Northern Virginia Transportation Authority
FY2024-2029 Six Year Program

Route 50 North Collector Road - Tall Cedars Parkway to Route 28

Date Submitted:
07/31/2025

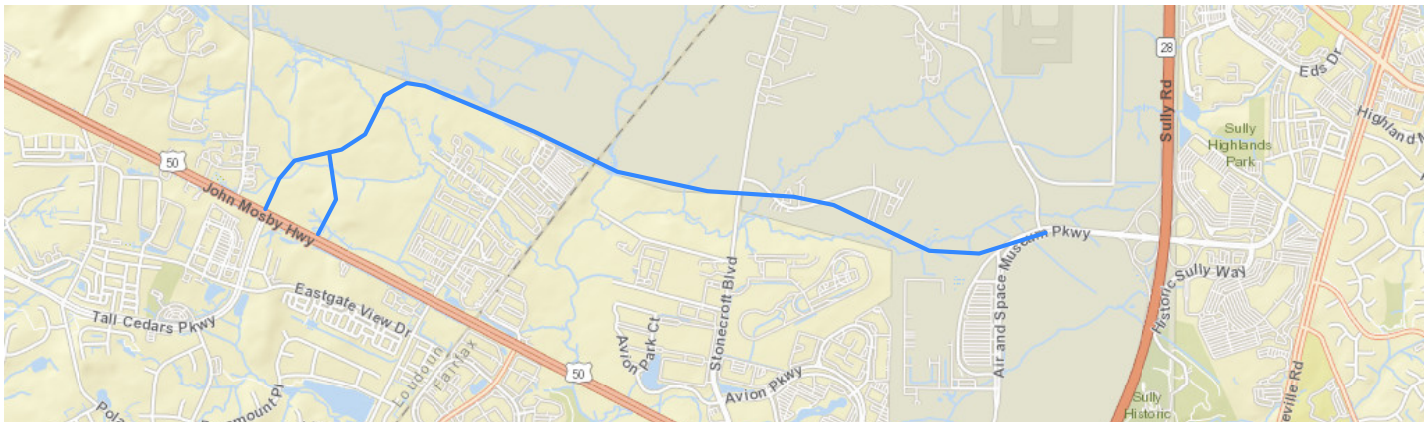
APPLICATION #: LDN-040

Project Description

The increasing traffic demands in the county is particularly pronounced along the eastern segment of U.S. Route 50 between Tall Cedars Parkway and Route 28. Within this 2.5 mile stretch of roadway, seven signalized intersections impede the projected 2040 average daily trips of 95,400 that will utilize this roadway segment. This scenario results in volume to capacity ratios (V/C's) of 1.63 along this stretch of road. The Route 50 North Collector Road solves this issue by providing a parallel route to U.S. Route 50 between Tall Cedars Boulevard and Route 28. This new four-lane facility is the result of close collaboration between the Metropolitan Washington Airports Authority, Loudoun County and Fairfax County. The facility will accommodate development of the new southern terminal and air cargo improvements included on the Airport Layout Plan developed by Dulles Airport. The improvements include a new 4-lane median divided, closed-section (curb & gutter) road extending approximately 3.2 miles between the Route 50/Tall Cedars Parkway intersection at the west end and the Route 28/Air & Space Museum Parkway Interchange at the east end. Signalized intersections are anticipated at Route 28, the new "quadrant roadway" intersection approximately 1,100' north of Route 50, Pleasant Valley Road, Stonecroft Boulevard, and a new intersection which maintains access to the Air & Space Museum and Flight Line Road. At the intersection with Tall Cedars Parkway, a 10' wide shared use path will be constructed along the east side of Route 50 NCR, connecting at the south to the existing shared use path along Route 50 and extending approximately 2,500' to the north, terminating at a new intersection with Wade Drive. Where the Route 50 NCR is located on Dulles Airport property, the airport perimeter fence will be located approximately 10' to the north of the new road, and the airport's perimeter access road will be relocated and reconstructed immediately north of the fence. This relocated 12' wide gravel access road will allow the Metropolitan Washington Airports Authority (MWAA) and Dulles Airport security personnel to continue perimeter observations along the airports southern boundary. Additional improvements include extension of Wade Road to NCR, intersection improvements at Willard Road, Wade Road, Pleasant Valley Road, Stonecraft Boulevard, and Air & Space Museum and Flight Line Road, as well as culvert improvement at Cub Run and underpass at Air & Space Museum taxiway.

Primary Mode(s)	Secondary Mode(s)
Application Number	LDN-040
Primary TransAction ID Number	463
Submitting Jurisdiction/Agency	Loudoun County
Location	The U.S. Route 50 North Collector Road is located in both Loudoun County and Fairfax County, Virginia. The project alignment is located approximately one thousand feet north of and parallel with U.S. Route 50. The North Collector Road eastern terminus is the existing interchange of Sully Road (Route 28) and Air and Space Museum Parkway. The proposed roadway follows the Air and Space Museum Parkway alignment west and continues through Dulles International Airport property within the limits of Fairfax County. As the proposed roadway enters Loudoun County, the alignment continues on Dulles Airport property, immediately north of the Dulles Airport property line and adjacent to existing development on private properties. At the western termini, a quadrant roadway will be implemented to improve operations on Route 50, Tall Cedars Parkway, and the Route 50 North Collector Road. The additional roadway segment required to complete the quadrant roadway configuration will be located east of TCP.
Requested NVTA Funds	$200,000,000.00
NVTA Funds Approved	$200,000,000
Previous NVTA Funds Received	$0.00
Total Cost to Complete Project	$400,716,000.00

Project Location



Project Milestones

	Study	Design / Engineering / Environmental	ROW and Utilities	Construction	Asset Acquisition
Earlier		X			
FY25		X			
FY26		X			
FY27		X			
FY28			X		
Beyond			X	X	

Year of expected project completion: FY2035

Project Funding

Source	Study	Design / Engineering / Environmental	ROW and Utilities	Construction	Asset Acquisition	Total
Total Cost	$0	$28,846,000	$75,310,000	$296,560,000	$0	$400,716,000
NVTA Funds Applied	$0	$0	$2,500,000	$197,500,000	$0	$200,000,000
RSTP		$6,001,000	$6,000,000			$12,001,000
Local		$22,845,000	$66,810,000	$99,060,000		$188,715,000
Total Other	$0	$28,846,000	$72,810,000	$99,060,000	$0	$200,716,000
Gap	$0	$0	$0	$0	$0	$0

Project Analysis Highlights

Congestion Reduction Relative to Cost (CRRC) Rating	10.10
Congestion Reduction Relative to Cost (CRRC) Rank	5
TransAction Project Rating	30.87
TransAction Project Rank	2
Project's Past Performance (Percentage of expected funds that was reimbursed by 12/31/2025)	N/A
Jurisdiction/Agency's Past Performance on All Projects (Percentage of expected funds that was reimbursed by 12/31/2025)	43.72%
Percentage of Total Project Cost Covered by Funds from Sources Other than NVTA	50.09%
Local Priority	1
Number of Supporting Resolutions (does not include resolution from applicant's own Board/Council)	3
Number of NVTA-Funded Project(s) Nearby	2
Regional Funds allocated to NVTA-Funded Project(s) Nearby	$55,250,000