit to Tollpayers:**  
 This project component benefits the toll payers by providing users with transportation choice in the corridor. The proposed service will also move more people in the corridor with fewer vehicles, decreasing demand on I-66 inside the Beltway and ensuring consistent travel speeds for toll users.

**Documented in:**  
 DRPT I-66 Transit/TDM Study  
 2015 Fairfax County Transit Development Plan



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b>Person Throughput (up to 45 points)</b> Project is likely to result in an increase in the corridor's peak period, peak direction person throughput. The project will move a higher ratio of people to vehicles compared to existing conditions.	<b>30</b>
<b>Peak Period Travel Time (up to 15 points)</b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>15</b>
<b>Connectivity (up to 15 points)</b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b>Accessibility (up to 15 points)</b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b>Diversion Mitigation (up to 10 points)</b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b>Total Component Benefit Score</b>	<b>80</b>

**Cost Evaluation:**

<b>Total Project Cost*</b>	<b>\$ 3,336,836</b>
<b>Funding Request*</b>	<b>\$ 3,336,836</b>
<b>Percent of Project Costs Requested</b>	<b>100%</b>
<b>Cost Effectiveness Score*</b> (Total Component Benefit Score/Funding Request)	<b>24</b>

**Additional Information:**

This route addresses connectivity by providing a direct connection to the State Department building from the Fairfax County Government Center complex. During the morning peak period when I-66 inside the Beltway is restricted to high-occupancy vehicle (HOV) use, single-occupancy vehicle (SOV) commuters traveling eastbound on I-66 outside the Beltway must now divert, at the Beltway, to U.S. 50 or U.S. 29 to continue inbound. The same is necessary westbound during afternoon HOV restrictions.

To reach the State Department, transit commuters must currently take Fairfax Connector Bus Route 623 to Vienna Metro Station, transfer to the Orange Line to the Foggy Bottom Metro Station, then transfer to a Metrobus route or walk six blocks southeast.

The Transform 66 Multimodal Project is done in conjunction with:

\*Reflects change in funding request from original application.

**Transform 66 Multimodal Project  
FY2017 Component Application Summary**

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*Investing in Multimodal solutions*



# Loudoun County Stone Ridge Enhanced Transit

## Applicant:

Loudoun County

## Proposed Opening Date:

July 1, 2017

## Description:

This project includes the construction of a 250-space park-and-ride lot and two years of operation for new commuter bus transit service from the new lot in the unincorporated community of Aldie. Aldie, located in Loudoun County between Chantilly and Middleburg, is adjacent to Arcola, an activity center identified by the Metropolitan Washington Council of Governments and one of the fastest growing parts of the county.

The project application will support the capital costs of purchasing two new buses and support the operational assistance to provide two years of new bus service.

## Multimodal Transportation Improvement Type:



New Bus Service

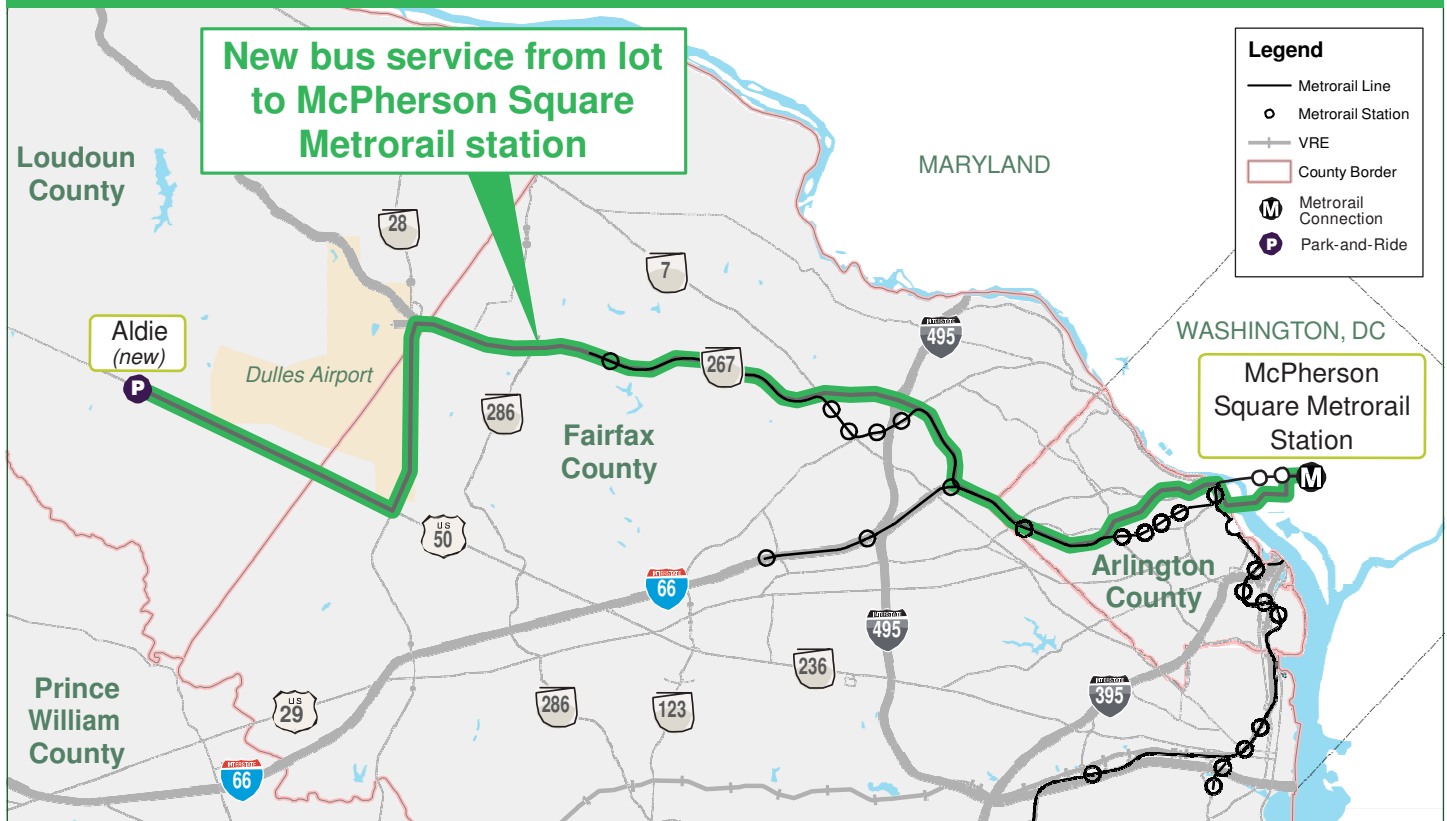
## Benefit to Tollpayers:

This program will have an immediate impact, benefiting tollpayers by reducing the number of single-occupancy vehicles (SOV) on I-66 inside the Beltway, providing bus connections and service to Washington DC via I-66, and converting SOV riders to transit riders.

## Documented in:

Loudoun County Transit Development Plan  
Northern Virginia Park & Ride Lot Feasibility Study (VDOT, April 2003)

## Component Location



\*Reflects change in funding request from original application.

**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project is likely to result in an increase in the corridor's peak period, peak direction person throughput. The Project will move a higher ratio of people to vehicles compared to existing conditions.	<b>30</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>10</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>15</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>10</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b>Total Component Benefit Score</b>	<b>75</b>

**Cost Evaluation:**

<b>Total Project Cost*</b>	<b>\$ 2,628,980</b>
<b>Funding Request*</b>	<b>\$ 1,940,939</b>
<b>Percent of Project Costs Requested*</b>	<b>74%</b>
<b>Cost Effectiveness Score*</b> <i>(Total Component Benefit Score/Funding Request)</i>	<b>39</b>

The Transform 66 Multimodal Project is done in conjunction with:



# PRTC Gainesville to Pentagon Commuter Service

**Applicant:**

Potomac Rappahannock Transportation Commission

**Proposed Opening Date:**

December 12, 2016

**Description:**

This project includes the implementation of a new commuter bus transit service between Gainesville and the Pentagon and two and a half years of operating costs.

The funding request also includes amounts for route marketing, communication, and lease costs for additional park-and-ride facility spaces.

**Multimodal Transportation Improvement Type:**



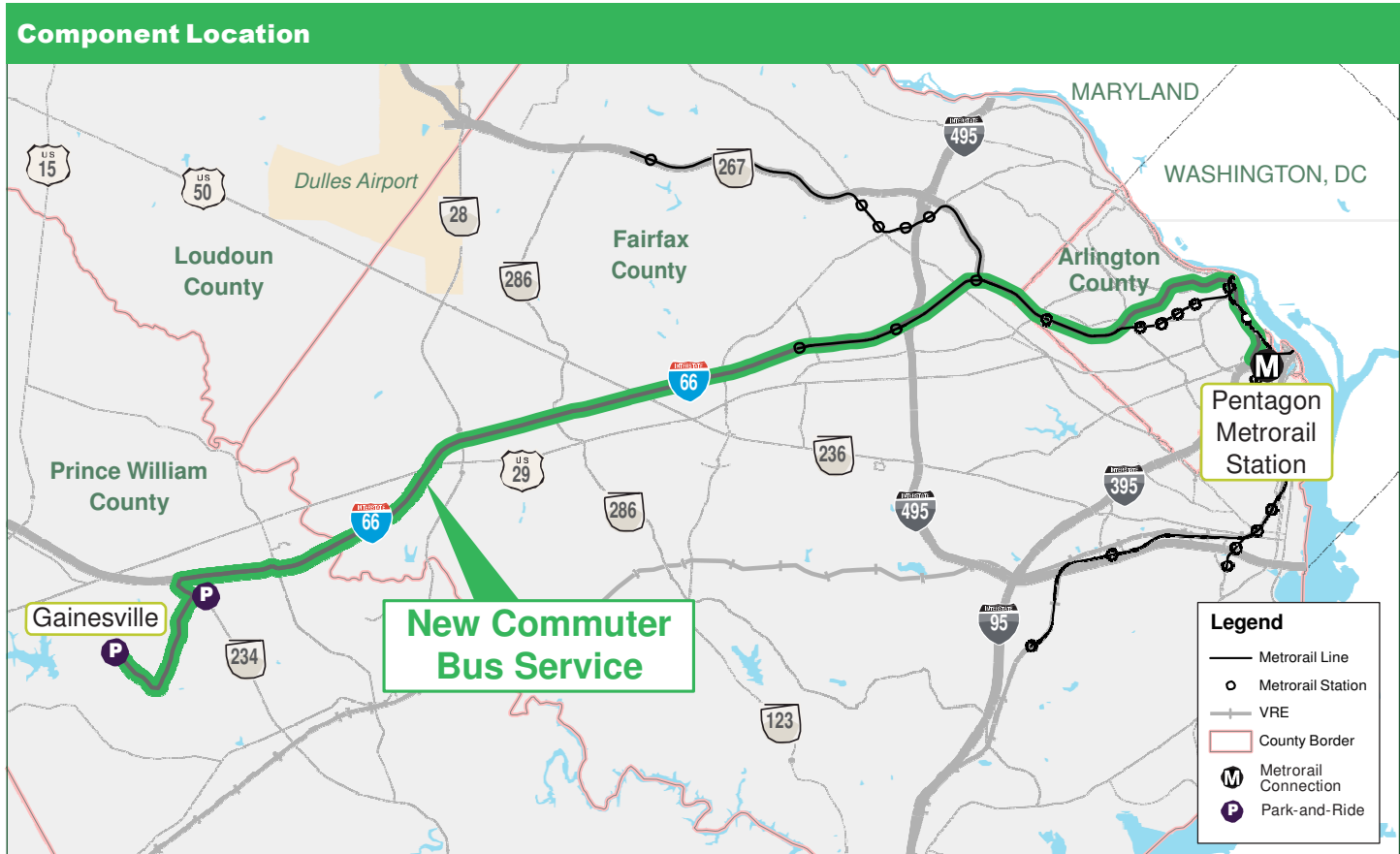
New Bus Service

**Benefit to Tollpayers:**

This project benefits toll payers by shifting single-occupancy vehicle trips to transit vehicle trips, thereby reducing congestion on the tolled facility. Since this will be a dynamic-variable toll facility, the reduction in single-occupancy vehicle trips also serves to maintain a lower toll rate for those that choose to pay to use the managed lanes, reducing congestion on I-66 inside the Beltway.

**Documented in:**

- Transportation Planning Board Constrained Long-Range Plan
- Other Regional Plan
- PRTC Long-Range Plan



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project is likely to result in an increase in the corridor's peak period, peak direction person throughput. The project will move a higher ratio of people to vehicles compared to existing conditions.	<b>30</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>10</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b><i>Total Component Benefit Score</i></b>	<b>75</b>

**Cost Evaluation:**

<b><i>Total Project Cost</i></b>	<b>\$ 887,900</b>
<b><i>Funding Request</i></b>	<b>\$ 887,900</b>
<b><i>Percent of Project Costs Requested</i></b>	<b>100%</b>
<b><i>Cost Effectiveness Score</i></b> <i>(Total Component Benefit Score/Funding Request)</i>	<b>84</b>

**Additional Information:**

The proposed service will improve connectivity by directly linking residents of western Prince William County with the largest transit hub in the region, the Pentagon. The Pentagon provides access to two Metrorail lines (Blue and Yellow lines), other regional bus services, and Department of Defense facility shuttles. Transit trips to employment centers such as Alexandria, Crystal City, Pentagon City, and Mark Center become more convenient for Gainesville area residents.

The Transform 66 Multimodal Project is done in conjunction with:



# Peak Period Service Expansion to Metrobus Route 2A, Washington Blvd-Dunn Loring

**Applicant:**  
Arlington County

**Proposed Opening Date:**  
August 31, 2016

**Description:**  
By increasing bus frequency and decreasing route run times, this project will serve 250 new weekday riders, increasing daily ridership to 1,090. Currently, half of commuters in the Metrobus 2A service area are destined for jobs in Washington, D.C., according to the Household Travel Survey. These riders would otherwise be traveling on the I-66 Inside the Beltway corridor. The 2A operates on US 29 and Washington Boulevard, adjacent to I-66, and connects three jurisdictions. Requested operational funds will allow the 2A to run every 10 minutes, as opposed to 15, in the AM and PM peak periods for two years.

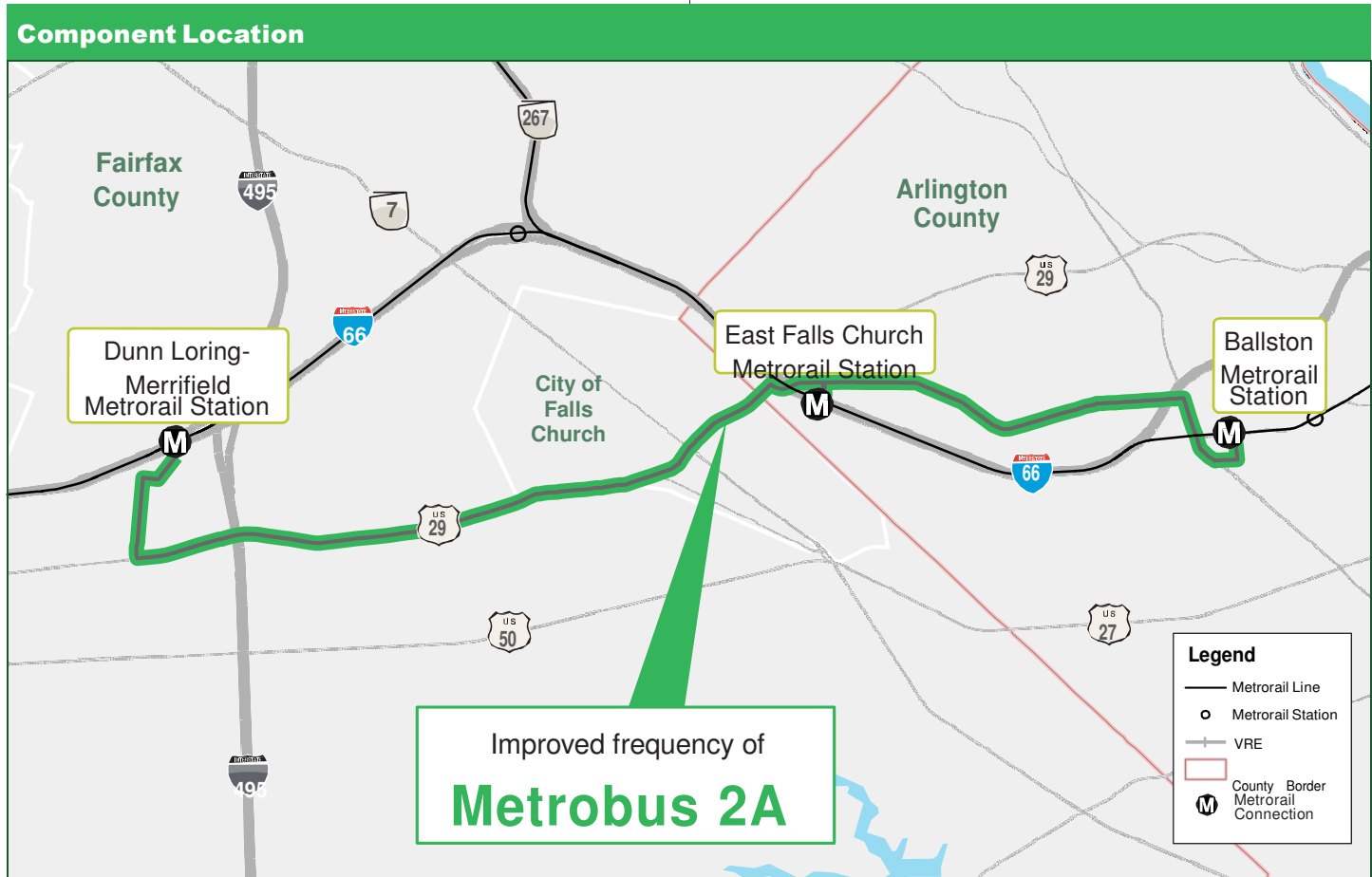
**Multimodal Transportation Improvement Type:**



Enhanced Bus Service

**Benefit to Tollpayers:**  
This service benefits toll-paying users of I-66 inside the Beltway by providing additional peak-period transit service on the parallel corridors of US 29 in Fairfax County, en route to the project corridor, and Washington Street in the City of Falls Church and Washington Boulevard in Arlington County in the project corridor. Increasing transit service will encourage more commuters to take the bus, thus removing cars from these roads and parallel commuting routes, including I-66.

**Documented in:**  
Arlington County Transit Development Plan



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project is likely to result in an increase in the corridor's peak period, peak direction person throughput. The component will move a higher ratio of people to vehicles compared to existing conditions.	<b>30</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>5</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b>Total Component Benefit Score</b>	<b>70</b>

**Cost Evaluation:**

<b>Total Project Cost</b>	<b>\$ 1,000,000</b>
<b>Funding Request</b>	<b>\$ 1,000,000</b>
<b>Percent of Project Costs Requested</b>	<b>100%</b>
<b>Cost Effectiveness Score (Total Component Benefit Score/Funding Request)</b>	<b>70</b>

The Transform 66 Multimodal Project is done in conjunction with:



# ART Bus Route 55 Peak Period Service Expansion

## Applicant:

Arlington County

## Proposed Opening Date:

July 1, 2017

## Description:

By adding a sixth bus to the route during the AM and PM peak periods, this project will allow for an extra 3.5 round trips daily. The improved frequency - buses will run every 12 minutes - will attract 250 new weekday riders, increasing daily ridership to 1,300. Currently, half of commuters in the ART 55 service area - Lee Highway between Rosslyn and East Falls Church - are destined for jobs in Washington, D.C., according to the Household Travel Survey. These riders would otherwise be traveling along the I-66 Inside the Beltway corridor. Requested funds support the rehabilitation of six buses and operational assistance for two years.

## Multimodal Transportation Improvement Type:



Enhanced Bus Service

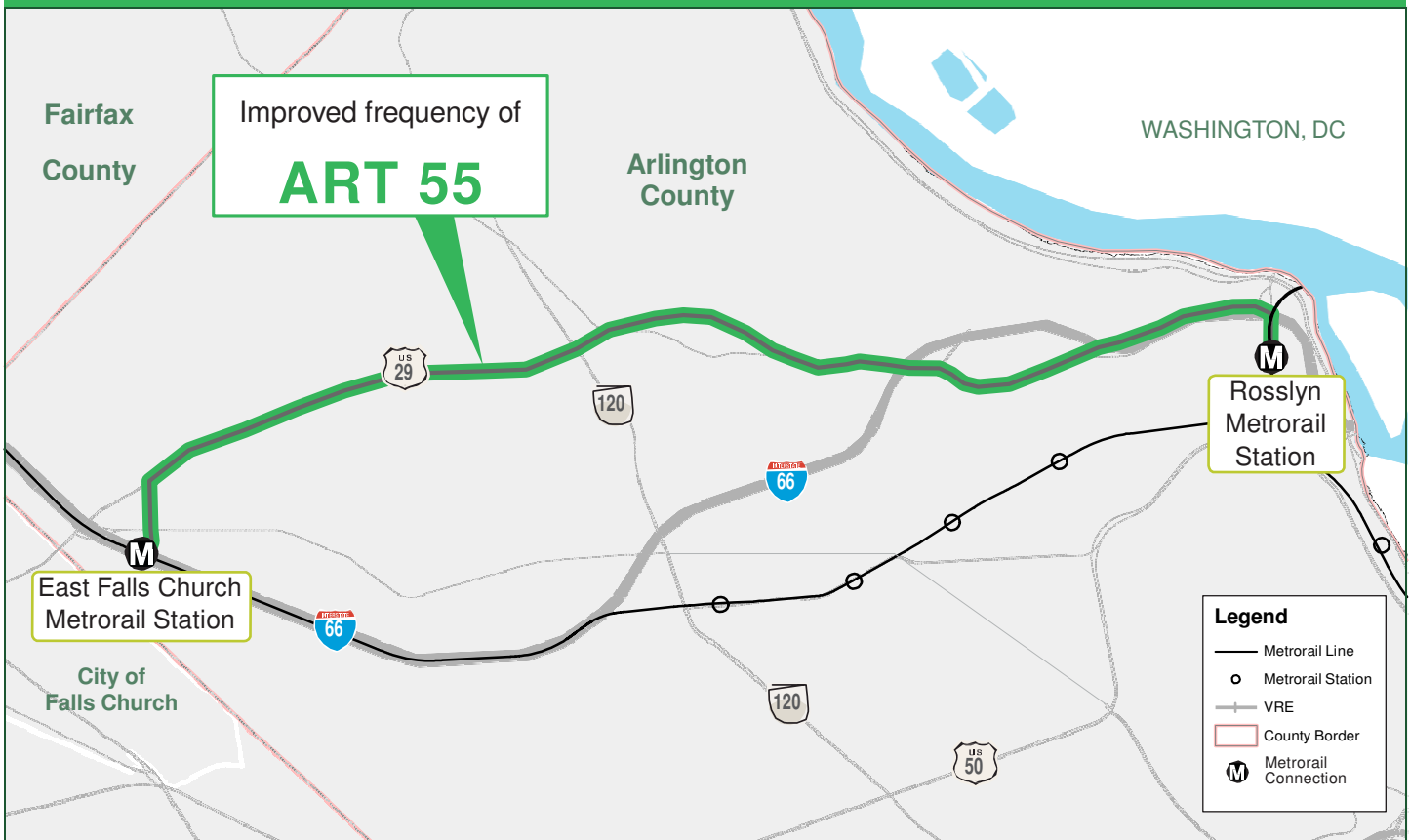
## Benefit to Tollpayers:

This service benefits toll-paying users of I-66 inside the Beltway by providing additional peak-period transit service in the parallel corridor of Lee Highway. Increasing transit service will encourage more people to ride the bus, thus removing cars from Lee Highway and parallel commuting routes, including I-66 inside the Beltway.

## Documented in:

Arlington County Transit Development Plan  
Arlington County Capital Improvement Program

## Component Location



**Benefit Evaluation:**

Evaluation Criteria	Weighted Benefit Score
<b>Person Throughput (up to 45 points)</b> Project is likely to result in an increase in the corridor's peak period, peak direction person throughput. The component will move a higher ratio of people to vehicles compared to existing conditions.	<b>30</b>
<b>Peak Period Travel Time (up to 15 points)</b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>5</b>
<b>Connectivity (up to 15 points)</b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b>Accessibility (up to 15 points)</b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b>Diversion Mitigation (up to 10 points)</b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b>Total Component Benefit Score</b>	<b>70</b>

**Cost Evaluation:**

<b>Total Project Cost</b>	<b>\$ 450,000</b>
<b>Funding Request</b>	<b>\$ 450,000</b>
<b>Percent of Project Costs Requested</b>	<b>100%</b>
<b>Cost Effectiveness Score (Total Component Benefit Score/Funding Request)</b>	<b>156</b>

**Additional Information:**

This project aims to enhance connections within the Lee Highway corridor by increasing the frequency of bus service between the East Falls Church and Rosslyn Metrorail stations, and provides enhanced connectivity to the region via improved access to Metro. Average service frequency will be improved from 16 minutes to 12 minutes during extended weekday peak periods.

The Transform 66 Multimodal Project is done in conjunction with:





# Bus Stop Consolidation and Accessibility Improvements

## Applicant:

Arlington County

## Proposed Opening Date:

October 1, 2018

## Description:

By consolidating underutilized and closely spaced bus stops along seven routes – Metrobus 2A, 3Y, 15L, 38B, 42 and 77, and ART 55 – this project reduces travel times and increases new bus riders by 15 percent. Thirty bus stops will be improved through the addition of bus stop pads and pedestrian facilities (sidewalks, curb ramps and crosswalks) that are compliant with the Americans with Disabilities Act, and enhanced passenger amenities (shelters, benches, lighting, customer information, etc.). Requested funds will support capital costs.

## Multimodal Transportation Improvement Type:



Enhanced Bus Service

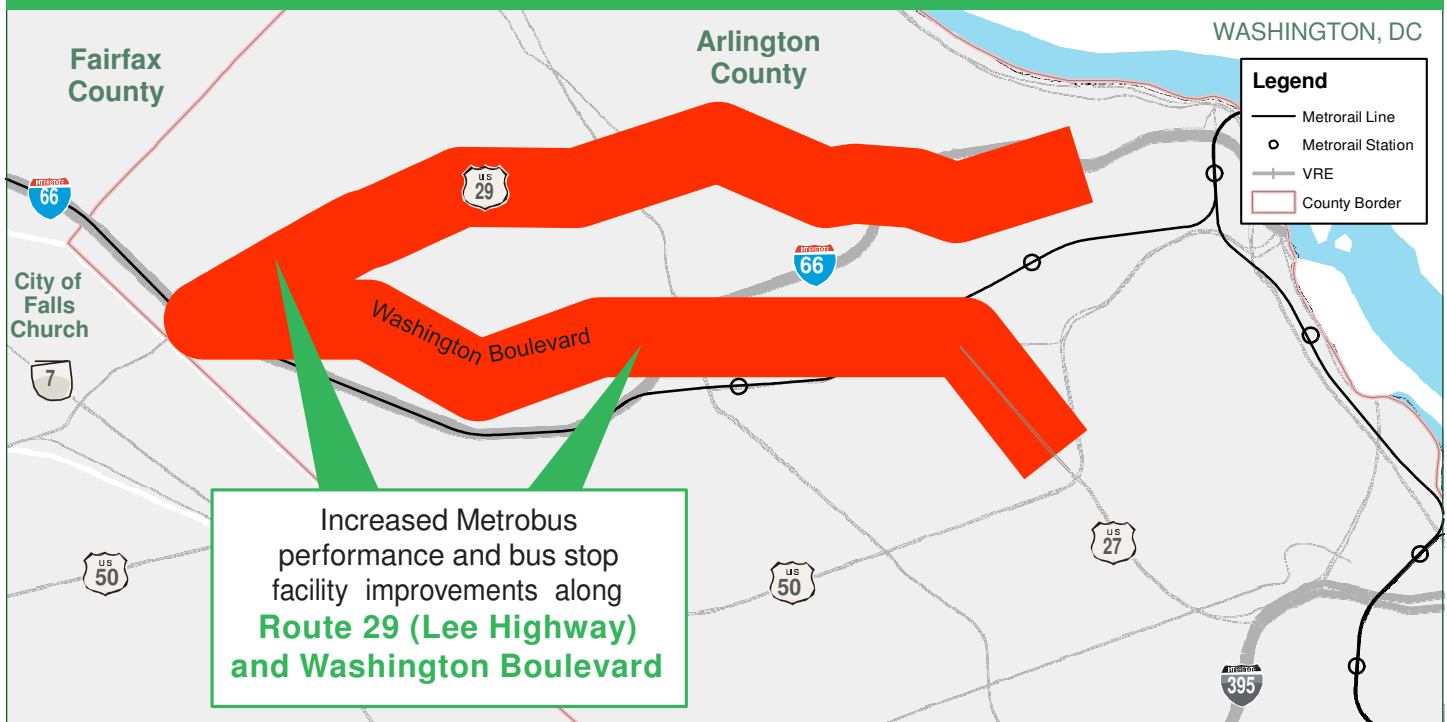
## Benefit to Tollpayers:

This project benefits toll-paying users of I-66 inside the Beltway by providing more streamlined bus service along Lee Highway; reducing both the amount of time a bus sits at the stop and the number of bus stops; and increasing bus speed through the corridor. Having more accessible bus stops will encourage more people to ride the bus, thus removing cars from Lee Highway and parallel commuting routes, including I-66.

## Documented in:

Arlington County Transit Development Plan  
Arlington County Capital Improvement Plan

## Component Location



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b>Person Throughput (up to 45 points)</b> Project supports an increase in peak period, peak direction vehicular throughput in the corridor that is significant (greater than 1 percent of the baseline).	<b>15</b>
<b>Peak Period Travel Time (up to 15 points)</b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>10</b>
<b>Connectivity (up to 15 points)</b> Project provides new modal connections and/or further promotes transportation choice.	<b>15</b>
<b>Accessibility (up to 15 points)</b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b>Diversion Mitigation (up to 10 points)</b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>10</b>
<b>Total Component Benefit Score</b>	<b>65</b>

**Cost Evaluation:**

<b>Total Project Cost</b>	<b>\$ 462,000</b>
<b>Funding Request</b>	<b>\$ 462,000</b>
<b>Percent of Project Costs Requested</b>	<b>100%</b>
<b>Cost Effectiveness Score</b> (Total Component Benefit Score/Funding Request)	<b>141</b>

The Transform 66 Multimodal Project is done in conjunction with:



# Expanded Transit Access, Through Capital Bikeshare

## Applicant:

City of Falls Church

## Proposed Opening Date:

March 1, 2017

## Description:

This component will fund the operations of an additional 16 bike share stations to serve as a first-mile/last-mile solution for two Orange and Silver line Metrorail stations: East Falls Church and West Falls Church. This effort has the potential to increase daily trips at the two Metrorail stations by 450. These stations, which will fill a gap in the regional bike share network, will extend the catchment area of transit stations, increase travel options and reduce pressure on the regional highway system.

Requested funds will provide three years of operating assistance and maintenance for bike share stations along N Washington Street and S Washington Street (Route 29), W Broad Street (Route 7), and the W&OD Trail in the City of Falls Church. The stations are proposed to be purchased and installed as part of a different funding program.



## Multimodal Transportation Improvement Type:



Access to Transit

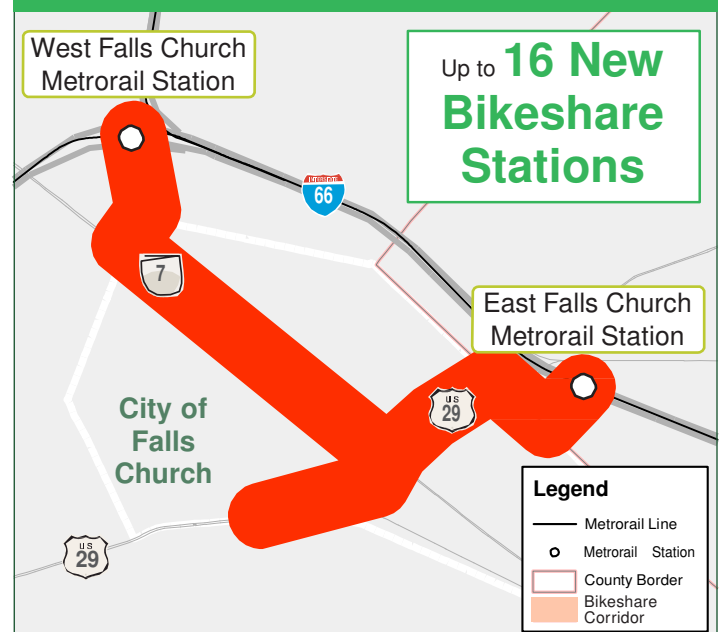
## Benefit to Tollpayers:

This project component benefits the toll payers by reducing congestion on I-66 inside the Beltway. The component increases connections and access to Metrorail stations along the I-66 corridor. The increased connections will allow more people to travel by transit, thereby reducing vehicle demand and congestion on I-66 inside the Beltway.

## Documented in:

City of Falls Church Planning/Safety Study  
City of Falls Church Master Bike Plan

## Component Location



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b>Person Throughput (up to 45 points)</b> Project will increase the corridor's peak period, peak direction throughput by supporting transportation choice.	<b>15</b>
<b>Peak Period Travel Time (up to 15 points)</b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>15</b>
<b>Connectivity (up to 15 points)</b> Project provides new modal connections and/or further promotes transportation choice.	<b>15</b>
<b>Accessibility (up to 15 points)</b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b>Diversion Mitigation (up to 10 points)</b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>N/A</b>
<b>Total Component Benefit Score</b>	<b>60</b>

**Cost Evaluation:**

<b>Total Project Cost</b>	<b>\$ 2,854,880</b>
<b>Funding Request</b>	<b>\$ 500,000</b>
<b>Percent of Project Costs Requested</b>	<b>18%</b>
<b>Cost Effectiveness Score*</b> (Total Component Benefit Score/Funding Request)	<b>120</b>

**Additional Information:**

Locating bikeshare stations throughout the central portion of the City of Falls Church and along corridors toward Orange Line Metrorail stations will allow for those commuting to or from Falls Church to use bikeshare as a first-mile/last-mile connection mode to access Metrorail and bus routes.

The Transform 66 Multimodal Project is done in conjunction with:



# Multimodal Real-Time Transportation Information Screens in Arlington County

**Applicant:**  
Arlington County

**Proposed Opening Date:**  
January 1, 2017

**Description:**

The provision of real-time information on transit arrivals, Capital Bikeshare and Zipcar availability, and I-66 travel times and toll rates will complement Arlington County's successful transportation demand management program and increase the number of daily Metrorail trips by 870. These multimodal, real-time transportation screens, which provide dynamic information, will be placed at the East Falls Church, Virginia Square-GMU, Clarendon, and Court House Metrorail stations; high-utilization bus stops; and in residential and office buildings in the Rosslyn-Ballston corridor. Comprehensive, up-to-the minute information will allow commuters to make informed travel choices and increase transit use. Requested funds will cover the purchase of 50 screens.

**Multimodal Transportation Improvement Type:**



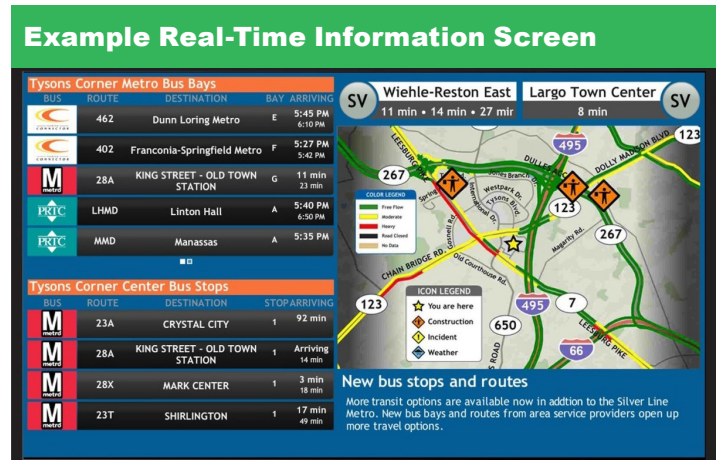
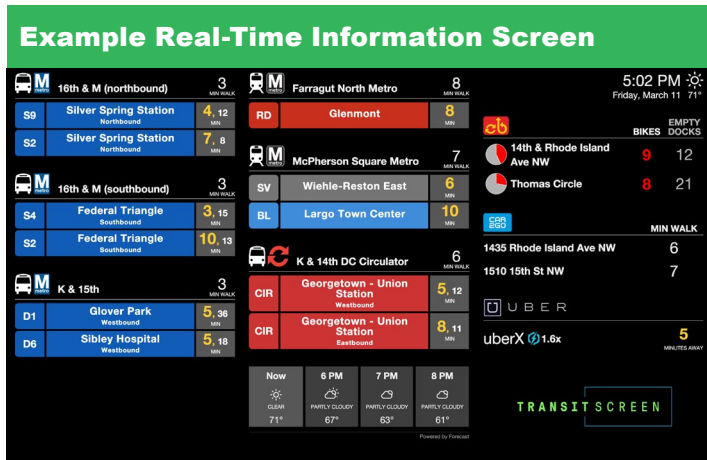
Transportation Demand Management

**Benefit to Tollpayers:**

This project will benefit the toll-paying users of I-66 inside the Beltway by providing real-time information on toll rates and multimodal commuting options, thereby removing vehicles from I-66 and surrounding roads and helping ease congestion.

**Documented in:**

Arlington County Commuter Services Strategic Plan  
VDOT 2012 I-66 Multimodal Study Inside the Beltway



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project will manage peak period, peak direction travel demand in the corridor by seeking to change travel behavior by providing information or incentives.	<b>15</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>15</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>5</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>3</b>
<b><i>Total Component Benefit Score</i></b>	<b>48</b>

**Cost Evaluation:**

<b><i>Total Project Cost</i></b>	<b>\$ 292,600</b>
<b><i>Funding Request</i></b>	<b>\$ 250,000</b>
<b><i>Percent of Project Costs Requested</i></b>	<b>85%</b>
<b><i>Cost Effectiveness Score</i></b> <i>(Total Component Benefit Score/Funding Request)</i>	<b>193</b>

**Additional Information:**

These screens give commuters the information needed to choose the best travel option. For example commuters could use Capital Bikeshare to travel to a bus stop or take Metrobus instead of Metrorail to shorten their wait time. This project complements other proposed transit and TDM services for the I-66 corridor. The alternatives provided through this project make it more likely that users will take advantage of alternatives.

The Transform 66 Multimodal Project is done in conjunction with:



# Loudoun County Transportation Demand Management

## Applicant:

Loudoun County

## Proposed Opening Date:

July 1, 2017

## Description:

This project expands a successful transportation demand management (TDM) program by targeting commuters bound for locations along the I-66 corridor inside the Beltway or Washington, D.C. Currently, 83 percent of Loudoun commuters using transit, vanpools or carpools are destined for those locations, according to the Household Travel Survey. Expected to serve 900 new riders, the TDM program will provide marketing and incentives during a one-year promotional period. Incentives include reduced fares on express buses into D.C. or to Orange and Silver line Metrorail stations, a SmarTrip® promotion for new Metrorail riders, and financial rewards for new carpools and vanpools.

## Multimodal Transportation Improvement Type:



Transportation Demand  
Management

## Benefit to Tollpayers:

This program will have an immediate impact, benefiting tollpayers by reducing the number of single-occupancy vehicles (SOV) on I-66 inside the Beltway and providing direct, tangible payments for the use of transportation alternatives. The program is scalable, depending on the desired benefit or availability of funding. Finally, the program will be designed to reach Loudoun County residents at their jobs within the corridor through partnerships with other jurisdictions in the region.

## Documented in:

Loudoun County Vision Long-Range Plan  
Loudoun County Countywide Transportation Plan (2010)



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project is likely to result in a significant increase in the corridor's peak period, peak direction person throughput (greater than 1 percent of the baseline). The project will move a higher ratio people to vehicles compared to existing conditions.	<b>45</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>10</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>15</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>15</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>7</b>
<b><i>Total Component Benefit Score</i></b>	<b>92</b>

**Cost Evaluation:**

<b><i>Total Project Cost</i></b>	<b>\$ 623,000</b>
<b><i>Funding Request</i></b>	<b>\$ 623,000</b>
<b><i>Percent of Project Costs Requested</i></b>	<b>100%</b>
<b><i>Cost Effectiveness Score</i></b> <i>(Total Component Benefit Score/Funding Request)</i>	<b>147</b>

The Transform 66 Multimodal Project is done in conjunction with:





# Expanded TDM Outreach to the I-66 Corridor

## Applicant:

Arlington County

## Proposed Opening Date:

January 1, 2017

## Description:

This project expands a proven transportation demand management (TDM) program by targeting commuters bound for locations along the I-66 corridor inside the Beltway or Washington, D.C. Robust employer and residential outreach and education services, including a focus on new carpool and vanpool initiatives, will eliminate 1,500 single-occupant car trips through the I-66 corridor inside the Beltway each day. These initiatives will provide convenient connections to existing transit, helping to resolve the first mile/last mile issue and feeding new riders into existing transit services. Requested funds will support incentives and marketing. Arlington Transportation Partners will provide, in kind, a .25 full-time equivalent residential outreach person to complement the grant-funded contract staff.

## Multimodal Transportation Improvement Type:



Transportation Demand Management

## Benefit to Tollpayers:

This project will benefit the toll-paying users of I-66 by providing information, incentives and encouragement to choose multimodal commute options, thereby removing vehicles from I-66 and parallel roads.

## Documented in:

Arlington County Commuter Services Strategic Plan  
VDOT 2012 I-66 Multimodal Study Inside the Beltway



**Benefit Evaluation:**

<b>Evaluation Criteria</b>	<b>Weighted Benefit Score</b>
<b><i>Person Throughput (up to 45 points)</i></b> Project will manage peak period, peak direction travel demand in the corridor by seeking to change travel behavior by providing information or incentives.	<b>15</b>
<b><i>Peak Period Travel Time (up to 15 points)</i></b> Project is likely to result in significant reductions (30 percent or greater) in inbound AM peak hour total travel time per person.	<b>10</b>
<b><i>Connectivity (up to 15 points)</i></b> Project provides new modal connections and/or further promotes transportation choice.	<b>10</b>
<b><i>Accessibility (up to 15 points)</i></b> Project addresses, improves, or enhances "first/last mile" travel between home/employment locations and transit or carpool/vanpool facilities.	<b>10</b>
<b><i>Diversion Mitigation (up to 10 points)</i></b> Project provides operational or geometric changes along a roadway in the corridor that may be used by trips that are diverted from I-66 due to tolling or HOV restrictions.	<b>7</b>
<b><i>Total Component Benefit Score</i></b>	<b>52</b>

**Cost Evaluation:**

<b><i>Total Project Cost</i></b>	<b>\$ 390,000</b>
<b><i>Funding Request</i></b>	<b>\$ 350,000</b>
<b><i>Percent of Project Costs Requested</i></b>	<b>90%</b>
<b><i>Cost Effectiveness Score</i></b> <i>(Total Component Benefit Score/Funding Request)</i>	<b>148</b>

**Additional Information:**

TDM consistently makes people aware of travel choices and connections they did not realize they had. Often the connection between modes is complicated or requires research that people do not do on their own, but the intensive information and personal connection of TDM helps people do so. Providing comprehensive information, incentives, and encouragement makes a big difference in people's awareness and use of options.

All TDM programs around the country use outreach as an essential component of getting travelers to use alternatives to driving. Integrating the availability of new enhanced transit and TDM services being proposed for I-66 funding into this outreach effort will be essential in getting commuters to become aware of such options and make them much more likely to use them. In this respect, this project is an important element for the success of many of the other proposed I-66 projects.

The Transform 66 Multimodal Project is done in conjunction with:

