

# **Route 9 Traffic Calming**

Town of Hillsboro

#### **Project Description**







This project addresses congestion on corridor segment 1/1 of Rt. 7/Dulles Toll Road/Silver Line corridor—a designated NVTA "hot spot". The project segment supports 16,000 ADT, projected 25,000 ADT by 2038. The project, which has 45% of its total funding secured, is scheduled to begin construction in summer 2018. Securing the balance of funding allows the entire project to be built concurrently and completed in 2020, reducing prolonged negative impacts on commuters, businesses and residents, better accommodating construction MOT and minimizing motorist disruption by building roundabouts first and—leveraging significant economies of scale—saving an estimated \$4 million.

Reference Number: 2018-027-0

**TransAction ID: 327** 

**Submitting Jurisdiction/Agency:** Loudoun County **Location**: Route 9 Corridor in the historic Town of Hillsboro, from 0.070 miles west of Rt. 719 (Stony Point

Road) to Rt. 690N (Mountain Road). **Requested NVTA Funds:** \$12,112,000

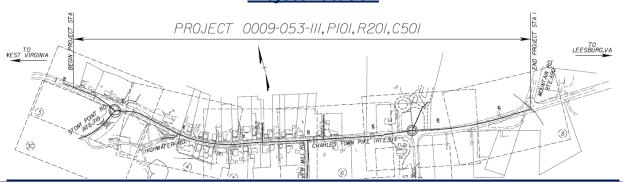
**Total Cost to Complete Project:** \$22,206,000

The project provides traffic congestion mitigation, traffic-calming measures and pedestrian safety improvements on the Rt. 9 corridor, which bisects the fastest growing agricultural/recreational tourism economy in Northern Virginia.

The project begins 0.070 miles west of Rt. 719 (Stony Point Road) and ends at Rt. 690N (Mountain Road). The project includes the following side streets: Stony Point (from Rt. 9 south 252'), Gaver Mill Road (from Rt. 9 south 250'), Rt. 690S/Hillsboro Road (from Rt. 9 south 455'). The project includes two roundabouts, minimum 4' sidewalks on north and south sides of Rt. 9, streetscaping, pedestrian lighting, raised and at-grade crosswalks, on-street parking, a closed storm sewer system and a shared-use path connecting to existing and planned area trails. Additional improvements include overhead utility burial with duct banks for future data utilities and installation of a new drinking water main, sanitary sewer main and laterals. A September 2012, VDOT Location and Design Public Hearing was held and design features were approved by the VDOT Chief Engineer. The project's Rt. 9 lane-width reduction to 11', in conjunction with the roundabouts (western at Rt. 9/Rt. 719; eastern at Rt. 9/Rt.690S), raised and at-grade crosswalks and a 25-mph speed within the Hillsboro limits contribute to the overall traffic-calming effect. The Rt.9/Rt.690S roundabout replaces an existing traffic signal, providing improved levels of service, adding additional capacity and providing safety benefits compared to the existing traffic signal levels of service improve from 'F' during AM and PM peak, to a LOS 'B' during AM peak and LOS 'E' during PM peak—a reduction in intersection delay of approximately 86% during AM peak and 58% during PM peak. This improvement reduces current corridor congestion and facilitates additional traffic load that will reroute to Rt. 9 via Rt. 690 as a result of the approved Smart Scale Rt. 7/Rt. 690 interchange, now at 50% design.

The project limits also incorporate an approved Transportation Alternatives grant shared-use-path—GapWay Trail—for connectivity to the historic Hillsboro Town Hall, employment centers, civic and educational institutions. The shared-use path on the north side of Rt. 9 extends from the Rt. 9/Rt.690S intersection east (0.22 mi.) to Mountain Road (Rt.690N). The GapWay Trail project includes a crosswalk at the eastern entrance to Hillsboro Cemetery and a sidewalk on the south side of Rt. 9 connecting to the roadway project sidewalk.

## **Project Location**



#### **Project Milestones**

	Before FY2018	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	After FY2023
Design, Engineering, Environmental Work	Χ	Х	X					
Right of Way Acquisition		Χ	Χ					
Construction			Χ	Χ				
Utilities		Χ	Χ	Χ				

# **Project Funding**

	Requested NVTA Funds	Other Funding Sources	Total Cost by Phase
Design, Engineering, Environmental Work	\$1,260,000	\$740,000 (Loudoun County) \$1,600,000 (FHWA)	\$3,600,000
Right of Way Acquisition	\$1,000,000	\$700,000 (Loudoun County)	\$1,700,000
Construction	\$7,960,000	\$6,100,000 (Loudoun County) \$472,000 (VDOT Grant) \$482,000 (Proffers)	\$15,014,000
Utilities Relocations	\$1,892,000		\$1,892,000
TOTAL:	\$12,112,000	\$10,094,000	\$22,206,000

#### **Project Analysis Highlights**

Congestion Reduction Relative to Cost Ratio (Total Cost in \$1000's): 16.01
Congestion Reduction Relative to Cost Ratio Rank (Total Cost in \$1000's): 33
TransAction Project Rating: 53.58
TransAction Project Rating Rank: 55

Note: The project analysis above was completed by NVTA staff using data and information from the project application and analyses of the region's transportation network.

### **Regional Impacts**

- Reduce congestion and improve travel time
- Improve safety
- Enhance environmental quality
- Improve access to employment and destinations
- Improve safety

Note: The regional impacts listed above are a summary of what was submitted in the project application NVTA staff received from the jurisdiction or agency that has applied for funding.

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