

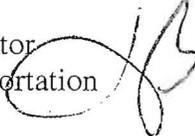


# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** May 7, 2013

**TO:** Members, Board of Supervisors Transportation Committee

**FROM:** Tom Biesiadny, Director  
Department of Transportation 

**SUBJECT:** Update on Detailed Operational Analysis of Proposed Tysons Dulles Toll Road Ramps

This memorandum is an update on the Detailed Operational Analysis of Dulles Toll Road Ramps into Tysons. The Department of Transportation (FCDOT) has been conducting this study of Dulles Toll Road Ramp connections into Tysons as a follow up to the Board's approval of the Tysons Comprehensive Plan Amendment in June 2010. FCDOT expects a significant number of future Tysons residents and workers to use transit and other high occupancy modes of transportation and is working to maximize the number of travelers using these options. However, there will still be a need to improve vehicular access into/out of Tysons from the Dulles Toll Road to support the 85,000 additional residents and 100,000 additional workers that are envisioned by the Comprehensive Plan Amendment.

In addition, FCDOT is in the process of finalizing the West/Central Consolidated Transportation Impact Analysis (CTIA) study. As per the findings of the CTIA study, FCDOT is recommending three proposed ramp accesses into Tysons due to an increase in the densities of the submitted rezoning applications and for better distribution of traffic into/out of Tysons grid of streets.

The three proposed ramps accesses to Tysons are generally located west of Route 7; between Route 7 and Spring Hill Road; and east of Spring Hill Road. After the Boone Boulevard ramp options were evaluated and presented to the Board on January 15, 2013, the Boone Boulevard alignment (one lane in and one lane out) has been recommended to be incorporated with the other two ramp locations including either collector-distributor (C-D) roads or urban frontage roads. Hence, two preferred alternatives have been identified:

- Option 1: Boone Boulevard Ramp (one lane in and one lane out), Greensboro Drive Ramp, and Jones Branch Drive Ramp with a C-D Road
- Option 2: Boone Boulevard Ramp (one lane in and one lane out), Urban Frontage Roads, and Jones Branch Drive Ramp

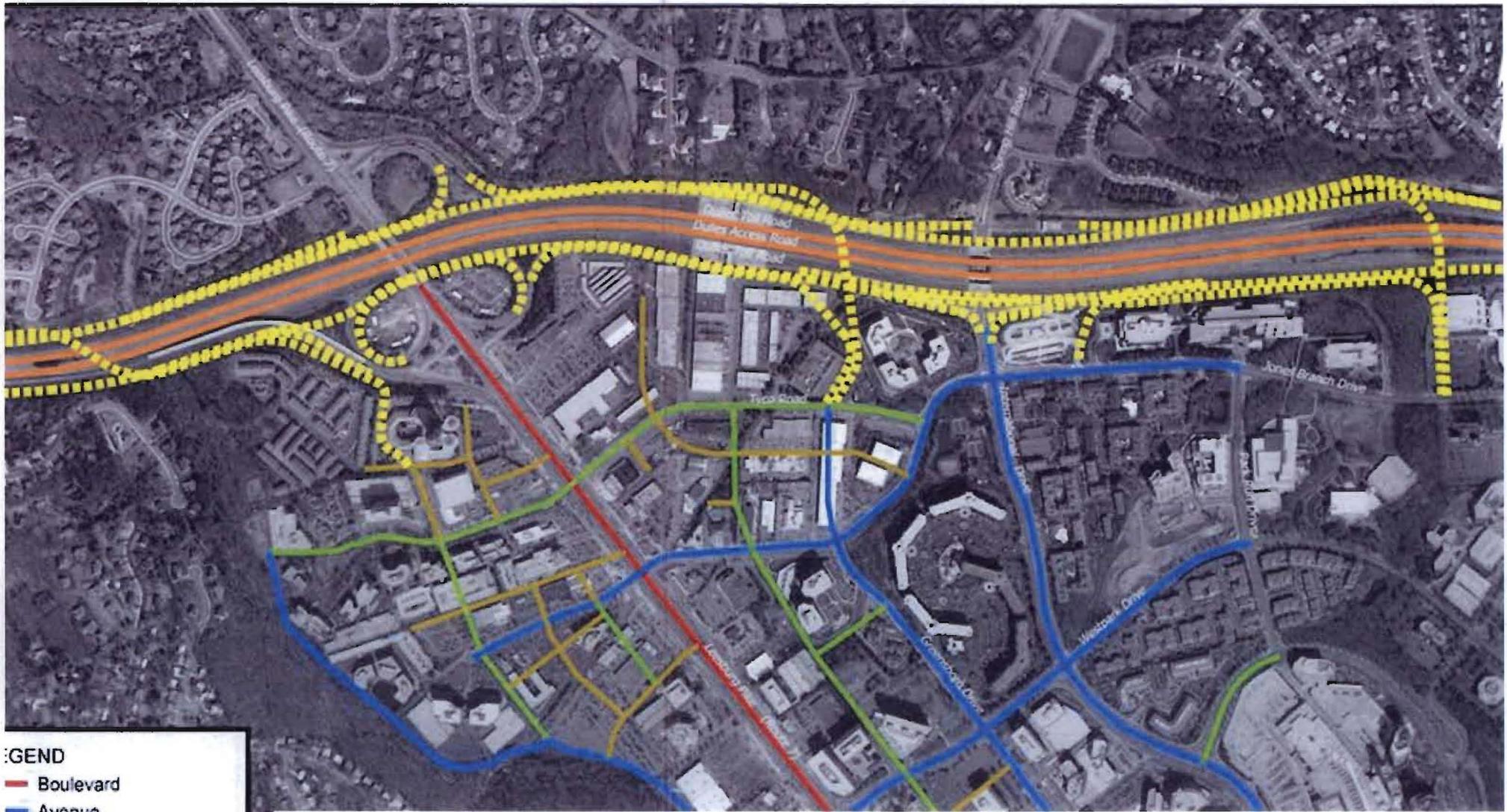
In general the two alternatives have similar impacts. Option 2 slightly improves the operation of the grid of street intersections. Option 2 also provides additional eastbound accesses that are not available on Option 1. Option 2 is more compatible with pedestrian and bicycle facilities. Plan sheets of Option 1 and 2 are attached.

The Table below provides a comparison of the two alternatives:

2030 Alternatives Evaluation		
Alternative	Option 1	Option 2
Description	Boone Blvd Ramp (one lane / direction), Greensboro Dr Ramp, & Jones Branch Dr Ramp with C-D Road	Boone Blvd Ramp (one lane / direction), Urban Frontage Roads, & Jones Branch Dr Ramp
Improvement to Route 7 Intersection Operations (AM / PM)	Low / Low	Low / Low
Improvement to Spring Hill Intersection Operations (AM / PM)	Low / Medium	Low / Medium
Improvement to Grid of Streets Intersection Operations (AM / PM)	Medium / Medium	Medium / High
Impacts to Merging / Weaving along DTR	Low / Low	Low / Low
Need for Additional Lanes along DTR	No Change	No Change
Ability to Facilitate Multi-Modal Transportation	- C-D Road Configuration is not Compatible with Pedestrian and Bicycle Facilities	- Urban Frontage Road Configuration is Compatible with Pedestrian and Bicycle Facilities
Increase in Impervious Area, SF	1,550,000	1,560,000
ROW & Permanent Easement Areas, SF	770,000	760,000
Environmental	Medium Impact	Medium Impact
Constructability	High Difficulty	High Difficulty
Potential Design Waivers / Exceptions	- Design Speed - Lane / Shoulder Width - Superelevation	- Design Speed - Lane / Shoulder Width - Superelevation
Major Utility Impacts	- Box Culvert Extension (Wolftrap Creek) - Box Culvert Extension (Old Courthouse Spring Branch) - Metrorail SWM Pond 1 - Dominion Power Electrical Substation	- Box Culvert Extension (Wolftrap Creek) - Box Culvert Extension (Old Courthouse Spring Branch) - Metrorail SWM Pond 1 - Dominion Power Electrical Substation
Other Impacts	- Medium Aesthetics Impacts - Trap Rd Bridge over DTR - Rt 7 Bridge over DTR - Ramp from DIAAH to Rt - MWAA Maintenance Facility - MWAA Toll Booths	- Higher Aesthetics Impacts - Trap Rd Bridge over DTR - Rt 7 Bridge over DTR - Ramp from DIAAH to Rt - MWAA Maintenance Facility - MWAA Toll Booths
Estimated Construction Cost	\$250 Million	\$330 Million
1. Refer to the description of each criteria for more information about how it was evaluated.		

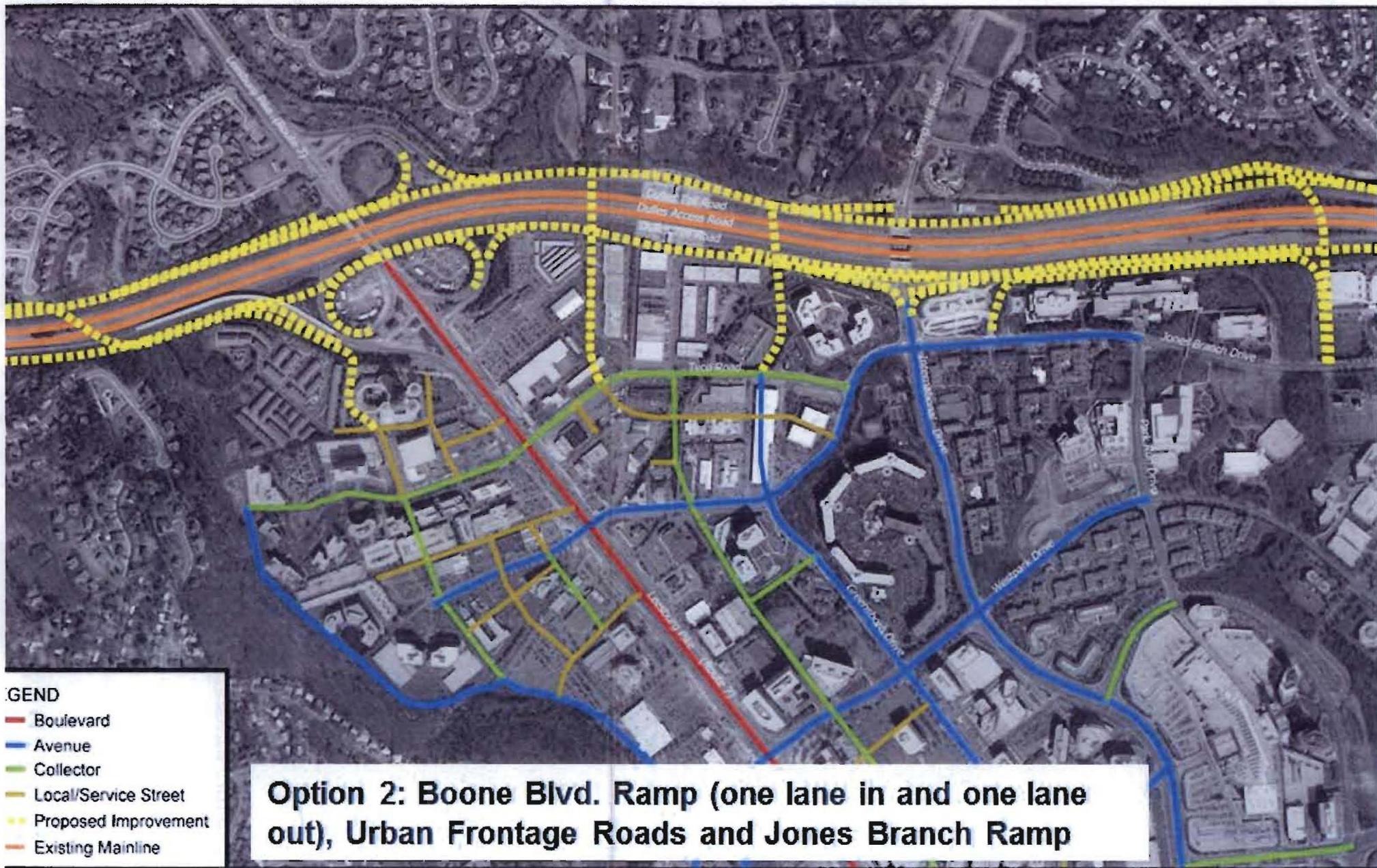
FCDOT has submitted a draft report of the study to Virginia Department of Transportation, Fairfax County Park Authority and Metropolitan Washington Airport Authority for their formal review. FCDOT is coordinating the two options with the developers near the ramp accesses. FCDOT is scheduled to present both options to the public on May 30, 2013, at Westbriar elementary school, and will be seeking community feedback.

If you have any questions or would like additional information, please call Seyed Nabavi at (703) 877-5759 or me at (703) 877-5663.



- LEGEND**
- Boulevard
  - Avenue
  - Collector
  - Local/Service Street
  - - - Proposed Improvement
  - Existing Mainline

**Option 1: Boone Blvd. Ramp (one lane in and one lane out), Greensboro Drive Ramp and Jones Branch Ramp, Includes CD Road**



- GEND**
- Boulevard
  - Avenue
  - Collector
  - Local/Service Street
  - Proposed Improvement
  - Existing Mainline