THE W & OD TRAIL MOBILITY AND TRANSPORTATION **MIRANDA LAO** YIMIN WU RYAN DENKER

Table of Contents

Table of Contents	1
Site Introduction Regional Transportation Introduction Regional Trail Introduction	2 3
Historical Development Main Transportation Development Timeline Main Transportation Spatial Location W&OD Railroad Trail Route 7 Silver Line Metro Dulles International Airport Route 267	4 4 5 6 7 7
The Trail and Transportation Multiple Mobilities Roadways Disruption Connection Character	8 9 10 11 12
Where are we headed? Silver Line Metro Extension Route 7 Other Investments	13 13 14 15
Further Connections	16
References	17

Site Introduction

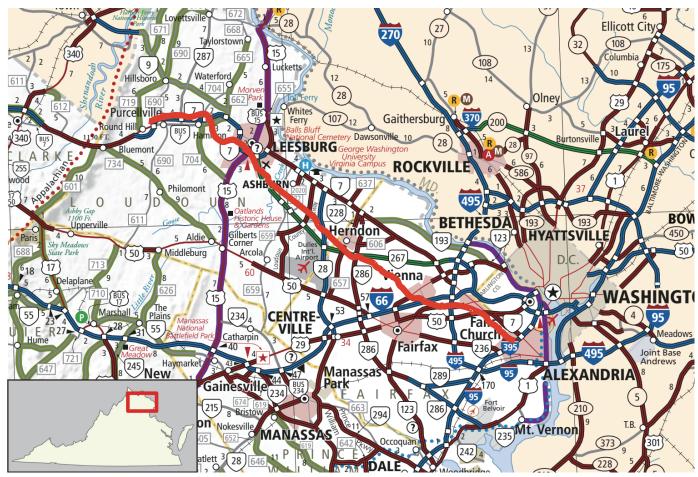
- Regional Transportation Introduction
- Regional Trail Introduction

Regional Transportation Introduction

Northern Virginia is often characterized as the "economic engine" for the Commonwealth of Virginia and known for its entrepreneurial spirit and technology-based companies, making it the most populous region in Virginia and the Washington metropolitan area.

Northern Virginia is served by a range of multi-modal transportation services: (1) major interstate limited-access facilities (I-66, I-95, I-395, and I-495), including HOT lanes; (2) tolled non-interstate limited-access facilities (SR-267, Dulles Toll Road and Dulles Greenway); and (3) principal arterials (SR-28, SR-286, SR-7, US-50, US-29, and US-1). The I-66, I-95, and the Dulles Toll Road are most important multi-modal corridors. They are interconnected with various rail services (Metrorail's Orange, Silver, and Blue Lines, and the Virginia Railway Express) and express bus services (Metro Bus, Loudoun County Transit, the Potomac and Rappahannock Transportation Commission, and Fairfax Connector), forming the complex and dynamic transportation system of NOVA.

However, transportation congestion in the Northern Virginia region is among the worst in the nation. In the current climate, where a plethora of regional initiatives are underway or about to get started, we will discuss the future possibilities of using the W&OD trail as the "glue" to link the disparate transportation initiatives together.

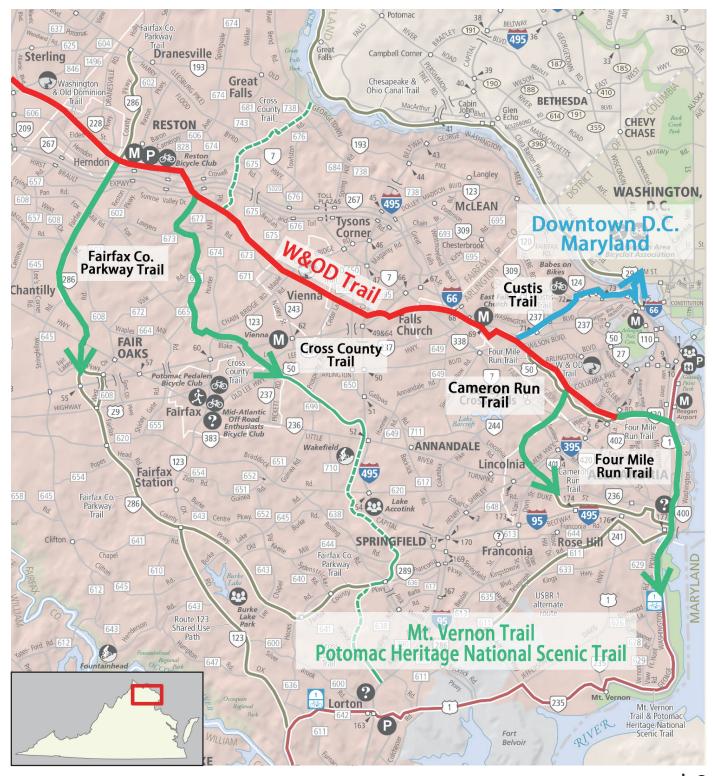


SITE INTRODUCTION 02

Regional Trail Introduction

Northern Virginia has the most extensive trail network in the commonwealth. Arlington is one of America's most bike-friendly places, Fairfax County has 600 miles of trails, many of which accompondate all needs and ability levels. Bike lockers are available at some Metrorail stations, and people can cross the Potomac at any points for access to attractions in nation's capital.

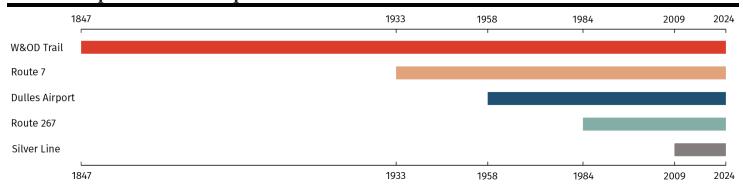
The Washington and Old Dominion Railroad Regional Park is a highlight of the NOVA trail system. The 45-mile paved, shared-use path can be used for cycling, walking, running and skating. The Mount Vernon Trail is an 18-mile paved, shared-use path that is designated as U.S. Bicycle Route 1. A number of other trails, bicycle lanes and routes may be accessed in this region connect the W&OD Trail with the Mt. Vernon Trail, downtown DC and the Chesapeake&Ohio Canal Trail in Maryland.



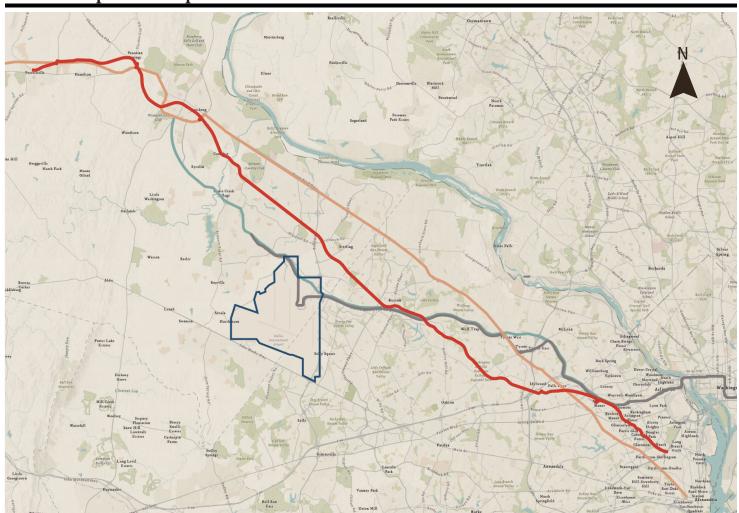
Historical Development

- Main Transportation Development Timeline
- Main Transportation Spatial Location
- W&OD Railroad-Trail
- Silver Line
- **Dulles Airport**
- Route 267

Main Transportation Development Timeline



Main Transportation Spatial Location





W&OD RAILROAD TRAIL



Detailed Development Timeline

1847-1900

The railroad was conceived to link Alexandria's port with agricultural and mining areas, promoting regional trade. Despite financial, managerial challenges, and Civil War destruction, it successfully completed its primary infrastructure by the 19th century's close

Foundation and Construction

May 17, 1860



First train from Alexandria to Leesburg.

April 1, 1874



Railroad completed to Purcellville.

1900-1930s

Renamed as Washington & Old Dominion Railroad, it flourished, transporting vast amounts of goods and offering passenger services, pivotal for regional transport. Yet, it faced growing challenges from road competition and operational issues.

Development and Prosperity

1905



A train carried with milk cans at Herdon.

May 24, 1911

EFFECTIVE SUNDAY, MAY 28, 1911.

COMPLETE SCHEDULE BETWEEN WASHINGTON AND BLUEMONT.									
WESTBOUND. ELSTERN TIME.	No. 121	No. 129	No. 131 San. Only.	No. 123	No. 125 Ex. Sun.	No. 133 Daily.	No. 119 Ex. Sun.		
Lv. Washington, D. C	8.10 atr	8.55 am			4.20 pm				
" Alexandria		9.02 **	9.22 **	1. 60 "		5.15 "	6.33 **		
" Alexandria Jet.	8,30	9,12	9.34 "	1.49 **	4.37 **	5.24 "	6.41 **		
" Cowdon	£ 8.85 "		1 9.38 "	f 1.53 "			£ 8.44 "		
" Reresoft	1 8.43 "			f 1,55 "			f 6.47 "		
" Glenearlyn	8.45 "			1 1,57 "		f 5,35 "	£ 6.80 "		
" Torrison	I 8.46 "		f 9.44 "	f 1.58 "		f 5.37 "	f 6.52 "		
	f 8.48 "			f 2.00 "		f 5.40 "	£ 6.84 "		
" Falls Church	8.49 "		9.49 "	2.04 "			6.56 **		
" West Falls Courob	8.52 **			2.07 **			6,59 ~		
" Dunn Loring	3.56 "		9.58 **	f 2, 12 "			£ 7.07 "		
			lf10.01 "	1 2.14 "			f 7.11 =		
" Vienna	0.02 "		70 00	2.21 "	5.08 "	6,65	7.14 "		
" Hunter	1 9.08 "			f 2.27 "		f 6.34 "	f 7.39 **		
" Wiehle	f 9.14 "		310.24 "	f 2.34 "		F 6, 24 "	f 7. 27 "		
" Herndon	.∤ 9.20 "			2.41 "	f 5.19 "	6,34 "	7.84 **		
" Sterling	9.29 "		10.40	2.51 "			7.43 "		
			L 10,49 ··	3.02 **			7.51 **		
" Delauont Park	1 9.47	1	10.55		5, 39 "	7.07	r 7.56 **		
" Leesburg	9.00	10.23 **	11.00	3.18 "	5.89	7.07	8.06 pm		
" Clarke's Gap	10.05	10.85	711.10	3 99 #	f 5.49 "	7.21 "	***************************************		
" Paecaian Springs	10.08	10.33 "	717.18	8.34 "	5.84 **	7 24 "			
	1 10.13	10.40 "	11.29	8.34 "	6.02 "	7.32 "			
	1 10.24 "	10.49 "	11.29 "	3.53 "	6.02 "	7.32			
	10.45 nn	11.05 an		4.05 cm					
Ar. Bluemont.					9.40 pm	1 1.40 pm			
BETWEEN BLUEMONT AND WASHINGTON.									
EASTBOUND No 120	No. 134		No. 122		No. 130 7	7 1	8 7		
Extract Time. Ex. Sun.	Daily.	Ex. Sun.	Er. Son.	Daily. St	No. 130 in. Only	1 2 4-	A 4		
MARKET THE						4 - 10	· 8		
Lv. Bluemont	5.50 am	7.15 am	12.15 nm	5.25 pm	6.45 pm 5	, 21 7.5	# č		
LV. Diuemone	5 59 "	7 23 **	12.25 "	5.85	6.03	, ~ E	. e		

Train schedule between Washington and Bluemont.

1930s-1968

The rise of automobiles and highways, compounded by the Great Depression and World War II, eroded the viability of railroad transport. The W&OD Railroad ceased operations, signaling a pivotal shift in the region's transportation landscape.

Decline and Cessation

May 31,1951



All passenger service was ended.

August 27, 1968



W&OD freight service ended and the line was abandoned.

1970s-Present

Post-closure, the W&OD Railroad's path was transformed into the W&OD Trail, a beloved recreational space. This multi-use trail now serves as a vibrant hub for hiking, cycling, and nature activities, fostering community well-being and outdoor engagement.

Transformation and Revival

1978 - 1988



Rail to trail transformation.

October 7,2021



Revamped mile-and-a-half strip of the W&OD Trail in Falls Church.

Detailed Development Timeline



Originally a series of local roads, VA Route 7 was incorporated into the U.S. Highway System, notably aligning with U.S. Routes 50 and 7. Significant enhancements and expansions during this period underscored its importance in national transport networks.

Served at the Country Level

1970s-Present

Route 7 shifted to a local artery, adapting to evolving transportation demands. Ongoing modernization, including widening, interchange upgrades, and advanced traffic management, ensures it meets growing traffic and urbanization needs.

Served at the State Level.

July 1933



Appeared as a renumbering of: VA 54, VA 826, VA 37, VA 822

1954



Part of the VA 7served in national highway system.

1996-2023



Route 7 was 6-lanedthrough several sections. Improvements between Reston Avenue and

2018-2024



Jarrett Valley Drive.

SILVER LINE METRO

Detailed Development Timeline

The Silver Line, an extension of the Washington Metro, has linked the D.C. area more closely with Dulles Airport and expanded transit options in Northern Virginia. The Silver Line has not only improved access to key destinations but also spurred investments, leading to residential and commercial growth along its corridors.

March 12, 2009



Construction of the Silver Line in Washington D.C. began

July 26, 2014



Phase 1 began service.

November 15, 2022



Phase 2 began service.



DULLES AIRPORT



Detailed Development Timeline

1958-1990s

Dulles Airport was inaugurated in the early 1960s as a response to the growing air traffic needs of the Washington, D.C., area, aiming to complement the existing Washington National Airport. Sone expansions had been finished in this earky stage.

Establishment and Early Growth

1958



Construction of International Dulles Airport begins.

1983



Access Road extension to I-66 completed.

2000-Present

In the 21st century, Dulles Airport embarked on major modernization, expanding terminals, adding concourses, and introducing the AeroTrain to meet rising passenger demands and enhance efficiency.

Modernization and Expansion

2008



Terminal expansion.

2010



The AeroTrain System opened.

ROUTE 267

Detailed Development Timeline

VA Route 267's strategic significance lies in its role as a major transportation artery, linking the airport with Northern Virginia and the greater Washington, D.C. area, thereby enhancing the region's accessibility and fostering its development as a vital economic hub.

1984



Built by the Virginia Department of Transportation as a toll highway

1992-1998



The originial 2 lanes had been expanded to 4 lanes.

March 27, 2006



MWAA took over from Virginia the operation of the Route 267.

The Trail and Transportation

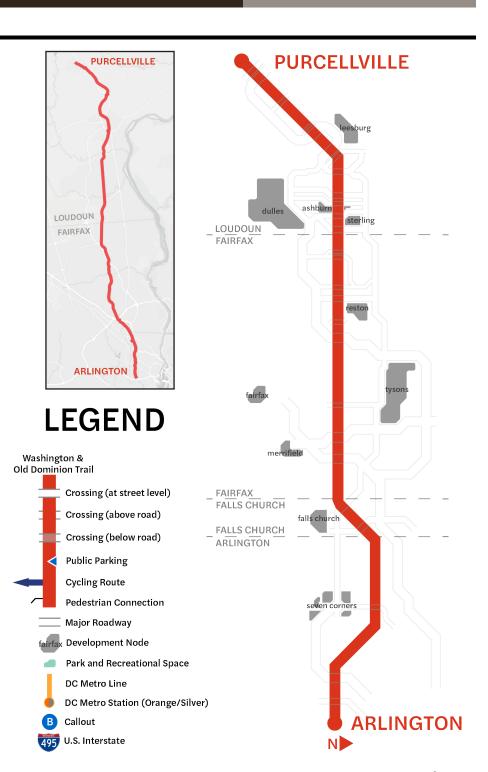
- **Multiple Mobilities**
- Roadways
- **Disruptions**
- Connection
- Character

Multiple Mobilities

The Washington & Old Dominion Trail connects many different environments within Northern Virginia and interacts with almost all of its key transportation infrastructure. As a result, it assumes several overlapping mobility "identities": first, as a recreation destination which is traveled to (criss-crossing automobile society and opening itself to both parking and parks) and second, as a corridor for travel elsewhere (opening up the region to pedestrian or cyclist commuters).

These infographics attempt to explore what mobility looks like around and along the W&OD trail--and the ways these mobilities intersect. Users can expect movement to look and feel distinct in the many regions of the trail, and across its length the W&OD contains different sets of strengths and weaknesses. This abstracted diagram of the trail (left), adapted from the real geography (below), shows how these conditions are distributed along the trail and discusses their implications on mobility so that we may better understand the possibilities for transportation in the future.

This first iteration of this graphic highlights the trail's proximity to major development nodes between its end points, connecting to central thoroughfares in urban areas like Falls Church and Reston.



Signaling

W&OD users have traffic priority at all intersections via crosswalks. Given the high traffic at most crossings, most are supplemented with lights or stop signs. Priority signaling for cyclists on the trail has expanded throughout its life, consistent with a vision of the trail as a functional transit corridor.



S Sterling Blvd crossing, 2008 (top) vs. 2023 (bottom). Motion-sensing traffic lights for bikers have been added.



Dozens of public parking lots dot the W&OD trail. In the portion between Vienna and Reston (left), these lots are the only means of access onto the trail. Parking for the trail is most concentrated near new development in Loudoun, and least concentrated in older urban areas like Alexandria.

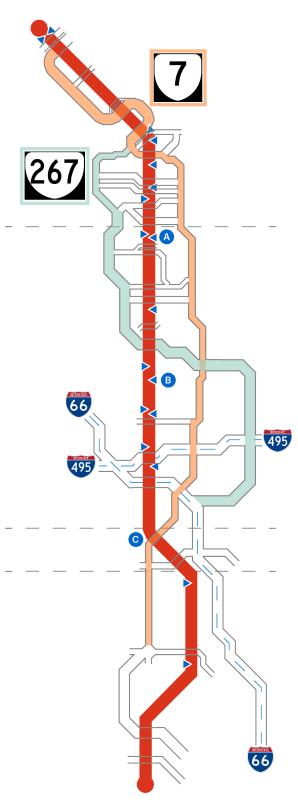


State and Federal Highways

The W&OD runs parallel to three major highways: Route 7, which it bypasses several times as both the Byrd Hwy in Loudoun and Broad St in Falls Church; Route 267, in the most sprawling portions of the trail; and I-66, the most-trafficked road it crosses. No highways cross the W&OD at-level.

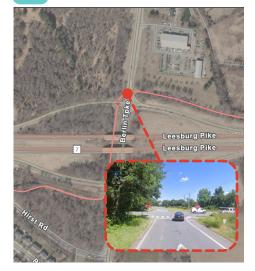


W&OD bypasses Route 7 in Falls Church via Citizen's



В

A Limited Priority



Several points have poor priority at high-volume intersections, like the exits of the Byrd Hwy (right), where cars approach the trail with minimal signaling at high speeds. These crossings are concentrated in the western half of the trail, limiting the recreation available to these users.

B High Traffic



W&OD has transitioned its busy crossings to bridges or tunnels, but it still meets several arterial roads at street-level, such as S Sterling Blvd (left). Rapid growth along this portion of the trail in places like Herndon are creating new high-traffic crossings for W&OD to contend with.

Rerouting Major Intersections



W&OD circumvents dangerous intersections by rerouting the trail into bridges and tunnels.

Above: Pedestrian bridge built in 2021, to avoid crossing US-29 in west Arlington.

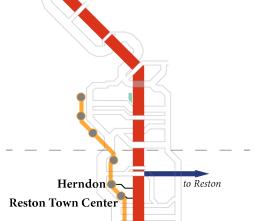
Below: An at-level crossing with Wiehle Ave in Reston. A new bridge will open in 2024.

DC METRO

Several stops on the DC Metro are within a mile's walk of the trail and offer a multimodal point of connection. However, both the Orange (I-66) and Silver (VA-267) Lines are sited alongside major highways, limiting the potential connectivity of most stations considerably.

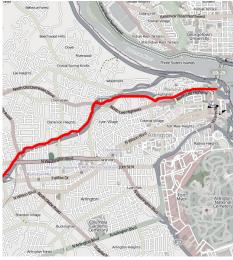


Possible connective route allong Gallows Road from the Dunn Loring-Merrifield Metro Station to the W&OD Trail



CYCLING ROUTES

One of the central functions of the W&OD as a transit corridor is to connect users to DC-bound paths like the Custis Trail (right). Cyclist groups in Virginia are currently attempting to expand connectivity between urban centers in Fairfax with new cycling trails, using the W&OD as the system's backbone.





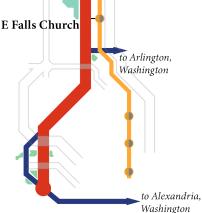


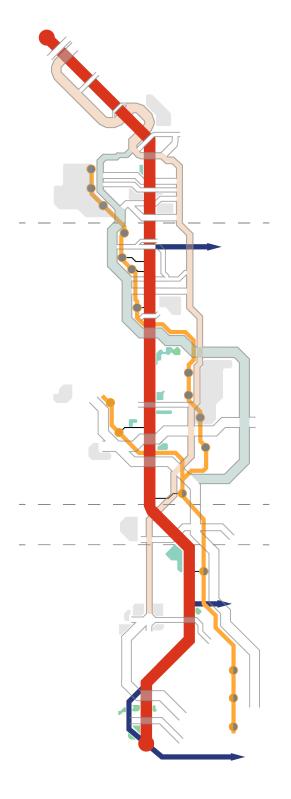
PUBLIC PARKS

The W&OD is an important point of connection for several regional parks, many of whom were built between subdivisions or highways and are otherwise inaccessible to pedestrians. Many residents use the trail as a recreation connector to sites like Meadowlark Gardens or Long Branch Nature Center.



Meadowlark Botanical Garden relies on the W&OD for pedestrian access.





Commute Connector



Connecting suburban downtowns, public parks, transit systems, bike routes, and more, the W&OD has tremendous incentive to enhance mobility along the trail, and has been consistently widening in key congested sections to provide dedicated cycling space and speed travel times.

Regional transportation networks have begun taking steps to better facilitate cyclist and pedestrian travel throughout the region, such as expanding sidewalks and paths to eventually connect the W&OD to previously isolated Metro stops, such as those along the exurban segments of the Silver Line.

Recreation Thruway



With regular parking availability and adjacency to area green space, the W&OD serves residents as a destination for recreation and exercise, or as a scenic means of reaching popular recreation sites. To this end, several major arterial roads, such as Route 7 and Wilson Blvd, facilitate easy access.

As Northern Virginia continues to grow, the W&OD's location within several small downtowns provides the possibility for new forms of amenity--shopping, restaurants, athletics, or community events.

Where are we headed?

- Route 7 Investments
- Silver Line Extension Investments
- Other Investments in Fairfax and Loudoun Counties

Transportation infrastructure is constructed for the purpose of connection; it's the technologies and spaces we use to travel between destinations. These connective pathways are themselves connected to each other. It is internally connected, too: flows that move across and through it are related. In other words, changes in one transportation system—be it the interstate roads, local roads, bus and metrorail system, or bicycle and pedestrian systems—have effects on the greater transportation network.

We can get some idea of what kind of transportation priorities and development aspirations a local region has by looking at where they have been allocating money in their budgets. This report will focus on investments made in Fairfax and Loudoun counties, since most of the length of the W&OD trail traverses these two governmental jurisdictions.

Two recent projects that have received notable investments are the Silver Line Metro and Route 7. Notably, these two transportation corridors run adjacent to the W&OD trail, passing through many of the same areas.

SILVER LINE METRO EXTENSION

The Silver Line Extension occurred in two phases. Phase 1 of the extension connects the WMATA metrorail system in Arlington out towards the suburbs of Reston. Construction began in 2009, and opened for service in 2014. This phase added five new stations, all within Fairfax County, for a total cost of \$2.906 billion (Federal Highway Administration n.d.). Phase 2 extends out from Reston along Route 267 to Dulles International Airport, and ends in the suburb of Ashburn. Construction was conducted from 2014 to 2022, adding six new stations, three of which were in Fairfax County, and three of which were in Loudoun County, for \$3.028 billion (Metropolitan Washington Airports Authority 2022), putting the total cost of the Phase I and II extensions at \$5.934 billion.



SV

Ashburn P

Loudoun Gateway P

Washington Dulles International Airport

Innovation Center P

Herndon P

Reston Town Center

Wiehle-Reston East P

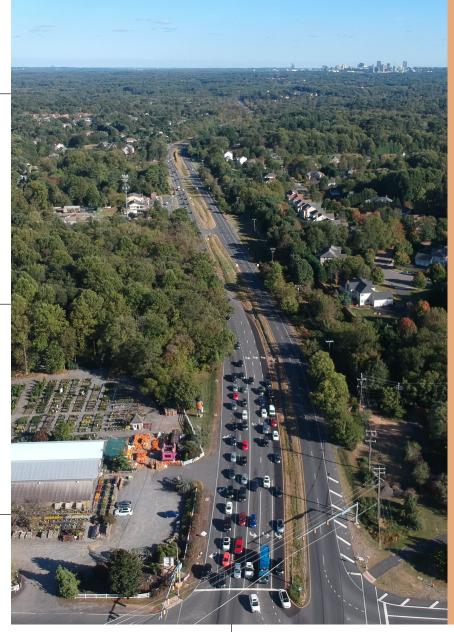
Spring Hill

Greensboro

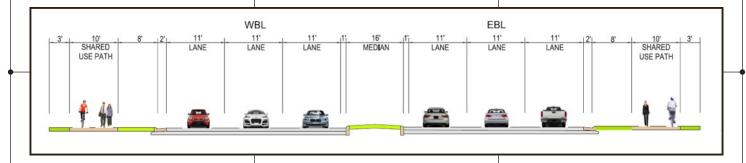
Tysons

McLean

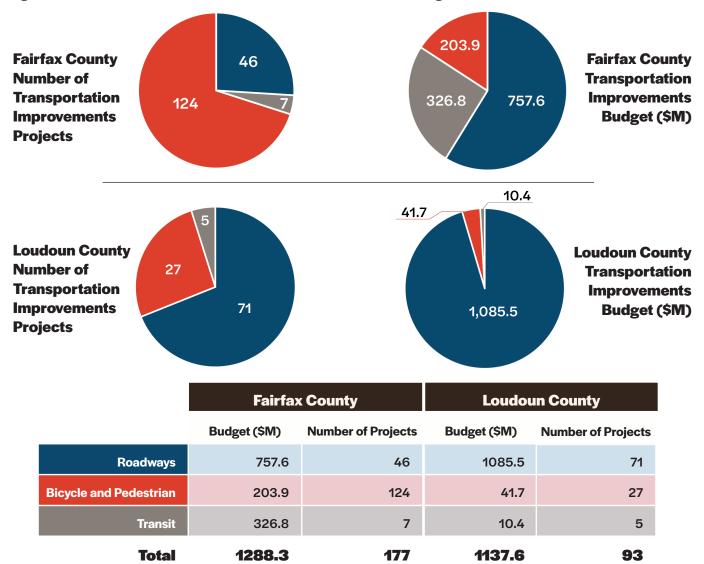
ROUTE 7



Route 7 is a state highway that runs parallel to the W&OD trail, between the cities of Alexandria through to Leesburg and Purcellville, and onwards from there to Winchester. Like the W&OD trail, it runs through both Fairfax and Loudoun counties. In recent years, both counties have put significant investments towards this route, as traffic has significantly increased due to the development of the surrounding area into data centers, warehouses, and sprawling residential zones. Loudoun county has an initiallyestimated \$424 million in roads and road improvements planned surrounding Route 7, "all aimed at letting Route 7 through-traffic move without hitting stoplights. It also includes new bike and pedestrian features, such as shared-use paths paralleling Route 7 on both sides, a pedestrian bridge [...] and new crossings" (Greene 2021). In Fairfax County, a project to widen seven miles of Route 7 from four lanes to six lanes is underway, while also adding 10foot wide shared-use paths along both sides. Construction began in Spring 2019 and is scheduled to conclude in Summer 2024, with a total estimated cost of \$313.9 million (VDOT 2021).



Of course, the two projects previously mentioned are just two out of many. The latest approved budget for Fairfax County transportation improvements was a six-year budget passed in 2014 by the Board of Supervisors for \$1.4 billion (Fairfax County Department of Transportation 2014). Similarly, Loudoun County currently has an active budget of \$1.138 billion in transportation improvements. The two budgets can be broken down as follows:



It's important to note that the above figures are all attached to active improvement projects; these are separate from operational budgets. The bulk of both budgets goes towards roadways. In Fairfax County, more of the budget is dedicated towards transit and bicycle and pedestrian projects, though it's important to note that \$199.46M (61%) of their Transit figure is in reserve, meaning it is set aside for transit improvements but is not attached to a specific project yet. We might be able to explain some of the discrepancy in transportation infrastructure prioritization through the needs of both counties: the developmental sprawl in Loudoun County is relatively newer than that of Fairfax County, and so they have a greater need for entirely new roads (which cost more than the road improvements—widenings, spot improvements)—that make up the bulk of Fairfax County's roadway budget).

The next largest section of line items by budget (and in Fairfax County's case, the greatest number of projects) goes towards Bicycle and Pedestrian infrastructural improvements. Some of the roadway budget, too, is towards widening roads for the sake of adding a shared-use path to run along the roadway. Both counties have countywide bicycle plans, efforts toward making their bicycle and pedestrian infrastructure more robust and connected. In Fairfax County's 2017 Comprehensive Plan, 6 of the 13 transportation objectives have something to do with prioritizing active modes of transport (Fairfax County Government 2018). Likewise, in Loudoun County's Transit Development Plan, 2 of 6 objectives directly reference bicycle and pedestrian infrastructure, while 2 others refer to integration of transportation and land use to link decision-making (TranSystems 2018).

Further Connections

Route 7 is being invested in heavily, with nearly a billion in investments combined between Fairfax and Loudoun counties, spent towards widening it and rerouting other roads in its proximity to allow for uninterrupted car traffic flow in. This cements it as the now and future primary transportation corridor along its route. Although there are shared-use paths for bicycles and pedestrians that are accompanying these road-widening measures, it feels like a hostile environment for transit, bicycles, and pedestrians, due to the high-speed, noisy, pollutant constant flow of car traffic that its current investments encourage. Similarly, an extended Silver Line can only be useful in meaningful reductions in road traffic if people can access the metro without a car, which is not generally the case. Both of the car-alternative possibilities feel foreclosed further when considering the large distances between destinations (grocery stores, office parks, shopping centers, residential neighborhoods) along these routes.

The W&OD trail, despite pathing through many of these same communities, is regarded as little more than a recreational bike trail. Between Route 7, the Silver Line Metrorail, and the W&OD trail, one gets the impression that each route is being optimized towards a single kind of purpose. How could we imagine the physical connector as another kind of connection between communities?

With this recent trend of investments in bicycle and pedestrian infrastructure, the W&OD Trail has greater potential as a place of human connection. Route 7 and the Silver Line metro prioritize getting places; the W&OD could prioritize the feeling of being in a place. Beyond being a recreational park, rather than being a major transportation artery, it could facilitate the kinds of hyperlocal, neighborly interactions that happen on the so-called "last mile". The benefit of being a major connecting trail and park is the potential for more interactions between more people living in different neighborhoods, and a greater sense of place.

As a place where interactions happen at human speeds, such a connection has great potential as a source of understanding about the necessary daily functions of the place they live in. Not only do people see each other, the W&OD is an opportunity to make visible the contexts these communities are situated in. Walking the dog, seeing last mile delivery of packages and logistics (connecting from major distribution centers in Loudoun to residential communities in Northern Fairfax), connecting to public space (schools, libraries, parks) through public space, could all serve to better situate people in the area in which they live. We can imagine the W&OD trail as a connective pathway in which both flaws and virtues of our connective infrastructures become more obvious, bringing those who interact with it a deeper sense of understanding, belonging, and care towards the world around them.

References

Bike Washington. n.d. Washington & Old Dominon Trail. Accessed February 1, 2024. http://bikewashington.org/trails/wad/wad.htm.

Capital Trails Coalition. 2020. List of Planned Network Trails. May 13. Accessed February 2, 2024. https://www.capitaltrailscoalition.org/list-of-network-trails./

Connect Route 7 Project Team. 2024. Connect Route 7. Accessed January 30, 2024. https://connectroute7.org/. Fairfax County Department of Transportation. 2014. Board of Supervisors Approved Projects. Accessed February 4, 2024. https://www.fairfaxcounty.gov/transportation/projects/approved.

Fairfax County Government. 2018. "Fairfax County Comprehensive Plan, 2017 Edition - Transportation." Policy Plan.

Federal Highway Administration. n.d. Project Profile: Dulles Corridor Metrorail Project. Accessed February 3, 2024. https://www.fhwa.dot.gov/ipd/project profiles/va dulles corridor.aspx.

Friends of the W&OD Trail. 2024. History. Accessed January 30, 2024. https://wodfriends.org/history/#aioseo-historical-pictures.

Greene, Renss. 2021. Loudoun Launching \$424M Plan for Rt. 7 East of Rt. 28. October 26. Accessed February 4, 2024. https://www.loudounnow.com/archives/loudoun-launching-424m-plan-for-rt-7-east-of-rt-28/article_3b2c8fc2-c748-5baa-96e1-fb0975af89bc. html.

Leayman, Emily. 2021. W&OD Trail Bridge Opens at Arlington-Falls Church Border. March 12. Accessed February 4, 2024. https://patch.com/virginia/fallschurch/w-od-trail-bridge-opens-arlington-falls-church-border.

Loudoun County Department of Transportation and Capital Infrastructure. 2024. "Capital Improvement Program - Capital Project Report Q2 FY2024." Quarterly Report.

Metropolitan Washington Airports Authority. 2022. Airports Authority Notes Silver Line Progress, Board Authorizes Budget Increase. July 20. Accessed February 3, 2024. https://www.mwaa.com/news/airports-authority-notes-silver-line-progress-board-authorizes-budget-increase.

—. 2024. History. Accessed February 2, 2024. https://www.flydulles.com/about-airport/history.

Northern Virginia Regional Park Authority. 2024. Washington and Old Dominion Railroad Regional park. January 10. Accessed February 1, 2024. https://www.novaparks.com/parks/washington-and-old-dominion-railroad-regional-park.

Rein, Lisa. 2006. A Space for the Centuries. May 31. The Washington Post. Accessed February 5, 2024. https://www.washingtonpost.com/archive/local/2006/06/01/a-space-for-the-centuries-span-classbankheadvienna-is-preparing-to-create-a-traditional-town-green-a-lasting-focus-for-people-watching-web-surfing-and-just-soaking-up-the-village-vibe-span/d6782981-aa26-421a-8e9d-c74397113ec1/.

Richmond Times-Dispatch. 1933. "VA Route Changes, May 10, 1993." Newspapers.com. May 10. Accessed February 2, 2024. https://www.newspapers.com/article/richmond-times-dispatch-va-route-changes/42704631/.

State Highway and Transportation Commission. 1980. "Minutes of Meeting of State Highway and Transportation Commission." Minutes of Meeting, Richmond, Virginia. https://www.ctb.virginia.gov/meetings/minutes_pdf/CTB-08-1980-01.pdf.

TranSystems. 2018. "Loudoun County Transit Development Plan Fiscal Years 2018-2028." Transit Development Plan.

VDOT. 2020. "Virginia Traffic Volume Map." December 10. Accessed February 2, 2024. https://www.virginiaroads.org/maps/VDOT::virginia-traffic-volume-map/about

- 2021. Route 7 Corridor Improvements About the Project. Accessed February 4, 2024. https://connectroute7.org/learn_more/default.asp.
- -.. 2024. State Bicycle Map. Accessed February 2, 2024. https://www.vdot.virginia.gov/travel-traffic/maps/#d.en.43307.

TRANSPORTATION AND MOBILITY REFERENCES | 17

References

Waseem, Fatimah. 2023. Construction on New W&OD Trail Bridge over Wiehle Avenue Begins. March 10. Accessed February 2, 2024. https://www.ffxnow.com/2023/03/10/construction-on-new-wod-trail-bridge-over-wiehle-avenue-begins/.

Wikipedia Contributors. 2024. Silver Line (Washington Metro). January 29. https://en.wikipedia.org/wiki/Silver_Line_(Washington_Metro).

-. 2024. Virginia State Route 267. January 25. https://en.wikipedia.org/wiki/Virginia State Route 267.

WMATA. 2024. Silver Line Extension. Accessed January 30, 2024. https://www.wmata.com/rider-guide/silver-line-extension/index.cfm.

— n.d. Silver Line Extension Overview. Accessed February 3, 2024. https://www.wmata.com/rider-guide/silver-line-extension/Overview.cfm.

Woolsey, Angela. 2023. New tax rates approved to pay off Fairfax County's Silver Line debts. March 31. Accessed February 3, 2024. https://www.ffxnow.com/2023/03/31/new-tax-rates-approved-to-pay-off-fairfax-countys-silver-line-debts/.

TRANSPORTATION AND MOBILITY REFERENCES | 18