

NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

MEMORANDUM

FOR: Chairman Martin E. Nohe and Members
Northern Virginia Transportation Authority

FROM: Monica Backmon, Executive Director

DATE: November 3, 2016

SUBJECT: Regional Funding Project 013-60721 (Lee Highway Corridor Intelligent Transportation System Enhancements)

1. **Recommendation.** Approval of attached Standard Project Agreement (SPA) 013-60721.
2. **Suggested motion.** *I move approval of the proposed Standard Project 013-60721 (Lee Highway Corridor Intelligent Transportation System Enhancements), in accordance with NVTAs approved Project Description Sheets for each project to be funded as appended to the Standard Project Agreements; and that the Executive Director sign it on behalf of the Authority.*
3. **Background.**
 - a. The Authority previously approved this project for funding using FY2017 70% regional revenues on July 14, 2016.
 - b. The attached SPA presented by the Arlington County is consistent with the project previously approved by the Authority.
 - c. The attached SPA has been reviewed by the Council of Counsels, noting that there were no legal issues.

Attachment: SPA for NVTAs Project Number 013-60721

Coordination: Council of Counsels

**Standard Project Agreement for Funding and Administration
between
Northern Virginia Transportation Authority
and
Arlington County
(Recipient Entity)**

Project Name: Lee Highway Corridor ITS Enhancements

NVTA Project Number: 013-60721

This Standard Project Agreement for Funding and Administration ("this Agreement") is made and executed in duplicate on this _____ day of _____, 20__, as between the Northern Virginia Transportation Authority ("NVTA") and _____ ("Recipient Entity").

WITNESSETH

WHEREAS, NVTA is a political subdivision of the Commonwealth of Virginia created by the Northern Virginia Transportation Authority Act ("the NVTA Act"), Chapter 25 of Title 33.2 of the Code of Virginia, as amended;

WHEREAS, Section 33.2-2500(4) of the Code of Virginia authorizes NVTA to enter into project agreements with certain statutorily designated entities for the provision of transportation facilities and services to the area embraced by NVTA;

WHEREAS, Section 33.2-2509 of the Code of Virginia authorizes NVTA to use funds from a fund established pursuant to that Code section (the "NVTA Fund") in order to assist in the financing, in whole or in part, of certain regional transportation projects in accordance with Code Section 33.2-2510;

WHEREAS, the NVTA Fund provides for the deposit therein of certain dedicated revenues and other funds appropriated by the Virginia General Assembly;

WHEREAS, Section 33.2-2510 of the Code of Virginia authorizes the use of funds from the NVTA Fund and the use of proceeds from NVTA debt issuances ("NVTA Bond Proceeds") to be used by NVTA solely for transportation purposes benefitting those counties and cities embraced by NVTA;

WHEREAS, the Project set forth and described on Appendix A to this Agreement ("the Project") satisfies the requirements of Virginia Code Section 33.2-2510;

WHEREAS, the Project is to be financed, as described in Appendix B, in whole or in part, by funds from the NVTAFund and/or from NVTABond Proceeds, is located within a locality embraced by NVTAs geographical borders, or is located in an adjacent locality, but only to the extent that any such extension is an insubstantial part of the Project and is essential to the viability of the Project within the localities embraced by NVTAFund;

WHEREAS, Arlington County formally requested that NVTAFund provide funding to the Project by timely submitting an application for NVTAFund funding in response to NVTAs call for projects;

WHEREAS, NVTAFund has reviewed Arlington Countys application for funding and has approved Arlington Countys administration and performance of the Projects described scope of work;

WHEREAS, based on the information provided by Arlington County, NVTAFund has determined that the Project complies with all requirements of the NVTAFund Act related to the use of moneys identified in Virginia Code Sections 33.2-2510(A),(C)1 and all other applicable legal requirements;

WHEREAS, the funds to be provided by NVTAFund described in Appendix B have been duly authorized and directed by Arlington County to finance the Project;

WHEREAS, NVTAFund agrees that Arlington County will design and/or construct the Project or perform such other specific work for the Project and Arlington County agrees that it will perform such work on the terms and conditions set forth in this Agreement and the Appendices appended thereto;

WHEREAS, both parties have concurred in the Arlington Countys administration, performance, and completion of the Project on the terms and conditions set forth in this Agreement and its Appendices and in accordance with all applicable federal, state, and local laws and regulations; and

WHEREAS, NVTAs governing body and Arlington Countys governing body have each authorized that their respective designee(s) execute this agreement on their respective behalf(s) as evinced by copies of each such entitys clerk's minutes which are appended hereto as Appendix E;

NOW THEREFORE, in consideration of the promises made mutual covenants, and agreements contained herein, the parties hereto agree as follows:

A. Recipient Entity's Obligations

Arlington County shall:

1. Complete or perform all said work as described in Appendix A, advancing such work diligently and ensuring that all work is completed in accordance with all applicable federal, state, and local laws and regulations, and all terms and conditions of this Agreement.
2. Ensure that all work performed or to be performed under this Agreement is in accordance with the Project Description Sheets attached to Appendix A and complies with Va. Code Ann. Sections 33.2-2510(A), (C)1.
3. Perform or have performed, and remit all payment requisitions and other requests for funding for design and engineering, including all environmental work, right-of-way acquisition, construction, contract administration, testing services, inspection services, or capital asset acquisitions for the Project, as is required by this Agreement and that may be necessary for completion of the Project.
4. Not use the NVTAFunds specified on Appendix B to pay any Project cost if the NVTAFund does not permit such Project cost to be paid with NVTAFunds.
5. Recognize that, if the Project contains "multiple phases" (as such "multiple phases" are defined for the Project on Appendix A), for which NVTAFund will provide funding for such multiple phases (as set forth on Appendix B), NVTAFund may not provide funding to Arlington County to advance the Project to the next phase until the current phase is completed. In any circumstance where Arlington County seeks to advance a Project to the next phase using NVTAFunds, Arlington County shall submit a written request to NVTAFund's Executive Director explaining the need for NVTAFund's funding of an advanced phase. NVTAFund's Executive Director will thereafter review the circumstances underlying the request in conjunction with Appendix B and NVTAFund's current and projected cash flow position and make a recommendation to NVTAFund whether to authorize the requested advance phase funding. Nothing herein, however, shall prohibit Arlington County from providing its own funds to

advance a future phase of the Project and from requesting reimbursement from NVTA for having advance funded a future phase of the Project. However, Arlington County further recognizes that NVTA's reimbursement to Arlington County for having advance funded a Project phase will be dependent upon NVTA's cash flow position at the time such a request for reimbursement is submitted and to the extent that any such advanced funding is consistent with Appendix B.

6. Acknowledge that NVTA's Executive Director will periodically update NVTA's project cash flow estimates with the objective toward keeping those estimates accurate throughout the life of the Project. Arlington County shall provide all information required by NVTA so as to ensure and facilitate accurate cash flow estimates and accurate updates to those cash flow estimates throughout the life of the Project as described in Appendix B.
7. Provide to NVTA requests for payment consistent with Appendix B and the most recently approved NVTA cash flow estimates that include NVTA's standard payment requisition(s), containing detailed summaries of actual project costs incurred with supporting documentation as determined by NVTA and that certify all such costs were incurred in the performance of work for the Project as authorized by this Agreement. Each payment requisition shall be in substantially the same form as set forth in Appendix C of this Agreement. If approved by NVTA, Arlington County can expect to receive payment within twenty (20) days upon receipt by NVTA. Approved payments may be made by means of electronic transfer of funds from NVTA to or for the account of Arlington County.
8. Promptly notify NVTA's Executive Director of any additional project costs resulting from unanticipated circumstances and provide to NVTA detailed estimates of additional costs associated with those circumstances. Arlington County understands that it will be within NVTA's sole discretion whether to provide any additional funding to the Project in such circumstances and that NVTA will do so only in accordance with NVTA's approved Project Selection Process and upon formal action and approval by NVTA. Arlington County shall timely provide to NVTA a

complete and accurate update to Appendix B, if NVTA approves funding of any additional Project costs for the Project under this Paragraph.

9. Release or return any unexpended funds to NVTA no later than 90 days after final payment has been made to the contractors.
10. Review and acknowledge the requirements of NVTA Resolution No. 14-08 adopted January 23, 2014; to wit that, if applicable to Arlington County's Project: a) Prior to any NVTA funds being released for a project that may be part of a larger project, projects, or system undertaken with an extra-territorial funding partner, all such extra-territorial funding partners must commit to pay their appropriate, respective proportionate share or shares of the larger project or system cost commensurate with the benefits to each on a basis agreed upon by the NVTA member localities; b) any such funds released by NVTA for such project will be in addition to the funds that the NVTA member locality is to receive from or be credited with by the extra-territorial funding partner for the project or system; and c) there shall be no funding made available by NVTA until such time as all extra-territorial funding partners for such project or system pay or officially commit to fund their appropriate, respective proportionate shares of such large project or system commensurate with the benefits to each on a basis agreed upon with NVTA.
11. Should Arlington County be required to provide matching funds in order to proceed or complete the funding necessary for the Project, Arlington County shall certify to NVTA that all such matching funds have been either authorized and/or appropriated by Arlington County's governing body or have been obtained through another, independent funding source;
12. Maintain complete and accurate financial records relative to the Project for all time periods as may be required by the Virginia Public Records Act and by all other applicable state or federal records retention laws or regulations, unless superseded by the laws that govern Arlington County and provide copies of any such financial records to NVTA, free of charge, upon request.

13. Maintain all original conceptual drawings and renderings, architectural and engineering plans, site plans, inspection records, testing records, and as built drawings for the Project for the time periods required by the Virginia Public Records Act and any other applicable records retention laws or regulations, unless superseded by the laws that govern Arlington County; and provide to NVTA copies of all such drawings and plans free of charge, upon request.
14. Reimburse NVTA for all NVTA funds (with interest earned at the rate earned by NVTA) that Arlington County misapplied or used in contravention of Sections 33.2-2500 *et. seq.* of the Virginia Code ("the NVTA Act") Chapter 766 of the 2013 Virginia Acts of Assembly ("Chapter 766"), or any term or condition of this Agreement.
15. Name NVTA and its Bond Trustee or require that all Arlington County's contractors name NVTA or its Bond Trustee as an additional insured on any insurance policy issued for the work to be performed by or on behalf of Arlington County for the Project and present NVTA with satisfactory evidence thereof before any work on the Project commences or continues.
16. Give notice to NVTA that Arlington County may use NVTA funds to pay outside legal counsel services (as opposed to utilizing the services of its own in-house counsel or NVTA's in-house legal counsel) in connection with the work performed under this Agreement Arlington County so as to ensure that no conflict of interest may arise from any such representation.
17. Provide certification to NVTA, that upon final payment to all contractors for the Project, Arlington County will use the Project for its intended purposes for the duration of the Project's useful life. Under no circumstances will NVTA be considered responsible or obligated to operate and/or maintain the Project after its completion.
18. Comply with all requirements of the Virginia Public Procurement Act and other applicable Virginia Code provisions, or local ordinances which govern the letting of public contracts, unless superseded by the laws that govern Arlington County.

19. Acknowledge that if the Project is being funded in whole or in part by NVTB Bond Proceeds, comply with the tax covenants attached as Appendix D.
20. Acknowledge that if Arlington County expects and/or intends that the Project is to be submitted for acceptance by the Commonwealth into its system that Arlington County agrees to comply with the Virginia Department of Transportation's ("VDOT's") "Standards, Requirements and Guidance."
21. Recognize that Arlington County is solely responsible for obtaining all permits and permissions necessary to construct and/or operate the Project, including but not limited to, obtaining all required VDOT and local land use permits, applications for zoning approvals, and regulatory approvals.
22. Recognize that if Arlington County is funding the Project, in whole or in part, with federal and/or state funds, in addition to NVTB funds and/or NVTB Bond Proceeds that Arlington County will need to comply with all federal and Commonwealth funding requirements, including but not limited to, the completion and execution of VDOT's Standard Project Administration Agreement and acknowledges that NVTB will not be a party or signatory to that Agreement; nor will NVTB have any obligation to comply with the requirements of that Agreement.
23. Provide a certification to NVTB no later than 90 days after final payment to the contractors that Arlington County adhered to all applicable laws and regulations and all requirements of this Agreement.

B. NVTB's Obligations

NVTB shall:

- I. Provide to Arlington County the funding authorized by NVTB for design work, engineering, including all environmental work, all right-of-way acquisition, inspection services, testing services, construction, and/or capital asset acquisition(s) on a reimbursement basis as set forth in this Agreement and as specified in the Project Budget and Cash Flow contained in

Appendix B to this Agreement or the most updated amendment thereto, as approved by NVTA.

2. Assign a Program Coordinator for the Project. NVTA's Program Coordinator will be responsible for monitoring the Project on behalf of NVTA so as to ensure compliance with this Agreement and all NVTA's requirements and with overseeing, managing, reviewing, and processing, in consultation with NVTA's Executive Director and its Chief Financial Officer ("CFO") , all payment requisitions submitted by Arlington County for the Project. NVTA's Program Coordinator will have no independent authority to direct changes or make additions, modifications, or revisions to the Project Scope of Work as set forth on Appendix A or to the Project Budget and Cash Flow as set forth on Appendix B.
3. Route to NVTA's assigned Program Coordinator all Arlington County's payment requisitions, containing detailed summaries of actual Project costs incurred which are in substantially the same form as shown on Appendix C submitted to NVTA for the Project. After submission to NVTA, NVTA's Program Coordinator will conduct an initial review of all payment requisitions and supporting documentation for the Project in order to determine the submission's legal and documentary sufficiency. NVTA's Program Coordinator will then make a recommendation to the NVTA's CFO and Executive Director whether to authorize payment, refuse payment, or seek additional information from Arlington County. If the payment requisition is sufficient as submitted, payment will be made within twenty (20) days from receipt. If the payment requisition is deemed insufficient, within twenty (20) days from receipt, NVTA's Program Coordinator will notify Arlington County in writing and set forth the reasons why the payment requisition was declined or why and what specific additional information is needed for processing the payment request. Payment will be withheld until all deficiencies identified by NVTA have been corrected. Under no circumstances will NVTA authorize payment for any work performed by or on behalf of Arlington County that is not in conformity with the requirements of the NVTA Act, Chapter 766, or this Agreement.

4. Route all _____ Arlington County _____'s supplemental requests for funding from NVTa under Paragraphs A.5 and A.8 of this Agreement to NVTa's Executive Director. NVTa's Executive Director will initially review those requests and all supporting documentation with NVTa's CFO. After such initial review, NVTa's Executive Director will make a recommendation to NVTa's Finance Committee for its independent consideration and review. NVTa's Finance Committee will thereafter make a recommendation on any such request to NVTa for final determination by NVTa.
5. Conduct periodic compliance reviews scheduled in advance for the Project so as to determine whether the work being performed remains within the scope of this Agreement, the NVTa Act, Chapter 766, and other applicable law. Such compliance reviews may entail review of _____ Arlington County _____'s financial records for the Project and on -site inspections.
6. Acknowledge that if, as a result of NVTa's review of any payment requisition or of any NVTa compliance review, NVTa staff determines that _____ Arlington County _____ has misused or misapplied any NVTa funds in derogation of this Agreement or in contravention of the NVTa Act, Chapter 766 or applicable law, NVTa staff will promptly advise NVTa's Executive Director and will advise _____ Arlington County _____'s designated representative in writing. _____ Arlington County _____ will thereafter have thirty (30) days to respond in writing to NVTa's initial findings. NVTa's staff will review _____ Arlington County _____'s response and make a recommendation to NVTa's Finance Committee. NVTa's Finance Committee will thereafter conduct its own review of all submissions and make a recommendation to NVTa. Pending final resolution of the matter, NVTa will withhold further funding on the Project. If NVTa makes a final determination that _____ Arlington County _____ has misused or misapplied funds in contravention of this Agreement, the NVTa Act, Chapter 766, or other applicable law, NVTa will cease further funding for the Project and will seek reimbursement from _____ Arlington County _____ of all funds previously remitted by NVTa (with interest earned at the rate earned by NVTa) which were misapplied or misused by _____ Arlington County _____. Nothing herein shall, however, be construed as denying, restricting or limiting the pursuit of either party's legal rights or available legal remedies.

7. Make guidelines available to Arlington County to assist the parties in carrying out the terms of this Agreement in accordance with applicable law.
8. Upon recipient's final payment to all contractors, retain copies of all contracts, financial records, design, construction, and as-built project drawings and plans for the Project for the time periods required by the Virginia Public Records Act and as may be required by other applicable records retention laws and regulations.
9. Be the sole determinant of the amount and source of NVTAs funds to be provided and allocated to the Project and the amounts of any NVTAs funds to be provided in excess of the amounts specified in Appendix B.

C. Term

1. This Agreement shall be effective upon adoption and execution by both parties.
2. Arlington County may terminate this Agreement, for cause, in the event of a material breach by NVTAs of this Agreement. If so terminated, NVTAs shall pay for all Project costs incurred through the date of termination and all reasonable costs incurred by Arlington County to terminate all Project related contracts. The Virginia General Assembly's failure to appropriate funds to NVTAs as described in paragraph F of this Agreement or repeal of the legislation establishing the NVTAs fund created pursuant to Chapter 766 shall not be considered material breaches of this Agreement by NVTAs. Before initiating any proceedings to terminate under this Paragraph, Arlington County shall give NVTAs sixty (60) days written notice of any claimed material breach of this Agreement; thereby allowing NVTAs an opportunity to investigate and cure any such alleged breach.
3. NVTAs may terminate this Agreement, for cause, resulting from Arlington County's material breach of this Agreement. If so terminated, Arlington County shall refund to NVTAs all funds NVTAs provided to Arlington County for the Project (including interest earned at the rate earned by NVTAs). NVTAs will provide Arlington County with sixty (60) days written notice that NVTAs is exercising its rights to terminate this Agreement and the reasons for termination. Prior to termination, Arlington County may

request that NVTa excuse Arlington County from refunding all funds NVTa provided to Arlington County for the Project based upon Arlington County's substantial completion of the Project or severable portions thereof; and NVTa may, in its sole discretion, excuse Arlington County from refunding all or a portion of the funds NVTa provided to Arlington County for the Project. No such request to be excused from refunding will be allowed where Arlington County has either misused or misapplied NVTa funds in contravention of applicable law.

4. Upon termination and payment of all eligible expenses as set forth in Paragraph C.3 above, Arlington County will release or return to NVTa all unexpended NVTa funds with interest earned at the rate earned by NVTa no later than sixty (60) days after the date of termination.

D. Dispute

In the event of a dispute under this Agreement, the parties agree to meet and confer in order to ascertain if the dispute can be resolved informally without the need of a third party or judicial intervention. NVTa's Executive Director and Arlington County's Chief Executive Officer or Chief Administrative Officer shall be authorized to conduct negotiations on behalf of their respective entities. If a resolution of the dispute is reached via a meet and confer dispute resolution method, it shall be presented to NVTa and to Arlington County's governing body for formal confirmation and approval. If no satisfactory resolution can be reached via the meet and confer method, either party is free to pursue whatever remedies it may have at law, including all judicial remedies.

E. NVTa's Financial Interest in Project Assets

Arlington County agrees to use the real property and appurtenances and fixtures thereto, capital assets, equipment and all other transportation facilities that are part of the Project and funded by NVTa under this Agreement ("Project Assets") for the designated transportation purposes of the Project under this Agreement and in accordance with applicable law throughout the useful life of each Project Asset. NVTa shall retain a financial interest in the value of each of the of the Project Assets, whether any such Project Asset may have depreciated or appreciated, throughout its respective useful life proportionate to the amount of the cost of the Project Asset funded by NVTa under this

Agreement. In the event that Arlington County fails to use any of the Project Assets funded under this Agreement for the transportation purposes as authorized by this Agreement or applicable law throughout its respective useful life, Arlington County shall refund to NVTA with interest at the rate earned by NVTA the amount attributable to NVTA's proportionate financial interest in the value of said Project Asset. If Arlington County refuses or fails to refund said monies to NVTA, NVTA may recover its proportionate financial interest from Arlington County by pursuit of any remedies available to NVTA, including but not limited to NVTA's withholding of commensurate amounts from future distributions of NVTA funds to Arlington County.

F. Appropriations Requirements

1. Nothing herein shall require or obligate any party to commit or obligate funds to the Project beyond those funds that have been duly authorized and appropriated by their respective governing bodies.
2. The parties acknowledge that all funding provided by NVTA pursuant to Chapter 766 is subject to appropriation by the Virginia General Assembly. The parties further acknowledge that: (i) the moneys allocated to the NVTA Fund pursuant to Va. Code Ann. Sections 58.1-638, 58.1-802.2, and 58.1-1742 and any other moneys that the General Assembly appropriates for deposit into the NVTA Fund are subject to appropriation by the General Assembly and (ii) NVTA's obligations under this Agreement are subject to such moneys being appropriated for deposit in the NVTA Fund by the General Assembly.

G. Notices

All notices under this Agreement to either party shall be in writing and forwarded to the other party by U.S. mail, care of the following authorized representatives:

- 1) to: NVTA, to the attention of its Executive Director;
3040 Williams Drive, Suite 200
Fairfax, VA 22031
- 2) to Arlington County, to the attention of Transp. Director
2100 Clarendon Blvd. Suite 900
Arlington, VA 22201 (address)

H. Assignment

This Agreement shall not be assigned by either party unless express written consent is given by the other party.

I. Modification or Amendment

This Agreement may be modified, in writing, upon mutual agreement of both parties.

J. No Personal Liability or Creation of Third Party Rights

This Agreement shall not be construed as creating any personal liability on the part of any officer, employee, or agent of the parties; nor shall it be construed as giving any rights or benefits to anyone other than the parties hereto.

K. No Agency

Arlington County represents that it is not acting as a partner or agent of NVT A; and nothing in this Agreement shall be construed as making any party a partner or agent with any other party.

L. Sovereign Immunity

This Agreement shall not be construed as a waiver of either party's sovereign immunity rights.

M. Incorporation of Recitals

The recitals to this Agreement are hereby incorporated into this Agreement and are expressly made a part hereof. The parties to this Agreement acknowledge and agree that such recitals are true and correct.

N. Mutual Preparation and Fair Meaning

The parties acknowledge that this Agreement has been prepared on behalf of all parties thereto and shall be construed in accordance with its fair meaning and not strictly construed for or against either party.

O. Governing Law

This Agreement is governed by the laws of the Commonwealth of Virginia.

IN WITNESS WHEREOF, each party hereto has caused this Agreement to be executed as of the day, month, and year first herein written by their duly authorized representatives.

Northern Virginia Transportation Authority

By: _____

Date: _____

_____ Arlington County (Name of Recipient Entity)

By: Mark A. Schwarz

Date: 9/30/16

Appendix A –Narrative Description of Project (Attach Project Description Form)

NVTA Project Title: Lee Highway Corridor Intelligent Transportation System Enhancements (6R)

Recipient Entity: Arlington County

Project Manager Contact Information: Amit Sidhaye, 703-228-3730, Asidhaye@arlingtonva.us

Table A-1 Project Changes

Only Complete if Different from the Approved NVTA Project Description Form Attached

Table A-2 Project Milestone Changes

Systems Engineering and Design will begin early in calendar year 2017.

Signature: _____

Chief Executive Officer

Date: _____

10/20/16

Revised: 4/14/2016



Project Description Form – 6R

Basic Project Information

Submitting Jurisdiction/Agency: Arlington County

Project Title: Lee Highway Corridor Intelligent Transportation System Enhancements

Project Location: Along Lee Highway from the City of Falls Church border to near the DC border in Rosslyn.



Project Description: The Lee Highway Corridor is an important parallel route to I-66 that must accommodate regional thru traffic and local residential and commercial traffic. With high traffic volumes, several congested intersections, dangerous pedestrian crossings, and the planned expansion of ART service, the Lee Highway Corridor has numerous regional and local mobility constraints. The Lee Highway Intelligent Transportation System (ITS) project proposes to address these issues by installing an Intelligent Transportation System and corresponding Adaptive Traffic Control System program, to better manage traffic flow for both automobiles and buses. The project will install additional Bluetooth devices, count stations, CCTV cameras, and Forward Looking Infrared (FLIR) detectors in order to monitor traffic flow and safety of all modes. At the interchange of Lee Highway and I-66, the project will upgrade two signals, providing a better-timed connection between I-66 and Lee Highway. The project will also upgrade existing mast arm signals and add or improve existing streetlights along Lee Highway.

As a corridor-wide system, the Intelligent Transportation System and Adaptive Traffic Control System program are adaptive responsive traffic control systems that help monitor real time traffic conditions, including volume, speeds, delays and queues. The system automatically optimizes the traffic signal timings depending upon real time traffic situations. The system also helps monitor and adjust the operation of traffic signals during emergency situations and facilitates the smooth operation of evacuation routes. The system will also provide for coordinated transit signal priority, which will improve transit service times along the corridor. As Arlington Transit (ART) adds more bus service along Lee Highway, increased bus service and signal priority provide the first phase in potential future large-scale multimodal improvements for the corridor.

Project Analysis Summary*

NVTA Quantitative Score	51.08		Rank	7
Congestion Reduction Relative to Cost Ratio (NVTA Share)	1.56	hours saved/\$	Rank	2
Congestion Reduction Relative to Cost Ratio (Total Cost)	1.56	hours saved/\$	Rank	1

*Detailed scoring information can be found at: <http://www.thenovaauthority.org/planning-programming/fy2017-program/>

For pedestrians and bicyclists, the system reduces delay timings and facilitates safe crossing at busy intersections. This project reduces vehicular and transit congestion along the corridor and improves the safety of vehicular, bicycle, and pedestrian users on County roadways. The goal of these improvements is to optimize roadway functionality for all modes, ensuring safe, efficient travel.

Project Milestones

Project Milestones by Project Phase:

- **Systems Engineering:** Expected Start July 2016; Expected End June 2017
- **Design:** Expected start January 2017; Expected End December 2017
- **Right of Way Acquisition:** Expected Start June 2017; Expected End June 2018
- **Construction:** Expected Start June 2018; Expected End September 2019

Project Cost

Requested NVTA FY2017 Funds: \$3,000,000

Total Cost to Complete Project: \$3,000,000

Project Phases	Requested NVTA FY2017 Funds	Other Sources of Funding	Total Cost by Phase
Systems Engineering	\$100,000 (FY2017)		\$100,000 (FY2017)
Environmental Work			
Design	\$375,000 (FY2017)		\$375,000 (FY2017)
Right of Way Acquisition	\$100,000 (FY2018)		\$100,000 (FY2018)
Construction	\$1,000,000 (FY2019) \$1,425,000 (FY2020)		\$1,000,000 (FY2019) \$1,425,000 (FY2020)
Capital Asset Acquisitions			
Other			
TOTAL	\$3,000,000		\$3,000,000

Project Impacts

What regional benefit(s) does this project offer? This project offers vehicular and transit travel time savings for those traveling the Lee Highway (US-29) corridor. This corridor provides important regional vehicular and transit connections between the East Falls Church and Rosslyn Metro stations / activity centers, servicing numerous residential and commercial destinations in between. The corridor is part of the National Highway System and is an important parallel route to I-66, with regional connections to the City of Falls Church, Fairfax County, Fairfax City, and downtown Washington, DC. By providing real-time based driver information, improving safety, and optimizing vehicular and transit travel times, Lee Highway can better move people through the County and provide a safe and efficient alternative to I-66 during incidents.

How will the project reduce congestion? This project reduces congestion by improving the level of vehicular and transit service on the facility and optimizing the performance of the roadway to better manage traffic. The Adaptive Signal Control System has the ability to adjust signal timing in real-time to better utilize the signal throughput and more efficiently move people through the intersection. This technique can improve the LOS at intersections along Lee Highway. Additionally, passive pedestrian detection has the capability to drop calls if pedestrians move out of the area. In this case, the unused signal time can be returned to the main phase, thus providing an increase in through capacity. Real-time driver information will also improve congestion by alerting drivers to alternate routes, incidents, and detours. This ITS project will also provide the infrastructure for Transit Signal Priority, reducing travel times for transit vehicles and increasing transit throughput of the corridor. Finally, by making Lee Highway a faster and more convenient travel option for all modes, this project will reduce congestion on I-66 caused by Lee Highway traffic that unnecessarily diverts to I-66.

How will the project increase capacity? This project will increase the capacity of bus transit and vehicular traffic on the Lee Highway Corridor. The Adaptive Signal Control System has the ability to adjust signal timing in real-time to better utilize the signal throughput and more efficiently move people through the intersection. This technique can increase the signal capacity from cycle to cycle to increase the capacity of the roadway for personal and transit vehicles. The project also includes passive pedestrian detection, which maintains the capability to drop calls if pedestrians move out of the area. In this case, the time can be returned to the main phase, thus providing an increase in capacity for all vehicle types.

By cycling buses along the corridor faster, the same number of buses will be able to provide more trips, thus increasing transit capacity without requiring an increase in transit vehicles. Transit travel times will be reduced, thereby increasing capacity, by utilizing technologies such as queue jumps and transit signal priority. This project will include the physical infrastructure to enable these transit improvements.

Additionally, improvements to signals at Lee Highway at Washington Boulevard will improve the operations of the intersection and increase capacity by providing additional queuing space for left-turns onto I-66.

How will the project improve auto and pedestrian safety? This project will improve safety for automobile drivers and passengers, bicyclists, pedestrians, and transit users. This project will enhance automobile safety by managing the flow of vehicles to reduce congestion and optimize performance, making traffic more predictable and reducing unanticipated stop-and-go incidents. Incident management and response times should be improved due to the improved monitoring and messaging provided by the project. Additionally,

the system also helps monitor and adjust the operation of traffic signals during emergency situations and facilitates the smooth operation of evacuation routes.

Pedestrian and bicycle safety will be improved through the installation of lead pedestrian intervals at high activity crossings. Accessible pushbutton systems will also help disabled pedestrians utilize crossings more safely. For all users, improved streetlights will improve visibility and help provide safety for pedestrians and automobiles. Improved monitoring due to additional CCTC camera installations will also help provide for better response and coordination among public safety agencies.

How will the project improve regional connectivity? The Lee Highway corridor is a major east-west route from Washington, D.C. to Fairfax County, Falls Church, and areas west. The project limits will directly extend between the **Falls Church** activity center and the **Rosslyn** and **Courthouse** activity centers. Within the project limits, this ITS project will enhance vehicular and transit service and provide enhanced and safer pedestrian and bicycle connections.

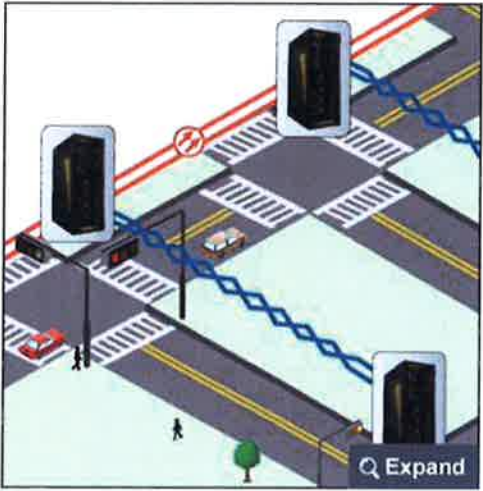
The corridor has critical importance as an alternate route to I-66 and also connects to several major regional routes outside project boundaries, such as I-66, Route 110, and the George Washington Parkway in **Rosslyn**, I-495 in **Merrifield/Dunn Loring**, US-50 in **Fairfax City**. Lee Highway connects many of the neighborhoods and activity centers in Arlington County to the wider region, including **Georgetown and Downtown Washington, DC**, and also provides a safe and direct access to the East Falls Church Metro station.

How will the project improve bicycle and pedestrian travel options? The ITS system is capable of detecting and optimizing service along the corridor for pedestrians and bicyclists as well as vehicles. The installation of infrared detection will allow for detection of bicycles in bike lanes or travel lanes, accommodating bicyclists with the same travel time and congestion improvement benefits as for other vehicles.

This project will install Lead Pedestrian Interval Signals at intersection of high pedestrian and bicycle traffic, eliminating most conflicts between crossing pedestrians and turning cars. It will also install audible accessible pushbutton systems, making signals ADA accessible. The capability of passive detection at areas of high pedestrian activity will allow for automatic detection of bicycles and pedestrians using crosswalks, enhancing their safety. Accommodating the safe movement of these users along the corridor is critical providing last mile access for residents or workers to access ART and Metrobus service on the corridor.

How will the project improve the management and operation of existing facilities through technology applications? This project is primarily a technology and operations project that, through the installation of ITS infrastructure, will enable the improved operations and management of the existing roadway configuration and transit service along Lee Highway.

Additional Information in Support of This Project



APPENDIX B-PROJECT BUDGET & CASH FLOW
PROJECT IDENTIFICATION AND PROPOSED FUNDING

NVTA Project Title: Lee Highway Corridor ITS Enhancements (6R)
 Recipient Entity: Arlington County
 Project Contact Information: Amit Sidhaye, asidhaye@arlingtonva.us

NVTA Use:
 Date Received: _____
 Funding Program: _____
 Project #: _____
 Ledger Account #: _____
 Revision Date: _____
 Recv'd Certificate of Ins: _____

TABLE B-1 PROJECT COSTS & FUNDING SOURCE

Project Cost Category	Total Project Costs	Approved NVTA Project Funds	Amount of Other Sources of Funds	List of Other Sources of Funds (For each cost category include all other funding sources; list each source of funds on a separate line for each cost category)
Study	\$ -	\$ -	\$ -	
Preliminary Engineering	\$ 475,000	\$ 475,000		
Right-of-Way Acquisition	\$ 100,000	\$ 100,000		
Construction	\$ 2,425,000	\$ 2,425,000		
Capital Asset Acquisitions				
Other				
Total Estimated Cost	\$ 3,000,000	\$ 3,000,000	\$ -	

TABLE B-2 PROJECT CASH FLOW PER FISCAL YEAR AND COST CATEGORY FOR NVTA FUNDS ONLY

Project Cost Category	Total FY2017 Project Funds	Total FY2018 Project Funds	Total FY2019 Project Funds	Total FY2020 Project Funds	Total FY2021 Project Funds	Total FY2022 Project Funds
Study						
Preliminary Engineering	\$ 200,000	\$ 275,000				
Right-of-Way Acquisition						
Construction		\$ 325,000	\$ 1,000,000	\$ 1,200,000		
Capital Asset Acquisitions						
Other						
Total Estimated Cost	\$ 200,000	\$ 600,000	\$ 1,000,000	\$ 1,200,000	\$ -	\$ -

Please Note: If additional years are needed, please submit a separate form with additional columns

TABLE B-3 MONTHLY/QUARTERLY PROJECT CASH FLOW FOR NVTA FUNDS ONLY

Month	FY2017 Monthly Cash Flow	FY2018 Quarterly Cash Flow	FY2019 Quarterly Cash Flow	FY2020 Quarterly Cash Flow	FY2021 Quarterly Cash Flow	FY2022 Quarterly Cash Flow
July						
August						
September		\$ 150,000	\$ 250,000	\$ 300,000		
October						
November						
December		\$ 125,000	\$ 250,000	\$ 300,000		
January						
February	\$ 50,000					
March	\$ 50,000	\$ 300,000	\$ 250,000	\$ 300,000		
April	\$ 30,000					
May	\$ 40,000					
June	\$ 30,000	\$ 25,000	\$ 250,000	\$ 300,000		
Total per Fiscal Year	\$ 200,000	\$ 600,000	\$ 1,000,000	\$ 1,200,000	\$ -	\$ -

Please Note: If additional years are needed, please submit a separate form with additional columns

The Total Amounts in Table B-2 and Table B-3 must agree to the total NVTA Funds listed in Table B-1

The total of each Fiscal Year must match in Table B-2 and Table B-3

This attachment is certified and made an official attachment to the Standard Project Agreement document by the parties of this agreement.

Recipient Entity
 Signature: Mark J. Schwarz
 Title: County Manager
 Date: Sept 30 2016
 Print name of person signing: MARK J. SCHWARZ
 Revised: 4/13/2016

Northern Virginia Transportation Authority
 Signature: _____
 Title: NVTA Executive Director
 Date: _____

Northern Virginia Transportation Authority
 Signature: _____
 Title: NVTA Chief Financial Officer
 Date: _____

APPENDIX D-Tax Covenants

TAX COVENANTS (For Bond Funded Projects Only)

The Recipient Entity will not permit more than five percent of the total amount of NVTB Bond Proceeds or the Financed Property to be used directly or indirectly (i) for a Private Business Use or (ii) to make or finance loans to Nongovernmental Persons. Any transaction that is generally characterized as a loan for federal income tax purposes is a "loan" for purposes of this paragraph. In addition, a loan may arise from the direct lending of NVTB Bond Proceeds or may arise from transactions in which indirect benefits that are the economic equivalent of a loan are conveyed, including any contractual arrangement which in substance transfers tax ownership and/or significant burdens and benefits of ownership.

The Recipient Entity agrees not to requisition or spend NVTB Bond Proceeds for any Project Cost not constituting a Capital Expenditure.

Except as may be described in Appendix B, the Recipient Entity neither has on the date of this Agreement nor expects to have after this date any funds that are restricted, segregated, legally required or otherwise intended to be used, directly or indirectly, for the purposes for which the Recipient Entity is receiving NVTB Bond Proceeds.

The Recipient Entity acknowledges that it may have to provide detailed information about the investment of the amount of any requisition unless (i) payments are remitted directly by NVTB to the contractors/vendors or (ii) the Recipient Entity remits payment to the contractors/vendors within five banking days after the date on which NVTB advances the amount of the requisition. NVTB may request the detailed information in order to compute the rebate liability to the U.S. Treasury on NVTB's bonds or other debt financing pursuant to Section 148 of the Internal Revenue Code of 1986, as amended (the "Code").

"Capital Expenditure" means any cost of a type that is properly chargeable to capital account (or would be so chargeable with (or but for) a proper election or the application of the definition of "placed in service" under Treas. Reg. § 1.150-2(c)) under general federal income tax principles, determined at the time the expenditure is paid.

"Federal Government" means the government of the United States and its agencies or instrumentalities.

"Financed Property" means the property financed by the NVTB Bond Proceeds.

"General Public Use" means use of Financed Property by a Nongovernmental Person as a member of the general public. Use of Financed Property by a Nongovernmental Person in a Trade or Business is treated as General Public Use only if the Financed Property is intended to be available and in fact is reasonably available for use on the same basis by natural persons not

engaged in a Trade or Business. Use under arrangements that convey priority rights or other preferential benefits is not use on the same basis as the general public.

"Governmental Person" means any Person that is a state or local governmental unit within the meaning of Section 141 of the Code (or any instrumentality thereof).

"NVTB Bond Proceeds" means, as used herein, the sale proceeds of any NVTB bonds or other debt instrument and the investment earnings on such proceeds, collectively.

"Nongovernmental Person" mean any Person other than a Governmental Person. For the purposes hereof, the Federal Government is a Nongovernmental Person.

"Person" means any natural person, firm, joint venture, association, partnership, business trust, corporation, limited liability company, corporation or partnership or any other entity (including the Federal Government and a Governmental Person).

"Private Business Use" means a use of the NVTB Bond Proceeds directly or indirectly in a Trade or Business carried on by a Nongovernmental Person other than General Public Use. For all purposes hereof, a Private Business Use of any Financed Property is treated as a Private Business Use of NVTB Bond Proceeds. Both actual and beneficial use by a Nongovernmental Person may be treated as Private Business Use under Section 141 of the Code. In most cases, however, Private Business Use results from a Nongovernmental Person having special legal entitlements to use the Financed Property under an arrangement with the Recipient Entity. Examples of the types of special legal entitlements resulting in Private Business Use of Proceeds include (i) ownership for federal tax purposes of Financed Property by a Nongovernmental Person and (ii) actual or beneficial use of Financed Property by a Nongovernmental Person pursuant to a lease, a Service Contract, an incentive payment contract or certain other arrangements such as a take-or-pay or other output-type contract. Private Business Use of the Financed Property may also be established on the basis of a special economic benefit to one or more Nongovernmental Persons even if such Nongovernmental Persons do not have a special legal entitlement to the use of the Financed Property. Any arrangement that is properly characterized as a lease for federal income tax purposes is treated as a lease for purposes of the Private Business Use analysis. An arrangement that is referred to as a management or Service Contract may nevertheless be treated as a lease, and in determining whether a management or service contract is properly characterized as a lease, it is necessary to consider all of the facts and circumstances, including (i) the degree of control over the property that is exercised by a Nongovernmental Person, and (ii) whether a Nongovernmental Person bears risk of loss of the Financed Property. Private Business Use of Financed Property that is not available for General Public Use may also be established on the basis of a special economic benefit to one or more Nongovernmental Persons even if such Nongovernmental Persons do not have a special legal entitlement to the use of the Financed Property. In determining whether special economic benefit gives rise to Private Business Use, it is necessary to consider all of the facts and circumstances, including one or more of the following factors: (i) whether the Financed Property is functionally related or physically proximate to property used in the Trade or Business of a Nongovernmental Person, (ii) whether only a small number of Nongovernmental Persons receive the economic benefit, and

(iii) whether the cost of the Financed Property is treated as depreciable by the Nongovernmental Person.

"Service Contract" means a contract under which a Nongovernmental Person will provide services involving all, a portion or any function of any Financed Property. For example, a Service Contract includes a contract for the provision of management services for all or any portion of Financed Property. Contracts for services that are solely incidental to the primary governmental function or functions of Financed Property (for example, contracts for janitorial, office equipment repair, billing, or similar services) are not included in this definition. Additional contracts not included in this definition are (i) a contract to provide for services by a Nongovernmental Person in compliance with Revenue Procedure 97-13, 1997-1 C.B. 632, as modified by Revenue Procedure 2001-39, I.R.B. 2001-28, (ii) a contract to provide for services by a Nongovernmental Person if the only compensation is the reimbursement of the Nongovernmental Person for actual and direct expenses paid by the Nongovernmental Person to unrelated parties and (iii) a contract to provide for the operations by a Nongovernmental Person of a facility or system of facilities that consists predominately of public utility property (within the meaning of Section 168(i)(10) of the Code), if the only compensation is the reimbursement of actual and direct expenses of the Nongovernmental Person and reasonable administrative overhead expenses of the Nongovernmental Person.

"Trade or Business" has the meaning set forth in Section 141(b)(6)(B) of the Code, and includes, with respect to any Nongovernmental Person other than a natural person, any activity carried on by such Nongovernmental Person. "Trade or Business" for a natural person means any activity carried on by such natural person that constitutes a "trade or business" within the meaning of Section 162 of the Code.

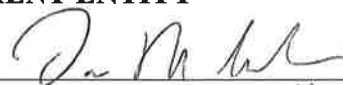
RECIPIENT ENTITY

By: _____

Name: _____

Title: _____

Date: _____



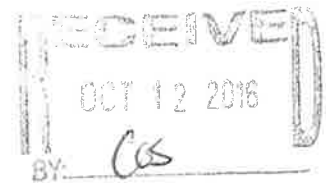
DENNIS M. LEBLOND

DIRECTOR OF TRANSPORTATION

10/9/16



ARLINGTON COUNTY, VIRGINIA



County Board Agenda Item Meeting of September 24, 2016

DATE: September 16, 2016

SUBJECT: Fiscal Year (FY) 2017 Northern Virginia Transportation Authority (NVTa) Standard Project Agreements for Funding and Administration and appropriation of grant funds.

C. M. RECOMMENDATIONS:

1. Approve the two attached Standard Project Agreements between the County Board of Arlington, Virginia, and NVTa for the use of NVTa Regional funding for two projects in the County's Capital Improvement Plan.
2. Authorize the County Manager or his designee, on behalf of the County Board, to execute all related documents necessary to formalize the Standard Project Agreements, subject to approval of the agreements and the documents as to form by the County Attorney.
3. Appropriate \$3,000,000 from FY 2017 NVTa funds (313.43514.353100) to the Department of Environmental Services (DES) (\$3,000,000 313.43514.TR07.A721), and \$11,600,000 from FY 2017 NVTa funds (335.43513.353100) to DES (\$6,221,000 to 335.43513.CC08.A731, \$3,279,000 to 335.43514.CC11.A731, and \$2,100,000 to 335.43513.CC16.A731) for transportation capital projects.

ISSUES: This is a request to execute two Standard Project Agreements between the County Board of Arlington, Virginia, and NVTa for use of regional transportation funds on projects previously endorsed by the Board and approved for funding by NVTa. No issues have been identified.

SUMMARY: On November 14, 2015, the County Board endorsed three Arlington projects proposed for consideration by NVTa for FY 2017 regional transportation funds. These three projects were included in the FY 2015-2024 Arlington Capital Improvement Plan (CIP). On July 14, 2016, NVTa approved a FY 2017 One-Year Program totaling \$466 million. Projects selected went through a rigorous screening process that gave priority to those projects that provided the greatest congestion reduction relative to cost. The final list of 12 regionally significant transportation investments included \$14,600,000 for two Arlington County projects:

County Manager:

mga/cgm

County Attorney:

GAH

Staff: Sarah Crawford, Department of Environmental Services, Transportation Division

37.

- Crystal City Streets: 12th Street Transitway, Clark/Bell Realignment, and Intersection Improvements (\$11,600,000)
- Lee Highway Corridor Intelligent Transportation Systems Enhancements (\$3,000,000)

The County submitted an additional project for consideration, \$6.5 million for the East Falls Church Regional Connections and Access Project, which was not selected for funding due its relatively low score for congestion reduction relative to cost.

Prior to receiving funding, the County must enter into project agreements with NVTa outlining the terms and conditions for the regional transportation funding, which is largely based on the legislation enacted by the General Assembly in 2013 (House Bill 2313), as well as other requirements set forth by NVTa, including insurance and record keeping requirements. Attachments 1 and 2 include the Standard Project Agreements to be executed for each of the approved projects.

BACKGROUND: House Bill 2313 raises transportation revenues for Northern Virginia through a series of state-imposed regional taxes and fees. The law imposes an additional 0.07 percent to the state Sales and Use Tax, a 2 percent increase in the Transient Occupancy Tax (hotel tax), and a 0.15 per \$100 assessment increase to the Grantor's tax (Congestion Relief Fee) in Northern Virginia. These revenues generate approximately \$300 million annually for the region. Revenues are collected by the state and distributed to NVTa. Of these revenues, 70 percent are retained by NVTa to fund regional transportation projects that have been rated by the Virginia Department of Transportation (VDOT) consistent with a process outlined by legislation enacted by the General Assembly in 2012 (House Bill 599).

To facilitate the implementation of these projects, NVTa developed an agreement to govern the terms and conditions associated with Virginia Code. In general, the agreement is based on the requirements of HB 2313, but it also includes practical provisions associated with the implementation of the law and standard contract language. The major provisions of the agreements remain unchanged from last year.

FISCAL IMPACT: The NVTa Regional funds were included in the County's Adopted FY 2017 – FY 2026 CIP (see the Crystal City, Pentagon City, Potomac Yard Streets and Intelligent Transportation Systems programs in the Transportation section). Reference to these funds is located in the Transportation Section of the Proposed FY 2017-2026 CIP: Crystal City, Pentagon City, and Potomac Yard Streets, page E-96, and Intelligent Transportation Systems, page E-103. Approving these project agreements ensures the full funding for the two projects receiving regional funds.



HOPE HALLECK
CLERK TO THE
COUNTY BOARD

ARLINGTON COUNTY, VIRGINIA
OFFICE OF THE COUNTY BOARD

2100 CLARENDON BOULEVARD, SUITE 300
ARLINGTON, VIRGINIA 22201-5406
(703) 228-3130 • Fax (703) 228-7430
E-MAIL: countyboard@arlingtonva.us



MEMBERS
LIBBY GARVEY
CHAIR
JAY FISETTE
VICE CHAIR

KATIE CRISTOL
CHRISTIAN DORSEY
JOHN VIHSTADT

CERTIFICATION

I hereby certify that at its September 24, 2016 Regular Meeting, on a consent motion by Mr. Dorsey, seconded by Ms. Cristol and carried by a vote of 5 to 0, the voting recorded as follows: Ms. Garvey - Aye, Mr. Fisetite - Aye, Ms. Cristol - Aye, Mr. Dorsey - Aye, and Mr. Vihstadt - Aye, the County Board of Arlington, Virginia, approved the C.M. **RECOMMENDATIONS** in the attached County Manager's reports dated September 16, 2016 "SUBJECT: Fiscal Year (FY) 2017 Northern Virginia Transportation Authority (NVTa) Standard Project Agreements for Funding and Administration and appropriation of grant funds."

Given under my hand this 28th day of September 2016.



Hope L. Halleck, Clerk
Arlington County Board

[SEAL]