

Government Center Parkway Extension

(Stevenson Street to Jermantown Road)

Conceptual Plan & Estimate

City Council Work Session

September 18, 2015

Scope & Intent of Study

 Study Developed to Support Funding Application to VDOT

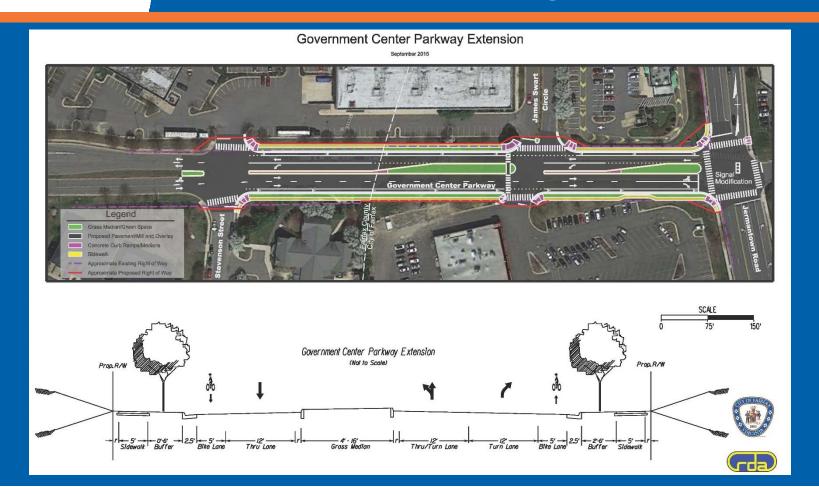
 Preliminary Traffic Analysis to Determine Effects of Constructing Gov. Center Pkwy Extension

Preliminary Plan Development to Evaluate
 Impacts & Enable Project Estimate Preparation

Project Location



Conceptual Design



Project Description

Project Scope

- Construct "Missing Link" of Government Center Parkway from Stevenson Street to Jermantown Road
- Two Eastbound Thru Lanes to Provide Right and Left Turn Lanes to Jermantown Road
- One Westbound Thru Lane
- Turn Lanes to Stevenson Street and Shopping Center
- Sidewalk, Pedestrian Crossings, On-Road Bike Lanes, Lighting & Landscaping
- Retaining Wall Adjacent to McDonald's Drive Thru
- Traffic Signal Reconstruction at Jermantown Road/Government Center Parkway

Project Description

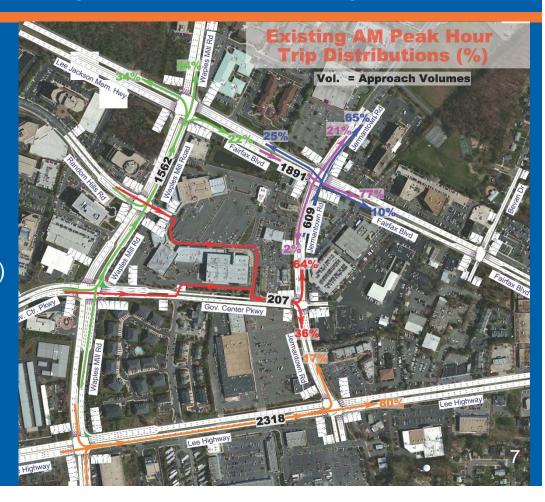
Project Impacts

- Majority of Project Contained Within Existing Right of Way
- 2 Impacted Properties (Shopping Centers to North & South)
 - Additional Right of Way & Easements Needed for Construction

Preliminary Traffic Analysis

AM Travel Patterns

- Majority of traffic entering City uses Lee Highway & Fairfax Boulevard (originating west of Waples Mill)
- Majority of traffic from Random
 Hills Road and Gov. Center
 Parkway heads north (Waples Mill)
 or west (Route 50)
- Some existing traffic (approx. 200 vehicles) uses shopping center as cut-through in AM peak



Preliminary Traffic Analysis

AM Operations

- Minor
 Degradation of
 signal operations
 at
 Jermantown/Lee
 Highway
- Increased congestion on Jermantown Road



AM Peak Hour Level Of Service

Intersection LOS with Existing Network = D Intersection LOS with Future Network = D

Intersection LOS with Existing Network = B Intersection LOS with Future Network = C

Intersection LOS with Existing Network = C Intersection LOS with Future Network = D

In Urban Areas, "LOS D" is Acceptable For Peak Periods. (See AASHTO)

Preliminary Traffic Analysis

PM Operations

Minor
 improvement to
 signal operations
 at Jermantown/
 Lee Highway &
 Jermantown/
 Fairfax
 Boulevard



PM Peak Hour Level Of Service

Intersection LOS with Existing Network = E Intersection LOS with Future Network = D

Intersection LOS with Existing Network = B Intersection LOS with Future Network = B

Intersection LOS with Existing Network = E Intersection LOS with Future Network = D

In Urban Areas, "LOS D" is Acceptable For Peak Periods. (See AASHTO)

Project Description

Traffic Impacts

- Government Center Parkway Completes the Roadway Network "Grid" at the Western City Limit
- Provides Alternative Route for East-West Travel
- Minor Redistribution of Traffic Anticipated
- Additional Traffic via VDOT-Operated Intersection (Gov. Center) Parkway/Waples Mill)
- Additional Congestion Anticipated on Jermantown Road Between Fairfax Boulevard & Lee Highway
- Traffic Signal Network Continues to Operate at Acceptable Levels

Project Cost Estimate

Preliminary Project Estimate:

Engineering (PE): \$300,000 R/W & Utilities (RW): \$550,000 Construction (CN): \$2,300,000

Project Total: \$3,150,000

Questions & Comments

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