Shirley Gate Road Extension

Fairfax Campus Community Advisory Board
January 31, 2019
County of Fairfax, Virginia

Project Background

• Extends existing Shirley Gate Road alignment from Braddock Road to Fairfax County Parkway
• Comprehensive Plan improvement since 1991
• Guidance to utilize existing easements and minimize impacts to residential properties to extent feasible.
Location & Affected Properties
History

• 1991 - Extension added to Comprehensive Plan
• 2006 – Interchanges at Popes Head Road and Shirley Gate Road Extension added to Comp Plan
• 2014 – Extension added to County’s Six Year Transportation Project Priorities (TPP)
• 2014 – Study of the Shirley Gate Road Extension authorized by Board of Supervisors
• 2015 – Sup. Herrity designated a Shirley Gate Road Extension Stakeholder Group made up of area property owners to help guide the planning process
Purpose and Need

• Improve north-south connectivity
• Relieve congestion on segments of the Fairfax County Parkway, Route 29, and Route 123.
• Relieve congestion at Route 123 and Braddock Road
• Delay need for planned grade-separated interchange at Route 123/Braddock Road
• Provide access to Patriot Park East, avoiding entrance off Braddock Road through an established neighborhood and existing wetland area
• Improve access to the west end of the City of Fairfax/Fair Oaks
Stakeholder Process

• Five meetings held between May and Sept 2015
  o Guided development of measures of effectiveness (MOE)
  o Provided adjustments to weighting values

• Guided development of updated alignment

  Impacts to Adjacent Properties
  o Septic Fields, Noise, Storm and Water Quality, Lighting

  Impacts on Transportation System
  o Traffic Operations, Improvements to Road Network, Safety

  Cost
  o Minimize the Cost of Construction
Refined Alignment

Current Plan: Extend Shirley Gate Road in a general alignment southward to connect with the Fairfax County Parkway utilizing existing easements and minimizing the impact on the five acre lots and the existing homes on Meath Court.

Proposed Plan: Per the Comprehensive Plan requirement mentioned at left, the proposed plan refines the alignment for the Shirley Gate Road extension and interchange concepts, including replacement of the planned interchange at Popes Head Road with an overpass and extending planned Shirley Gate Road extension from the planned interchange at Fairfax County Parkway to Popes Head Road.
Fairfax County Parkway Interchange at Popes Head Road / Shirley Gate Road Extension

- Minimizes traffic delays with roundabouts
- Maintains continuous route for Popes Head Road
- Popes Head Road roundabout provides traffic calming for this Virginia Byway

Reduced park entrance roadway to two lanes – Interchange designed to accommodate future Shirley Gate Road Extension.
Shirley Gate Road Extended Corridor Planning Study

Existing, 2040 No Build, and 2040 Build Volumes

**Network Assumptions:**

**No Build**
- Fairfax County Parkway: 6 Lanes
- Braddock Road: 6 Lanes (east of FCP)

**Build (in addition to No Build)**
- Shirley Gate Road Extension: 4 Lanes
- Interchange with FCP on Shirley Gate Road Extension Alignment
Benefits of Shirley Gate Road Ext.

- Reduced traffic volumes, travel times, delay and traffic congestion along area roadways/intersections
  - Braddock Road
  - Route 123
  - Intersection of Route 123 and Braddock Road

- Benefit Cost Ratio Analysis (2013 County Analysis)
  - 36.1 B/C (one of the highest amongst County projects)
Benefits of Shirley Gate Road Ext.

- Improved safety at Fairfax County Parkway and Popes Head Road
- Improved access to the west end of the City of Fairfax/Fair Oaks Area
- Provides proper access to Patriot Park East
Cost & Cost Effectiveness

• Planning Level Cost Estimate:
  $39,500,000 (2014)

• Other Factors:
  o congestion relief;
  o savings for travel time;
  o accident costs;
  o emissions; and
  o increased access to jobs
Ongoing & Next Steps

- Initiate Conceptual Design
- Coordinating with VDOT Fairfax County Parkway Widening project (US 29 to VA 123)
Questions?

Leonard Wolfenstein, AICP
Fairfax County DOT
Leonard.Wolfenstein@FairfaxCounty.gov

Project website:
https://www.fairfaxcounty.gov/transportation/study/shirley-gate-extension