

## VDOT Proposal to Address McLean Cut Through Traffic Problems

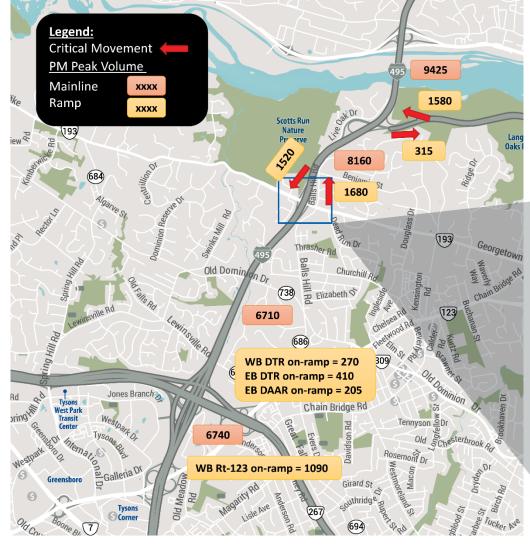
Board Transportation Committee July 17, 2018

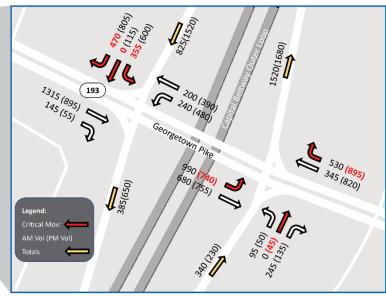
Tom Biesiadny, Director Fairfax County Department of Transportation



### Study Area: Existing Conditions

- Heavy PM peak hour volumes using Rt. 193
   & other on-ramps to NB I-495
- Heavy intersection volumes along Rt. 193 (includes cut-through traffic)







## Issue: Safety and Access in neighborhoods and schools

## **Different Solution**

- Has been modeled
- Probability of success

## **Solution Plan A** (recommended)

- Up to a 4-month pilot with before and after analysis
- Approach the Federal Highway Administration (FHWA) to close Northbound I-495 on-ramp at Georgetown Pike from 1 to 7 PM

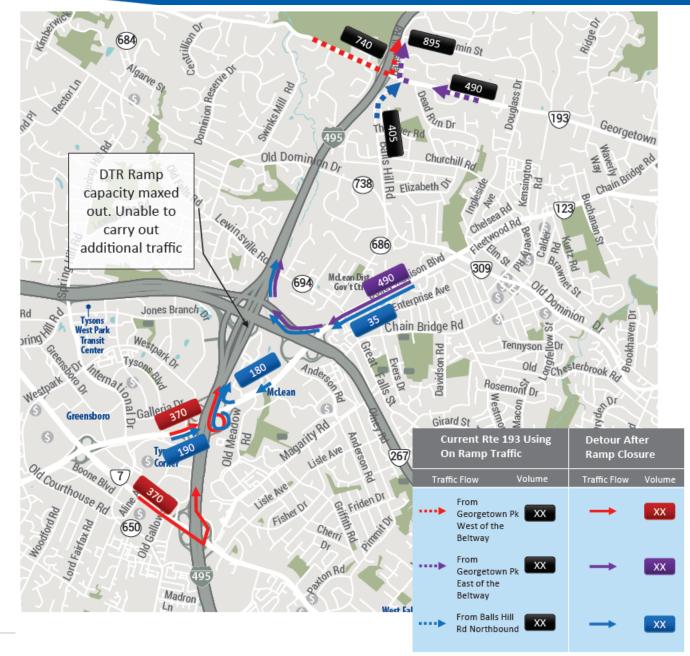
### **Solution Plan B**

- Up to a 4-month pilot with before and after analysis
- Approach the Commonwealth Transportation Board (CTB) to prohibit turn movements from Georgetown Pike to Northbound I-495 on-ramp from 1 to 7 PM



### Assumed Diversion Routes after Closure of the Georgetown Pike On-Ramp to the I-495 Inner Loop (PM)

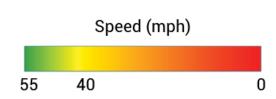
PM peak hour – ramp closure detours will have greater impact

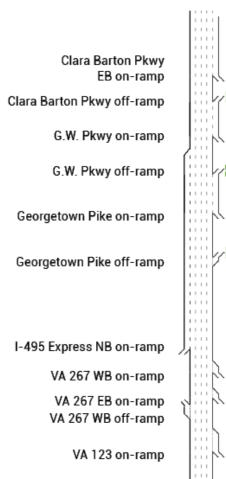


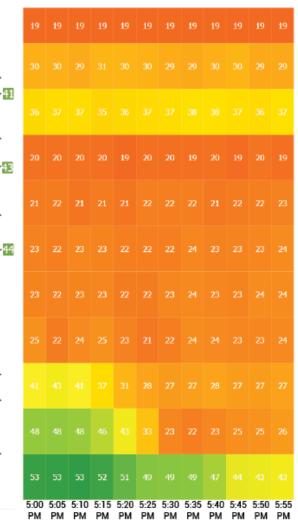


## Congestion: Speed Comparison (PM Peak Hour)

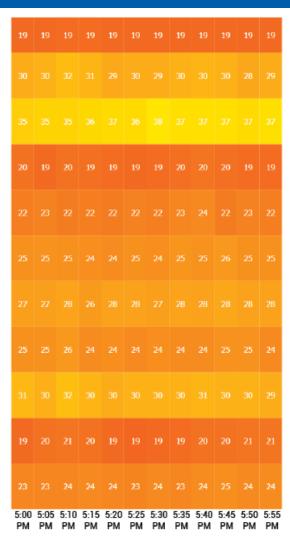












Ramp Closure Scenario

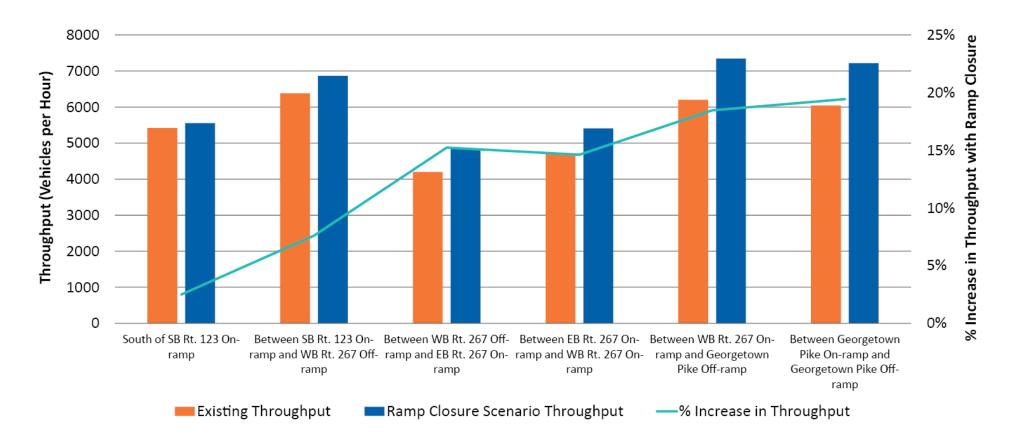
PM peak hour – ramp closure detours will increase queue on I-495



Virginia Department of Transportation

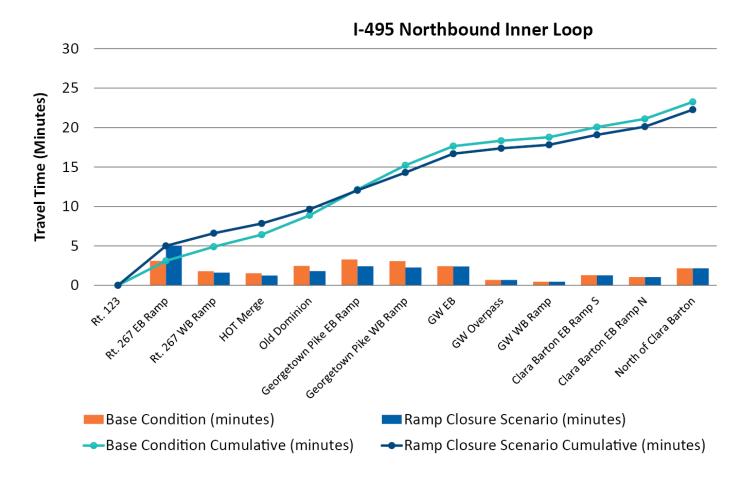
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## THROUGHPUT: PM Demand vs. Throughput Comparison



PM peak hour – ramp closure will increase throughput upstream of Rt. 193

## TRAVEL TIME: Travel Time Comparison (PM Peak Hour)



PM peak hour – ramp closure will decrease the overall travel time



# Main Existing Diversion Routes to the I-495 Inner Loop and Recommended VMS Locations

Freeway Routes Being Avoided by Drivers Freeway Main Downstream Destinations Reston/Sterling to Route 193 Shortcut Tysons West to Route 193 Shortcut Tysons East to Route 193 Shortcut VMS Locations (Indispensable)

16 recommended VMS locations

VMS Locations (Desirable)



### **Comparison: Plans A and B**

### Plan A

### **Pros:**

- Will eliminate cut throughs and improve safety/access
- Does not degrade the I-495 throughput in model
- Takes less law enforcement than Plan B

#### Cons:

- Eliminates local access to I-495 North at Rt. 193 during restriction
- Requires some law enforcement
- Causes slower speeds on I-495 and limits spot congestion in the model
- Requires FHWA approval and announcement in the Federal Register

### Plan B

### **Pros:**

- Will eliminate cut throughs and improve safety/access
- Does not require
   FHWA approval and
   Federal Register
- Allows exit and reentry of I-495 at Rt. 193
- Does not degrade the I-495 throughput in model

### Cons:

- Eliminates local access to I-495 North at Rt. 193 during restriction
- Requires heavy and continuous local law enforcement
- Causes slower speeds on I-495 and limits spot congestion



### **Next Steps**

- Initial Community Meeting August 2
- Additional analysis of proposal and comments received
- Second Community Meeting Fall 2018
- Staff Recommendation
- Board of Supervisors Consideration Fall 2018
- Implementation, if endorsed the Board



### **Questions/Discussion**

