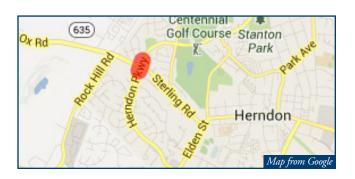
NORTHERN VIRGINIA TRANSPORTATION AUTHORITY

Project Description Form — 3A

Basic Project Information

- 1. Submitting Agency: Town of Herndon
- 2. **Project Title:** Herndon Parkway Intersection Improvements at Sterling Road
- 3. Project Type:
 ✓ Roadway □ Multimodal □ Transit
- 4. Project Description/Scope: Herndon Parkway and Sterling Road intersection is located along the western portion of Herndon Parkway and serves as a regional arterial intersection providing access to/from Old Ox Road (Rt. 606) / Route 28 interchange in Loudoun County. The project is for street capacity improvements to address significant traffic congestion and lengthy peak hour delays. Specific congestion relief improvements include dual turning lanes at the northbound approach onto westbound Sterling Road for the afternoon and evening commuting traffic as well as a dedicated right-turn lane at the eastbound approach onto southbound Herndon Parkway for the morning commuting traffic. Improvements are also to include traffic / pedestrian signalization, pedestrian enhancements and to be constructed primarily within existing rightof-way and town-owned property in order to provide congestion relief now..
- **5. Route** *(if applicable)***/Corridor:** Route 606 / Route 228 / Corridor 3



- 6. Total Project Cost: \$500,000
- 7. Total Funds Required: \$500,000
- 8. Phase/s of Project Covered by Funding: Final Engineering Design, Rightof-Way Acquisition and Construction
- **9. Project Milestones** (by phase, include all phases):
 - Traffic study and concept design completed with Town Council approval
 - Continue with Final Engineering, ROW acquisition and Construction during FY2014
- 10. In TransAction 2040 plan?

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11. In CLRP, TIP or Air Quality Neutral? No.

12. Leverages Sources:

 \mathbf{V} Local $\mathbf{\Box}$ State \mathbf{V} Federal

• Other (*please explain*)

Local capital funds and Federal RSTP funds completed the traffic study and concept design.

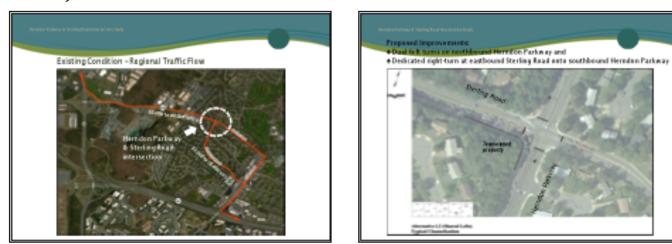
PROJECT ANALYSIS Tier I Pass Fail Tier III Congestion Reduction Relative to Cost: Tier II 5 out of 8 points Plan CLRP TA2040 only Rating High Med Low

Stated Benefits

- 1. What regional benefit/s does this project offer? Herndon Parkway and Sterling Road both serve as minor arterial roadways providing regional access to/from Old Ox Road (Rt. 606) and Route 28 interchange in Loudoun County as well as connectivity to/from the Dulles Toll Road. Implementation of this project will provide significant congestion relief for regional commuting traffic between both Fairfax and Loudon counties and for relatively modest transportation funding.
- 2. How does the project reduce congestion? Proposed improvements are to include road widening to accommodate major intersection traffic capacity improvements, including dedicated turning lanes. Specifically, the project is to include dual-left turn lanes for northbound Herndon Parkway onto westbound Sterling Road as well as a dedicated right-turn lane at eastbound Sterling Road onto southbound Hendon Parkway.

The proposed improvements would directly address the most critical congestion point at the northbound left-turn lane. Left turns from northbound Herndon Parkway onto westbound Route 606, is forced to carry 5 times the existing capacity of the current stacking lane. Today, over 600 vehicles are carried in a single lane during each of the PM peak commuting hours; well above the 300 vehicle-perhour level that warrants a second turning lane. Most approaches to the intersection exceed or operate at LOS F. The combined benefit of dual-left turn lanes, the exclusive southbound right-turn lane, and the eastbound free flow right turn, along with appropriate signal timing adjustments, would be a reduction in average peak hour vehicular delay of 44 percent.

- 3. How does the project increase capacity? (Mass transit projects only) N/A
- **4.** How does the project improve auto and pedestrian safety? Accident data over a 3-year period revealed a relatively high accident rate of 2.14 accidents per million vehicles entering the intersection. Several accidents involve vehicles that failed to negotiate the northbound left-turn from Herndon Parkway onto eastbound Sterling and left the roadway. As a result of improved traffic signalization and reduced signal delay as well as improved roadway curvature alignment will assist in overall vehicle safety at this intersection. ADA pedestrian curb cuts and crosswalk enhancements are to be included.
- 5. List internet address/link to any additional information or documentation in support of project benefits. (Optional) N/A



6. Project Picture/Illustratives

Source: Herndon Parkway/Sterling Road concept design, prepared by Vanasse-Hangen-Brustlin consultants (approved by Herndon Town Council, May 2013)