



## MEMORANDUM

**TO:** Transportation Planning Board  
**FROM:** Eric Randall, TPB Transportation Engineer  
**SUBJECT:** Update on the Implementation of the TPB Regional Priority Bus Project under the Transportation Investments Generating Economic Recovery (TIGER) Program  
**DATE:** December 10, 2015

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This memorandum provides a report on the implementation status and grant funding drawdown on the group of projects funded with federal Transportation Investments Generating Economic Recovery (TIGER) funds awarded to the TPB in February 2010. Also included in the memorandum is a summary status report of the ongoing activities of projects underway and scheduled to be completed in the next months.

The \$58 million TIGER grant program has sixteen component projects being implemented on transit corridors across the District of Columbia, Maryland, and Virginia. There are five implementing agencies: the City of Alexandria, Virginia; the District of Columbia Department of Transportation (DDOT); the Maryland Department of Transportation (MDOT); the Potomac and Rappahannock Transportation Commission (PRTC); and the Washington Metropolitan Area Transit Authority (WMATA). Table 1 lists the individual projects along with the estimated cost and the lead agency responsible for project implementation and Figure 1 displays the Regional Priority Bus Network created by the TIGER component projects.





### IMPLEMENTATION AND FUNDING DRAWDOWN

As of December 1, 2015, four of the 16 projects are essentially complete. As of November 30, 2015 approximately \$33.3 million of the grant, or 57%, has been invoiced and reimbursed. Approximately \$3.5 million of additional work has been completed by contractors and manufacturers for the implementing agencies, but invoices have not yet been submitted to COG for federal reimbursement. As of December 1, 2015, the 12 remaining projects are underway for a combined amount of about \$21.9 million in reimbursable expenses.

The grant expires in September 30, 2016, and unused funds will be returned to the US Treasury. With the time needed for final invoicing and processing of the reimbursement from the Federal Transit Administration (FTA), all construction and implementation work must essentially be completed by June 30, 2016.

### MAJOR PROJECTS AT RISK CHART

Of the twelve projects currently underway, the following four major projects are scheduled to be completed close to the desired deadline of June 30, 2016 or have construction work to be completed during the winter months. While design, procurement and permitting work for all four projects have been completed unforeseen implementation or construction issues could pose the risk of delayed completion and impact the ability to fully drawdown the funds by September 2015.

<i>Project (Agency)</i>	<i>Total Budget</i>	<i>Remaining Funds</i>	<i>Est. Completion Date</i>
Georgia Avenue Bus Lane (DDOT)	\$3.5 million	\$1.5 million	May 2016 
Takoma Langley Transit Center (MDOT/MTA)	\$13.3 million	\$4.6 million	February 2016 
Transit Signal Priority (DDOT, City of Alexandria and WMATA)	\$8.0 million	\$6.5 million	July 2016 
Pentagon and Franconia Springfield Stations (WMATA)	\$9.7 million	\$8.7 million	June 2016 

**PROPOSED REVISIONS**

As projects have reached final design and procurement processes have moved forward, some elements of several projects are no longer feasible to complete due to lack of cost-effectiveness or the time remaining in the grant. In order to accelerate expenditure and more effectively use the grant funds, the following project revision requests are being developed for submittal to the FTA. Of the 12 projects currently underway, revisions to the planned work for the following three projects are being requested. The proposed revision totals around \$1 million and the funds would be used to fund other elements of the same project OR other TIGER projects. FTA review and approval of the revisions is necessary before this can occur.

**US-1 Corridor Enhancements (MDOT/SHA)**

MDOT/SHA have requested the Queue Jumps and the TSP components planned for this project be cancelled and the funds used for the Takoma Langley transit center. The funds are proposed to be used for real-time information signs, security cameras, and a public address system at the Takoma-Langley Transit Center.

**Alternative Bus Bays at Army Navy Drive (WMATA)**

WMATA is developing a revision request to remove this project for a bus bay facility at the Hayes Parking Lot adjacent to Army Navy Drive, near the Pentagon. The TIGER grant funds would be used to provide additional improvements at the Franconia-Springfield station.

**Van Dorn-Pentagon Rapid Bus (Alexandria)**

The City of Alexandria is developing a revision request to eliminate the SuperStop component of this project, due to increased costs and right-of-way issues. The City plans to use the funds to install TSP components at traffic signals in preparation for future use.

**STATUS REPORT UPDATE**

The TPB was briefed at their March and July 2015 meetings on the progress of the projects funded by the grant, in response to a request for periodic updates. A memorandum update was provided in May and September 2015, and a memorandum update is provided for this December 2015 TPB meeting. The following is an update to the September 2015 Status Report of the ongoing activities of projects underway and scheduled to be complete in the next six months.

Staff anticipate again briefing the Board on the status of the above projects and highlighting any potential issues associated with the timely completion and utilization of the grant funds at the February 2016 meeting.

## **MAJOR PROJECT PROGRESS REPORT**

### **Real Time Passenger Information (RTPI) Display Project (WMATA):**

This project is largely complete, with a total of 169 displays now installed and successfully tested at locations in the District of Columbia, Maryland, and WMATA stations in Virginia. Twelve additional displays will be installed at sites in Virginia once bus shelters have been constructed. Display software was updated this fall to improve the text presentation for bus arrival times.

### **Georgia Avenue Bus Lane (DDOT):**

Construction mobilization began in July. The contractor has begun the installation of storm water drainage structures along the corridor on the east side of Georgia Avenue. Over the course of the fall DDOT's contractor installed curbs and gutters, ADA sidewalk ramps, and electrical infrastructure. The contractor will shortly begin placement of new sidewalks. This project is expected to be completed in May 2016.

### **Takoma/Langley Transit Center (MDOT/MTA):**

The steel structure and concrete paving work for the transit center is essentially complete. The center's final electrical power has been connected. Work to relocate a gas main by Washington Gas is underway, which will allow final construction elements to proceed. Completion of the center for handover to WMATA is anticipated around February 2016.

### **Transit Signal Priority (TSP) Project (WMATA, City of Alexandria and DDOT)**

Transit Signal Priority (TSP) installation on VA 7 (Leesburg Pike) is complete at 20 locations in Fairfax County and the City of Alexandria. The City of Falls Church requires a signal upgrade at the 5 intersections in the city prior to finalizing an MOU with WMATA and is working to finalize the installation by February. A WMATA bus fleet of 8 buses has been equipped with the onboard equipment and began initial field testing in November. WMATA anticipates completing the project in March 2016.

In September, DDOT completed installation of TSP wayside devices at 94 locations throughout the District. Onboard bus equipment is being installed by WMATA on 116 Metrobuses which will continue through February. Operational testing will take place through June 2016. Development of a second phase contract for another 101 TSP devices is in progress, with the goal of completing all work by July 2016.

Also in September, the City of Alexandria received new traffic signal controllers to serve the Van Dorn-Pentagon corridor in preparation for TSP upgrades. The City's TSP contractor completed the basic programming of the controllers, and is testing TSP at the eight locations along the corridor.

### **Pentagon and Franconia-Springfield Station Improvements (WMATA)**

At the Pentagon transit station, work began in June 2015, with construction of pedestrian access, safety, and security improvements, station bus pads, lighting installed in October and security bollards in November. Two security technology projects, CCTV cameras and a PA system, have had vendors selected and pre-installation work is underway. WMATA anticipates completing all work by January 2016.

At the Franconia-Springfield transit station, construction work started in October with site clearance, utilities work, and foundation excavation, followed by concrete work in November. The fabrication of

bus shelter canopies is taking place at the factory. The first bus canopy was installed on November 21, and installation will take place through the winter with work completed by March 2016. The remaining component is the construction of a bike cage, which has been delayed due to negotiations with the manufacturer and may be reevaluated.

**Table 1: NCR TIGER Priority Bus Transit Grant Project Component Descriptions**

#	Project Components (As Revised January 15, 2015)	Lead Agency	Budget
1	<b>16th Street Bus Priority Improvements:</b> Capital improvements include a queue jump lane, bus stop improvements, real time passenger information (RTPI) displays at up to 17 stop locations, and transit signal priority/traffic system management (left turn phase for bus) at 31 intersections.	DDOT	\$1,292,317
2	<b>Georgia Avenue Bus Priority Improvements:</b> Improvements include a short bus-only lane that will be constructed on Georgia Avenue to alleviate current bus delays. Additionally, improvements include transit signal priority, bus stop improvements, queue jumps, and real time passenger information (RTPI) displays will be installed.	DDOT	\$5,442,000
3	<b>H Street/Benning Road Bus Priority Improvements:</b> This project will implement RTPI displays and install security cameras at select locations.	DDOT	\$434,000
4	<b>Wisconsin Avenue Bus Priority Improvements :</b> Capital improvements include transit signal priority and RTPI displays deployed to a number of express service stop locations.	DDOT	\$1,490,000
5	<b>Addison Road Improvements :</b> This is a WMATA priority bus corridor that connects the Addison Road and Southern Avenue Metrorail stations. The project includes the replacement of bus shelters along with installation of real-time passenger information displays at select locations.	WMATA	\$214,000
6	<b>University Boulevard Bus Priority Improvements:</b> Planned improvements include installation of RTPI displays and a series of bus stop enhancements along the corridor.	MDOT	\$235,864
7	<b>US 1 Bus Priority Improvements:</b> Improvements include queue jump lanes and transit signal priority.	MDOT	\$476,250
8	<b>Veirs Mill Bus Priority Improvements:</b> Improvements include deployment of RTPI displays.	MDOT	\$98,479
9	<b>US 1 Transitway:</b> A bus transitway in the median of US 1 within the city limits will provide exclusive right of way for buses.	City of Alexandria	\$8,202,500
10	<b>VA 7 (Leesburg Pike) Bus Priority Improvements:</b> A WMATA Priority Corridor that connects the Cities of Alexandria and Falls Church with the commercial center of Tysons Corner, the TIGER grant funds improvements that include transit signal priority at up to 25 intersections along the corridor.	WMATA	\$1,084,000

#	Project Components (As Revised January 15, 2015)	Lead Agency	Budget
11	<b>Van Dorn-Pentagon Rapid Bus:</b> The project will provide runningway improvements to support a future rapid bus service in the City of Alexandria from the Van Dorn Metrorail Station in the City of Alexandria to the Pentagon in Arlington County. TIGER funding will support signal prioritization technology, two super stops, and two queue jump lanes. These improvements will enhance transit service along three current bus routes in addition to a future new BRT route.	City of Alexandria	\$646,550
12	<b>Theodore Roosevelt Bridge to K Street Bus Priority Improvements:</b> Implementation of an integrated transit signal priority and traffic signal optimization system along E Street, northbound 18th Street, and southbound 19th Street. Additionally, uninterruptable power supply installation will take place at select traffic lights will prevent traffic signals outages following power interruptions.	DDOT	\$1,703,683
13	<b>14th Street to K Street Bus Priority Improvements:</b> Implementation of an integrated transit signal priority and traffic signal optimization system along 14 <sup>th</sup> Street from the bridge to K Street. Additionally, uninterruptable power supply installation will take place at select traffic lights.	DDOT	\$2,729,190
14a	<b>Pentagon and Franconia-Springfield Station Improvements:</b> Station improvements at Pentagon Station and Franconia/Springfield Station, including bus bays, real time bus information, and traffic circulation/access/security improvements. Major technology improvements include real-time bus information displays.	WMATA	\$9,770,550
14b	<b>PRTC Buses and ITS Technology:</b> This component includes the replacement of 13 buses, with new vehicles using state-of-the-art clean-fuel technology. The project also includes security cameras outfitted on 15 buses and the procurement of computer-aided dispatch and automatic vehicle location (CAD/AVL) technology.	PRTC	\$9,650,000
TC	<b>Takoma/Langley Transit Center:</b> This transit center at the intersection of University Boulevard and New Hampshire Avenue will consolidate the bus stops at the intersection into one facility (although some existing bus stops will still remain in order to prevent requiring pedestrians to cross busy roads to their final destinations). The transit center will provide a safe, attractive, comfortable and efficient facility for passengers and improve pedestrian safety and accessibility.	MDOT	\$13,309,287
<b>TOTAL FROM 16 COMPONENT PROJECTS</b>			<b>\$56,778,670</b>

FIGURE 1: MAP OF THE 16 COMPONENT PROJECTS OF THE NCR TIGER GRANT

