

**BOARD OF SUPERVISORS
BUSINESS MEETING
ACTION ITEM**

SUBJECT: Sidewalk and Trail Program Update, Results of the Missing Links Prioritization Study

ELECTION DISTRICT: Countywide

CRITICAL ACTION DATE: At the pleasure of the Board

STAFF CONTACTS: Laura E. Ghosh, Transportation and Capital Infrastructure
Joe Kroboth, III, Transportation and Capital Infrastructure

PURPOSE: To report to the Board of Supervisors (Board) the results of the Prioritization Study for the Capital Improvement Program (CIP) Sidewalk and Trail Program and seek direction from the Board regarding the projects to advance to conceptual design.

RECOMMENDATION: Staff recommends that the Board direct staff to forward the 12 projects listed in Attachment 1 to Fiscal Year (FY) 2022 CIP budget deliberation.

BACKGROUND: The 2019 Loudoun County Countywide Transportation Plan (2019 CTP) promotes a multi-modal transportation system including pedestrian and bicycling as a safe, secure and convenient alternative transportation option. This network of walkways and bikeways enables citizens and visitors to move efficiently to and from places such as work, schools, mass transit access, shopping centers, libraries, and local and regional parks. To achieve safe and efficient multi-modal transportation system countywide, the 2019 CTP policies require that bicycle and pedestrian facilities be integrated as part of the planning, design and implementation process of all roadway projects by both the public and private sectors and that priority shall be given to roadways with functional classification of arterial and collector roads as identified in the 2019 CTP. In the 2019 CTP, 6-foot-wide sidewalks, 10-foot-wide shared use paths, on-road bicycle lanes or a combination thereof, are required on arterial and collector roadways.

However, on roadway projects that were planned, designed and/or built prior to the adoption of the CTP in 2010, bicycle and pedestrian facilities were not integrated as part of the planning, design and implementation process, which initiated connectivity issues countywide. To address this problem along the 2019 CTP roadway segments, the County implemented bicycle and pedestrian facilities projects on an ad-hoc basis typically reacting to requests from communities by which District Supervisors formally direct staff via Board Member Initiatives (BMI) to begin a process

of addressing these concerns. Several of these BMIs have elevated into capital improvement projects that are currently in the County's CIP such as and just to name a few:

- Oak Grove Road (Route 824) at Trefoil Lane in Broad Run Election District;
- Colonial Highway (Route 7 Business) at Harmony Middle School in Blue Ridge/Catoctin Election Districts;
- River Creek Parkway (Route 773) between Parkers Ridge Drive (Route 3054) and Potomac Station Drive (Route 3064) in Catoctin/Leesburg Election Districts;
- Route 7 Pedestrian Improvements between Bartholomew Fair Drive (Route 1792)/Campus Drive (Route 391) and Lakeland Drive (Route 821) in Algonkian/Sterling Election Districts.

Home Owner Associations and/or business owners fronting or bordering these missing segments have also contributed to supporting the continuous walkway and bikeway connectivity by independently constructing these facilities.

To address the missing segments countywide, the Board approved the addition of the Sidewalk and Trail Program project with the adoption of the FY 2019 - 2024 CIP. The project budget was originally programmed with \$1,100,000 of General Obligation Bonds in FY 2022 for the planning, design, right-of-way acquisition, and construction up to three (3) miles of sidewalks and trails annually. The Adopted FY 2021 CIP includes \$206,000 of Cash Proffer funding programmed for FY 2021 and \$905,000 of General Obligation Bonds programmed for FY 2022 for the project.

In January 2019, the Department of Transportation and Capital Infrastructure (DTCI) initiated a countywide study to identify and prioritize the missing sidewalks and shared use paths along 2019 CTP roadways in an effort to accelerate the delivery of projects, and propose a proactive approach to ensure adequate resources and programmatic methodology to efficiently implement projects. The final report of this countywide study, titled the *Loudoun County Sidewalk and Shared Use Path Prioritization Project* ([Final Report](#)) dated June 2020 is included as Attachment 2.

A total of 1,124 missing segments totaling 277 miles were identified by comparing the Loudoun 2019 Bicycle and Pedestrian Plan Network to facilities either existing, programmed in the CIP or proffered near the metro area. The total number of miles of missing segments are summarized by election district in Table 1.

Missing facilities in the Urban Land Use Areas, Suburban Land Use Areas, Transition Areas, Rural Villages and Joint Land Management Areas as identified in the County's [2019 Comprehensive Plan](#) and that were not already programmed to be constructed as part of the County's CIP were evaluated based on seventeen (17) prioritization criteria:

Proximity to Pedestrian Generators

1. Proximity to Loudoun County Public Schools (LCPS)
2. Proximity to Loudoun County Recreational Centers and Community Centers
3. Proximity to Colleges and Universities

4. Proximity to Major Sport Facilities
5. Proximity to Major Commercial Centers
6. Proximity to Loudoun County and Regional Parks
7. Proximity to the Washington & Old Dominion (W&OD) Railroad Regional Trail Park
8. Adjacent Land Use Type

Proximity to Transit

9. Proximity to Washington Metropolitan Area Transit Authority (WMATA) Metrorail Stations
10. Proximity to Loudoun County Transit Stops
11. Proximity to Loudoun County Commuter Bus Stops

Roadway Characteristics

12. Adjacent Roadway Traffic Volume
13. Adjacent Roadway Speed Limit
14. Proximity to Historical Crash involving a Pedestrian or Bicyclist

Network Characteristics

15. Ability of the Segment to Facilitate Crossing Limited Access Facilities and Natural Barriers
16. Ability of the Segment to Provide Access to Limited Access Facility and Natural Barrier Crossings
17. Ability of the Segment to Directly Connect to the Existing Pedestrian or Bicyclist Infrastructure

Table 1: Summary of Missing Sidewalks, Shared Use Path and Regional Trail along Roadway Identified in 2019 Countywide Transportation Plan

District	Sidewalks/Shared Use Path (miles)	Rural Shared Use Path (miles)	Regional Trail (miles)	Total (miles)
Algonkian	13	0	0	13
Ashburn	15	0	0	15
Blue Ridge	65	24	3	92
Broad Run	45	0	0	45
Catoctin	31	25	0	56
Dulles	36	0	0	36
Sterling	20	0	0	20
Total	225	49	3	277

At the onset of this study, the influence of an identified trail network was considered for inclusion as a prioritization factor. The factor would award more points for missing segments that are part

of a master planned route or network. Since no specific routes were defined and documented by the County as of May 2020, this prioritization factor was not included in this analysis. However, in May 2019, the Metropolitan Washington Council of Governments (MWCOG) Transportation Planning Board (TPB) informed DTCI that they are in the process of expanding the National Capital Trail to include new routes in Loudoun County. Upon finalization of this trail network in Loudoun County and adoption by TPB, DTCI will incorporate a factor that awards points if the link is part of the regional trail network. Thus, bicycle and pedestrian missing link projects that lie within the newly-identified National Capital Trail routes will receive funding priority in future Sidewalk and Trail Program studies.

Policies in the 2019 CTP and published research were used to develop the scoring methodology. Representatives from LCPS, DTCI Loudoun Transit and Commuter Services, the Department of Parks Recreation and Community Services (DPRCS), and two advocacy groups, Bike Loudoun and Loudoun Walks, were solicited regarding the relative importance of the 17 prioritization criteria and to provide input regarding scoring methodology. Based on representatives' feedback, the influence of proximity to LCPS facilities, Metrorail stations and roadway crossings at the W&OD trail was increased. Scores associated with each criteria were computed and segments were ranked based on total score. Appendix E of Attachment 2 provides a rank-order list of the missing sidewalk and shared use path segments. Appendix G through Appendix M of Attachment 2 provide a list of missing facility segments by election district.

The highest ranked missing segments were identified and used to develop the recommended sidewalk/shared use path projects, listed in Attachment 1, to advance forward for design and construction under the Sidewalk and Trail Program. The recommended projects are comprised of segments that (1) most efficiently complete the network without creating additional gaps and (2) reduce construction mobilization costs.

Of the twelve (12) projects listed in Attachment 1, conceptual drawings and cost estimates for pedestrian improvements have been or are currently being developed for the three highlighted projects via BMIs. As part of the scope of work of this study, conceptual drawings and cost estimates will be developed for the remaining nine (9) projects. DTCI's Capital Projects and Project Management Office will also develop project schedules to assist with budget deliberation.

ISSUES: Staff has identified two issues to bring to the Board's attention, they are:

Sidewalk and Trail Program Funding Allocation: The approved FY 2019 CIP Sidewalk and Trail Program project was established to fund the planning, design, right-of-way acquisition, and construction up to three (3) miles of sidewalks and trails annually; however, the cost and difficulty of implementation varies significantly based on available right-of-way, utilities requiring relocation, and terrain. The use of the funding that is programmed in the Adopted FY 2021 CIP Sidewalk and Trail Program project will depend on the development of planning-level cost estimates and project schedules. The order and pace at which projects are implemented may change depending on available funds and staffing resources.

Periodic Updates: Since the prioritization of missing sidewalk/shared use path segments in the Final Report is based on the most recent multi-modal traffic, transit use, bicyclist/pedestrian safety and public and private development, the ranking of missing segments will need to be periodically updated to reflect current data and maintain integrity of the Sidewalk and Trail Program. Staff recommends that the prioritization analysis be updated at least every five (5) years.

FISCAL IMPACT: There is no fiscal impact from this item. These projects will have fiscal impact if they are incorporated into the CIP during the FY 2022 deliberations.

ALTERNATIVES: Staff has identified two alternatives for the Board's consideration. They are as follows:

1. The Board may forward the 12 projects listed in Attachment 1 to the Fiscal Year 2022 Capital Improvement Program budget deliberation.
2. The Board may forward a select subset of the 12 projects listed in Attachment 1 to the Fiscal Year 2022 Capital Improvement Program budget deliberation.

DRAFT MOTIONS:

1. I move that the Board of Supervisors forward the 12 projects listed in Attachment 1 to the Fiscal Year 2022 Capital Improvement Program budget deliberation for programming.

OR

2. I move an alternate motion.

ATTACHMENTS:

1. List of Recommended Sidewalk and Trail Projects to Advance to Design and Construction Phases
2. [Loudoun County Sidewalk and Shared Use Path Prioritization Project June 2020.](#)

Recommended Sidewalk and Trail Projects to Advance to Design and Construction Phases

Project	Name	Side	Length (miles)	District	Facility Type
1	Sterling Boulevard from Shaw Road to W&OD Trail	North	0.56	Sterling	Sidewalk
2	Potomac View Road from south of River Meadows Terrace to Harry Byrd Highway	West	0.55	Algonkian	Shared Use Path
3	East Maple Avenue from Enterprise Street to South Sterling Boulevard	North	0.15	Sterling	Sidewalk
4	Church Road from Magnolia Road to Existing Sidewalk west of West Holly Avenue	South	0.35	Sterling	Sidewalk
5	Ashburn Village Blvd from Tippecanoe Terrace to W&OD Trail	East	0.06	Broad Run	Shared Use Path
6	Waxpool Road from Faulkner Parkway to Trask Place ⁽¹⁾	Both	0.85	Ashburn/ Broad Run	Shared Use Path/Sidewalk
7	Ashburn Road from W&OD Trail to Gloucester Parkway ⁽²⁾	Both	0.54	Ashburn/ Broad Run	Shared Use Path/Sidewalk
8	Blossom Drive from Victoria Station Drive to Magnolia Road	West	0.32	Sterling	Sidewalk
9	Pacific Boulevard from Waxpool Road to the Existing Sidewalk south of W&OD Trail	East	0.38	Broad Run	To Be Determined
10	Potomac View Road from Cascades Parkway to First Baptist Church Driveway	South	0.35	Sterling	To Be Determined
11	Shellhorn Road from south of Blossom Hill Terrace to Ashburn Village Boulevard	East	0.21	Broad Run	Sidewalk
12	Davis Drive from South Sterling Boulevard to Church Road ⁽³⁾	Both	1.20	Sterling	Sidewalk
Total			5.52		

Notes: **Highlighted cells** pertain to existing corridor studies with recommended pedestrian improvements:

- (1) Missing segments were identified as part of the Waxpool Road – From Faulkner Parkway to Demott Drive – Corridor Study. Preliminary engineering and right-of-way and construction cost estimates were presented to the Board at the [November 7, 2019 Business Meeting](#); Funds have already been allocated for preliminary engineering.
- (2) Missing segments have been identified as part of the Ashburn Road – From Faulkner Parkway to Gloucester Parkway – Corridor Study. Results of the study will be presented to the Board in Fall 2020.
- (3) Missing segments have been identified as part of the Davis Drive – From Sterling Blvd to Church Road – Corridor Study. Results of the study will be presented to the Board in Fall 2020.