## TIGER Grant for Priority Bus Transit in the National Capital Region

## Transportation Planning Board June 18, 2014

**Project Implementation Update** 

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### **Structure of Presentation**

Annual update presentation to the TPB on the progress of the TIGER Grant.

#### Contents:

- 1. Overview of TIGER Grant
- 2. Projects Completed / Under Construction
- 3. Projects Completing Design
- 4. Critical Implementation Steps



### **Overview of the TIGER Grant**

- The region's Transportation Investments Generating Economic Recovery (TIGER) Grant Agreement with USDOT was signed on December 14, 2010.
  - \$58.8 million in capital funding (100% Federal) for priority bus transit improvements.
  - Five implementing organizations (project owners): City of Alexandria, DDOT, MDOT, PRTC, and WMATA.
- Complex and multimodal projects:
  - 16 projects to improve bus operations and customer service.
  - Involves roadway managers, traffic engineers, information technology personnel, and transit operations staff.
  - Extensive work to complete detailed design for the construction projects and several key technology procurements.

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## **Progress of the TIGER Grant**

Progress to Date / Remaining

Period of Performance: Actual/Anticipated Expenditures: To Date:
Three years and 5
months (60%)
\$17.6 million
(30%)

Remaining:
27 months to go
(40%)
\$41.2 million

(70%)

- The TIGER grant is a reimbursable project and the federal funds expire on September 30, 2016.
- Given invoice processing time, work must be completed by the end of June 2016 to ensure timely disbursement.

## **Map of TIGER Grant Projects**

#### **Grant projects include:**

- Buses and ITS (PRTC)
- US-1 (VA) / Potomac Yard Transitway (Alexandria)
- Takoma/Langley Transit Center (MDOT)
- Franconia-Springfield and Pentagon station improvements (WMATA)
- Bus Corridor Priority
   Treatments (DDOT, WMATA, MDOT, Alexandria)
  - Three groups of projects



### **TIGER Projects Completed or Under Construction**

Four sets of projects have been completed or are under construction:

- Buses and ITS (PRTC)
- US-1 (VA) / Potomac Yard Transitway (Alexandria)
- Takoma/Langley Transit Center (MDOT)
- Bus Corridor Priority Treatments (All\*)
  - Group A: Real Time Passenger Information (RTPI)



\* Not including PRTC



# Potomac and Rappahannock Transportation Commission (PRTC)

- 13 replacement buses delivered in 2012.
- Computer-Aided Dispatch and Automatic Vehicle Location (CAD/AVL) system in mini-fleet testing. (est. complete in December 2014)



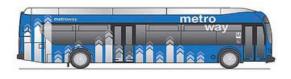
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## **City of Alexandria**

US 1 (VA) Transitway (August 2014)

- Dedicated travel lanes for bus in median of US-1.
  - Construction of lanes largely complete.
  - Landscaping and bus shelter installation underway.
- Anticipated opening date for new
  "Metroway" BRT service is August 24.
  - Connecting Braddock Road, Potomac Yard, Crystal City, and Pentagon City.





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## **Potomac Yard Transitway**





## **Takoma – Langley Crossroads Transit Center** (Oct. 2015)

Maryland Transit Administration (MTA) managing construction:

- New traffic signals and pedestrian connections installed.
- Demolition of existing structures (Taco Bell) about to begin.



### Bus Corridor Priority Treatments: Group A – Real Time Passenger Information (RTPI)



#### **Proposed Locations (240 signs total)**

- 16<sup>th</sup> Street (30)
- Georgia Avenue (25)
- H St / Benning Rd (28)
- Wisconsin Avenue (40)
- Addison Road (13)
- University Blvd (35)
- Veirs Mill Road (25)
- VA-7 / Leesburg Pike (31)
- Pentagon and Franconia-Springfield Stations (13)
- First hardware order for signs placed, with installation expected to begin in September (continuing through end of grant).
- Coordinating with road agencies, utility companies, and bus shelter contractors to complete electrification of bus shelters at proposed locations.

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## **TIGER Projects Completing Design**

Three sets of projects are completing design, with construction scheduled to begin in the next year:

- Bus Corridor Priority Treatments (All\*)
  - Group B: Transit Signal Priority (TSP)
  - Group C: Capital Improvements
- Franconia-Springfield and Pentagon station improvements (WMATA)



\* Not including PRTC

## **Bus Corridor Priority Treatments: Group B – Transit Signal Priority (TSP)**

Procurement led by WMATA, with input from other agencies.

- WMATA has procured onboard equipment for its buses. Prototype wayside equipment deployment on VA-7 (Leesburg Pike) scheduled for late 2014/early 2015.
- Once testing completed, road agencies will procure and install wayside equipment compatible with their traffic signal systems.

#### **Proposed TSP Locations (77 total)**

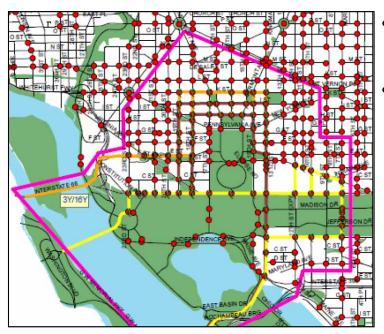
- 16<sup>th</sup> Street (6)
- Georgia Avenue (4)
- Wisconsin Avenue (5)
- University Blvd (20)
- US 1 MD (7)
- Van Dorn / Beauregard (8)
- VA-7 / Leesburg Pike (25)

#### What is TSP?

Modification of traffic signal timing to benefit transit vehicles operating along a roadway. TSP green phase for buses can be: extended, early/advanced, or inserted in cycle.



## Signal Optimization & Prioritization TR Bridge and 14th Street Bridge to K Street



- 208 traffic signals to be optimized
- 71 traffic signals to be both optimized and have TSP installed

(April 2016)

## Bus Corridor Priority Treatments: Group C – Capital Improvements

District Department of Transportation (DDOT) (Oct. 2015)

- 16th Street
  - Bus stop improvements
- H Street/Benning Road
  - o Security Cameras
- Georgia Avenue
  - Bus-Only lane (near Howard University)
    - o Construction: September 2014 August 2015
  - Bus stop improvements

#### City of Alexandria (June 2016)

- Van Dorn Pentagon Corridor
  - Queue jumps and bus stop improvements.

#### WMATA (March 2016)

- Addison Road Corridor
  - o Bus stop improvements.





## Washington Metropolitan Area Transit Authority (WMATA)



- Bus Station Improvements at Pentagon (June 2016)
  - Construction about to begin on pedestrian access treatments.
  - Pentagon Transit Center bus bays DoD conducted work that precludes the original proposal. As an alternative, a proposal for construction of a bus station in the Hayes Street Lot that lies between I-395 and Army-Navy Drive is in development (50% TIGER, 50% other funds).
- Improvements at Franconia-Springfield (June 2016)
  - WMATA is requesting the deletion of two circulation components of the project: a pedestrian bridge and a cell phone waiting area due to cost impacts significantly greater than the original estimates.

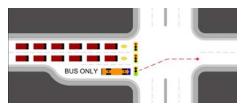
Both projects propose revisions to the TPB's TIGER grant that must be submitted for review and approval by USDOT.



### **Maryland Department of Transportation (MDOT)**

Bus Corridor Enhancements: University Boulevard, US 1 (MD), and Veirs Mill Road

TSP and RTPI installation, bus stop improvements, queue jumps.



TSP installation along University Boulevard and Veirs Mill Road no longer feasible due to advancement of other transit projects (e.g., Purple Line).

 Project revision request to be submitted to USDOT to use funds on other Maryland projects.

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## **Critical Implementation Steps**

- 1. Project Revision Requests: Pentagon, Franconia Springfield, University Blvd and Veirs Mill Road
  - Revisions to the initial grant must be submitted for approval by USDOT, a process which takes several months.
  - Goal is for MDOT and WMATA to submit final requests by end of June for submission to USDOT, with revised construction plans underway by the end of the year.
- 2. Transit Signal Priority (TSP) Systems
  - Successful compatibility testing across multiple wayside traffic signal systems is technologically challenging, and may experience delays that affect TSP projects planned for completion in 2016.
- 3. TIGER Grant Expiration
  - Work must be completed by the end of June 2016 to ensure timely disbursement before funds expire on September 30, 2016.
     Two years to go!

