



Growth & Accessibility Planning

TECHNICAL ASSISTANCE PROGRAM

TOWN OF WASHINGTON PEDESTRIAN INFRASTRUCTURE EVALUATION REPORT

July 15, 2022

Prepared by Toole Design for
the Virginia Department of Transportation
Office of Intermodal Planning and Investment

Town of Washington Pedestrian Infrastructure Evaluation Report

REVISED DRAFT July 2022 | Prepared by Toole Design

Introduction

The Town of Washington's *Pathways Assessment and Improvements Plan* is a technical assistance report to identify sidewalk gaps, potential improvements to roadway safety, a proposed route for an off-street pedestrian pathway, and trailhead concepts, funded through the Virginia Department of Transportation (VDOT) Office of Intermodal Planning and Investment (OIPI) Growth and Accessibility Planning (GAP) Technical Assistance Program. This report includes planning-level direction for:

- A. Sidewalk conceptual plans
- B. Proposed pedestrian pathway conceptual plan
- C. Proposed trailhead concepts
- D. Planning level cost estimates

Additional background information can be found in the supporting document, Town of Washington Field Work Summary, which outlines the findings from field work conducted in April 2022 and informed the recommendations in this report. A survey and right-of-way assessment were not included in this scope of work, and additional information will be needed as these projects move into design.

Sidewalks

Six routes were identified in the scope for sidewalk evaluation, including:

1. Route 211/Main Street (within town limits)
2. Middle Street/Warren Avenue (Main Street to Route 211 bypass)
3. Piedmont Avenue (Main Street to west of Oden Avenue)
4. Mount Salem Avenue (Main Street to Route 211 bypass)
5. Gay Street (within town limits)
6. Harris Hollow Road (Main Street to western town boundary)

Route 211 / Main Street / Fodderstack Road Sidewalk

Route 211—known locally as Main Street south of Wheeler Street and as Fodderstack Road to the north—is the primary commercial zone for the Town of Washington. Portions of the street have existing, discontinuous sidewalks today. Additional sidewalk segments are recommended to fill the gaps and provide continuous pedestrian access on at least one side of the street (east side) between the proposed trail crossings on the north and south ends of town, with sidewalks on both sides where the highest concentration of destinations is located:

- Northern Trail Crossing to Warren Avenue: A new sidewalk is proposed on the east side of the street beginning at the northern trail crossing and heading south toward the town center. Significant grading, including areas of retaining wall would be necessary, as well as drainage features to address observed issues like standing water. Mature trees should be avoided to the extent possible. While less grading would be necessary on the west side, the garden and historic stone wall of 687 Main Street comes within one foot of the edge of pavement and several structures are located close to the road, constraining the available space for a sidewalk.
- Piedmont Avenue to Warren Avenue: There is an acceptable existing sidewalk on the east side. A new sidewalk is recommended on the west side to connect to existing businesses. Formal parallel parking spots would be constructed where necessary and feasible.
- Piedmont Avenue to Southern Trail Crossing: A new sidewalk is recommended on the east side of the street to the southern trail crossing on Main Street to create a continuous pedestrian path through the corridor. The sidewalk will be constrained to a minimum width of three feet on the bridge due to the width of the structure.

Figure 1. Proposed Main Street Sidewalks



Middle Street / Warren Avenue Sidewalk

There are existing 4-foot sidewalks in fair condition on portions of the south side of Warren Avenue. Additional sidewalk segments are recommended on the south side of the street to connect to key destinations like the Post Office and planned trail at Avon Hall. For most of the study area, there is a paved shoulder that could be partially utilized to accommodate a sidewalk. There are several utility poles on the south side that would need to be avoided or relocated; it is recommended that the sidewalk be routed behind these poles, which may require an easement or right-of-way acquisition. There are also several stretches where it may be necessary to install handrailing and/or a retaining wall due to the slope. Closer to Main Street, portions of existing sidewalk may need to be reconstructed to ensure ADA compliance and address issues with standing water.

The proposed sidewalk on Warren Avenue would terminate at the trail crossing and fire station near Firehouse Lane, which will also connect to the proposed Rush River Commons mixed-use development. In the future, the sidewalk on Warren Avenue could be extended east to Lee Highway/Route 211/Route 522 to get to the Rappahannock County Park and Recreational Center on the east side of Lee Highway. However, today the crossing of this 55-mph divided highway with a curved approach from both directions would be unsafe for pedestrians. The client noted that a potential pedestrian bridge was previously considered for this location but may not have had a positive benefit cost ratio and is not a planned project.

Figure 2- Warren Ave Sidewalks



Piedmont Avenue Sidewalk

The only sidewalk on Piedmont Avenue is a short segment on the east end, which has drainage and ADA issues. A new sidewalk is proposed, mostly on the south side of Piedmont Avenue. There will be some meandering aspects to avoid mature trees and an easement or right-of-way acquisition will likely be required. Closer to Main Street on the east end, a sidewalk is proposed on the north side to avoid the ADA and drainage issues; alternatively, the existing sidewalk on the south side could be completely reconstructed. Two new crosswalks are proposed where the trail crosses Piedmont Avenue and where the sidewalk transitions from the north to the south side. Sections of this sidewalk go outside of the Town Limits.

Figure 3 - Piedmont Avenue Sidewalks



Mount Salem Avenue Sidewalk

There are 3-foot sidewalks along portions of the northeast side of Mount Salem Avenue today that are in good condition. To create a continuous pedestrian path between the town center and the trail, new sidewalk segments would be constructed on the northeast side of Mount Salem Avenue to fill the gaps. A new sidewalk would pick up where the existing sidewalk ends in front of the Washington School. This part of the sidewalk would also serve as part of the trail loop. Due to space constraints and steep slopes, it is recommended to be routed on the flat land behind the existing stone wall, which would require an easement or acquisition. On the north end near Porter Street, crosswalks would be added and a sidewalk on County property would be reconstructed to be ADA compliant. The client noted that the County is changing the function of the building next to the sidewalk and will likely no longer need access to the door facing this street, which could allow the protruding porch to be removed to accommodate a standard, accessible sidewalk. Additional survey, reconstruction, and perhaps right-of-way will be required on this part of Porter Street between Mount Salem Avenue and Main Street.

Figure 4- Mount Salem Avenue Sidewalks



Gay Street Sidewalk

Sidewalk exists on Gay Street south of Warren Avenue, primarily made of brick. Spot improvements to the existing sidewalk are needed to ensure ADA accessibility where the bricks have become displaced and are causing tripping hazards. North of Warren Avenue, a new concrete sidewalk would be constructed on the west side of the road. Some areas will be set back further from the edge of pavement to avoid drainage ditches. In front of Town Hall, the new sidewalk will abut the road so the original walkway for Town Hall can be retained.

Figure 5- Gay Street Sidewalks



Harris Hollow Road Sidewalk

A sidewalk is proposed on the north side of Harris Hollow Road. Due to constraints, the sidewalk would be along the edge of pavement, except when needing to route around utility poles. There are several areas where there may be constrained widths due to mailboxes, utility poles, and brush and only a the minimum 3-foot requirement can be accommodated. Easements or right-of-way acquisition may be needed in some locations. A mid-block crosswalk is recommended where the proposed trail meets Harris Hollow Road.

Figure 6- Harris Hollow Road Sidewalks



As part of a future project, sidewalks along Wheeler and Calvert Streets should be considered to create a more continuous sidewalk network throughout the town. Marked crosswalks would be added where sidewalks intersect the street.

Figure 7. Map of Proposed Sidewalks



Pedestrian Path

The Town of Washington has envisioned a continuous, off-street pedestrian loop around the town, both to support walkability for locals and to serve as an attraction for tourists to support economic development. During field work, the team evaluated the potential loop route that the client identified in the scope of work, as well as some alternative routes the mayor had identified for portions of the loop. The mayor also provided guidance about anticipated likeliness of various property owners to allow a trail on their properties. The “path” or “route” as referenced in this document refers to the proposed alignment for the trail, based on field work observations and available GIS data. The route should be refined as the project moves into the design phase, a site survey is completed, and property access is negotiated.

The proposed route is a complete loop around the Town, with access points at Fodderstack Road, Harris Hollow Road, Piedmont Avenue, Main Street, and Warren Avenue. Key destinations that would connect to the route include the Post Office, downtown, the Inn at Little Washington, and Avon Hall. Portions of the route include wooded, natural areas, offering a recreational component in addition to providing enhanced pedestrian access to these destinations.

In the following section, the proposed route is described organized into five zones:

1. Northeast Zone Trail: Warren Avenue to Fodderstack Road
2. Northwest Zone Trail: Fodderstack Road to Harris Hollow Road
3. Southwest Zone Trail: Harris Hollow Road to Main Street
4. South Central Zone Trail: Main Street to Mount Salem Road
5. Southeast Zone Trail: Mount Salem Road to Warren Avenue

The client requested more natural materials for the trail to reflect the town’s character and align with preferences of property owners whose support is needed for implementation.

To balance the desire for ADA-accessibility with the hilly topography in some areas and a desire for more natural feeling materials, a portion of the loop is recommended to be ADA-accessible and a portion in areas with steep slopes would not be fully accessible. The accessibility of segments should be clearly marked as such at their entrances.

Figure 8- Proposed Pedestrian Path

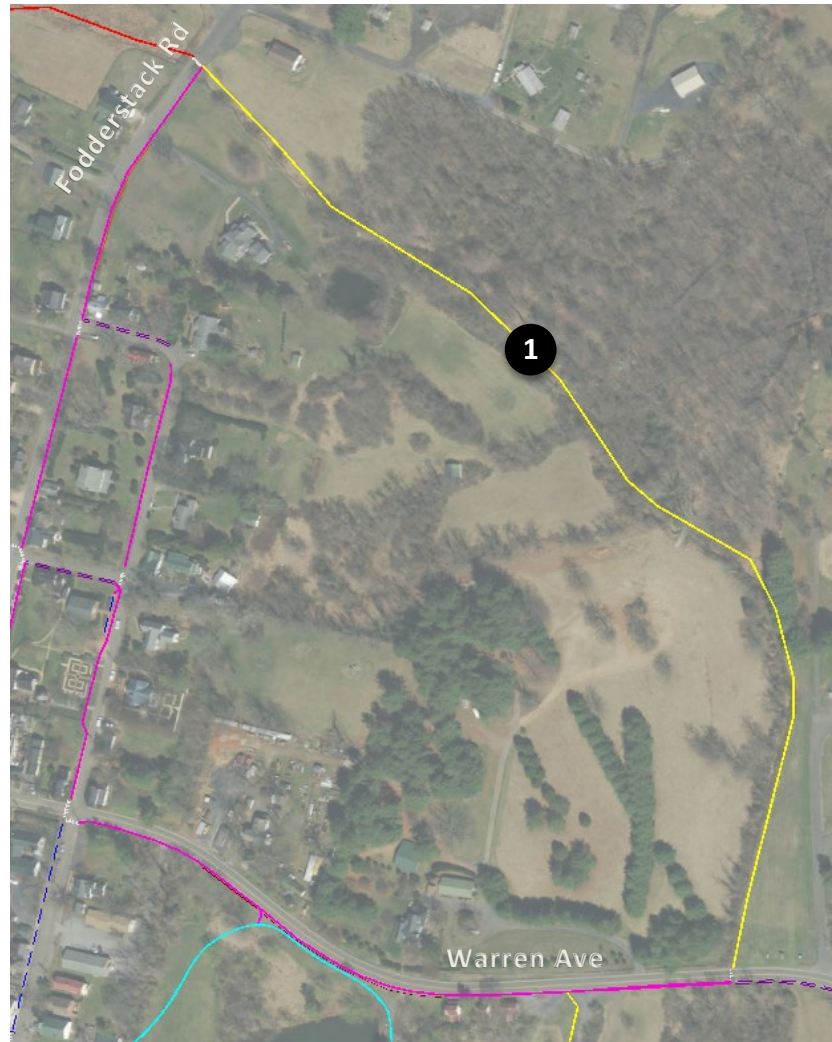


1. Northeast Zone Trail: Warren Avenue (near Post Office) to Fodderstack Road (near northern Town limits)

In the northeast zone, the trail will connect to the Post Office and follows the Warren Avenue sidewalk before turning north at a mid-block crossing west of Firehouse Lane. A rectangular rapid-flashing beacon (RRFB) is recommended at the crossing to increase the visibility of trail users and encourage yielding by drivers. North of Warren Avenue, the path would follow the stream north and west to Fodderstack Road.

This section of trail is recommended to be constructed to ADA standards with crusher fines and a width of six feet.

Figure 9. Northeast Zone Trail Route

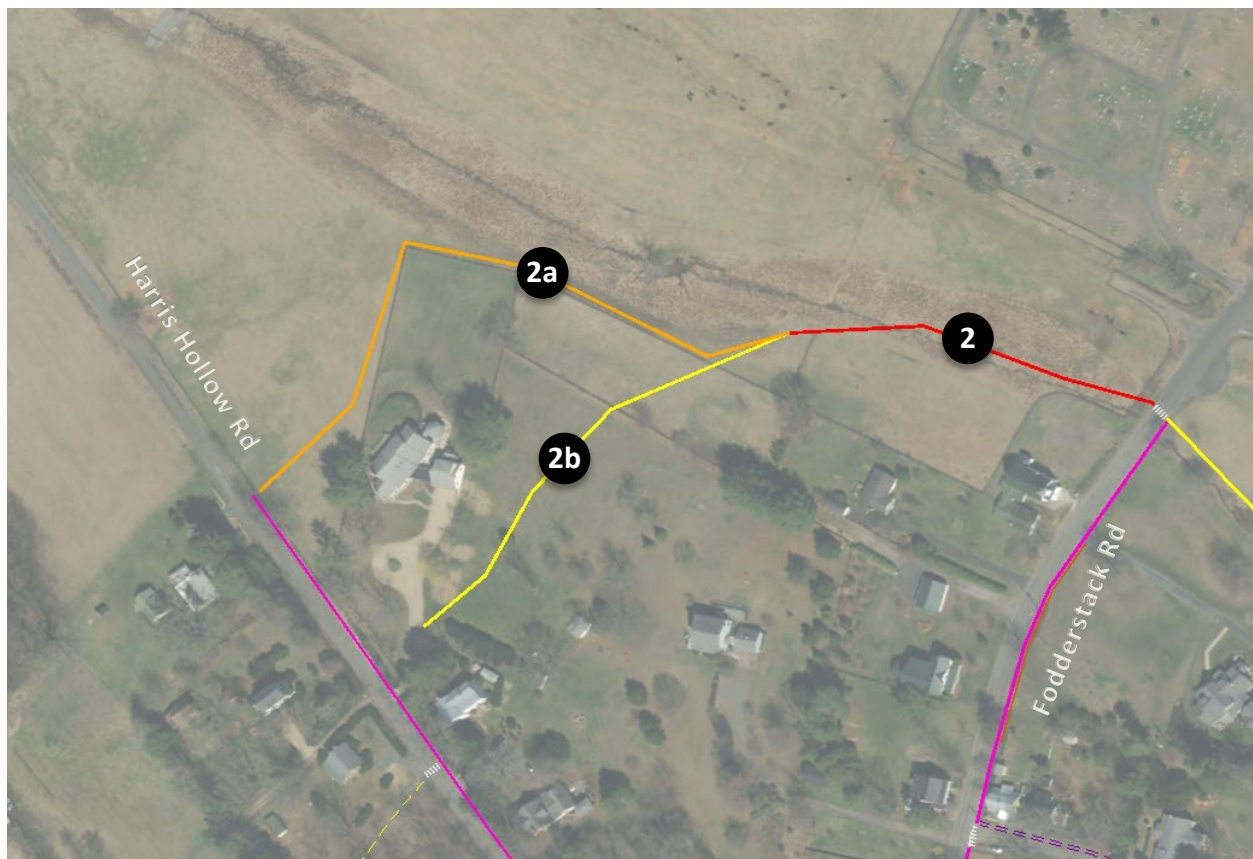


Above: Example of a rectangular rapid-flashing beacon (RRFB), a pedestrian-activated device that can be placed at crosswalks to increase compliance of vehicles yielding to pedestrians. They have two rectangular-shaped yellow indications, each with an LED-array-based light source that flash with high frequency when activated. When the lights are activated by pedestrians, drivers should stop like a stop sign.

2. Northwest Zone Trail: Fodderstack Road (near northern Town limits) to Harris Hollow Road

At Fodderstack Road, there will be a crosswalk with a RRFB and a connection to a sidewalk that leads to the town center to the south. On the west side, an elevated boardwalk section will be required as the trail crosses the creek and marsh land. From that points, two alternative routes are being considered and the client requested to keep both options as it works with property owners to refine the preferred route. Alternative 2A would follow just along the northern edge of the fence around the residential parcels before reaching Harris Hollow Road. Upon reaching Harris Hollow Road, the trail would share space with the road until the driveway at 25 Harris Hollow Rd. Alternative 2B would follow a direct path to Harris Hollow Road between residential parcels. A mid-block crosswalk would be added at Harris Hollow Road to connect to the trail on the southwest side. Except for the on-street sections and boardwalk, the trail would be composed of ADA compliant crusher fines at a width of six feet.

Figure 10 – Northwest Zone Trail Route



3. Southwest Zone Trail: Harris Hollow Road to Main Street (near southern Town limits)

From Harris Hollow Road, the trail will connect to the existing footpath at the Inn at Little Washington, which is open for public use. On the south side of the inn's loop, it will continue to the South just inside of the fence line, avoiding the marshy area, down to Piedmont Avenue where there would be a raised crossing to break up the long straight path of Piedmont Avenue. A trailhead is proposed here to provide trail users a place to rest and enjoy the view of the Shenandoah Mountains, as well as to inform guests of the inn that there is a trail beyond its property. The trail would then continue south of Piedmont Avenue for another 500 feet.

Alternative 3A would turn east and meet Main Street at the Harris Foster House parking lot, where a crosswalk with an RRFB would be added.

Alternative 3B would go around the estate before meeting Main Street just south of the Town limits, where a crosswalk with an RRFB would be added. Compacted dirt is the proposed material for this stretch of trail, which is not part of the ADA-accessible loop due to the hillier topography in this area.

Figure 11. Southwest Zone Trail



4. South Central Zone Trail: Main Street (near southern Town limits) to Mount Salem Avenue (near Washington School)

Alternative 4A follows the Main Street sidewalk south until turning east at the property line south of Mount Prospect Lane until Mount Salem Avenue. Alternatively, segment 3B could continue south along Main Street, following the topography through the woods to meet at the south end of above mentioned property line. From there, the trail would travel east toward Mount Salem Avenue. The proposed material is ADA compliant Crusher Fines and a width of six feet.

Figure 12 – South Central Zone Trail



5. Southeast Zone Trail: Main Street (near southern Town limits) to Mount Salem Avenue (near Washington School)

The trail crosses Mount Salem Avenue near the end of the existing sidewalk, where there will be a raised crosswalk. The path will use the proposed new sidewalk, heading south behind the stone wall to the parking lot. Signage would guide trail users through the parking lot to the Washington School Trailhead near the edge of the woods. From there, the trail would follow the topography around the water plant and back up to the Post Office. The trail section would be composed of ADA compliant crusher fines and a width of six feet.

Figure 13. Southeast Zone Trail



Trailhead Concepts

Concepts for up to three trailheads were included in the scope of work. The following locations are proposed as trailheads, selected in collaboration with the client:

- A. Post Office/Rush River Commons
- B. The Washington School Building (567 Mount Salem Avenue)
- C. The Inn at Little Washington Trail

Other wayfinding elements include custom signage to indicate cross streets and distances.

Figure 14. Proposed Trailhead Locations



Trailhead A: Post Office / Rush River Commons

The primary trailhead in Washington which will connect the trail and trail to be constructed by others. This trailhead will also connect to Rush River Commons and contain parking at the Post Office.

Recommendations are illustrated in Figure 15 and include:

- Monument Sign
- Wayfinding Signs
- Parking
- Directional Signs
- Trash and Recycling Bins
- Benches
- Picnic Tables
- Interpretive signage about the history of Little Washington, building on the content from the town's upcoming brochure

A pavilion could be installed with the picnic tables for additional shelter and character. This concept is supported by the addition of sidewalk on Warren Ave as well as an RRFB warning device for safe pedestrian crossing.

Figure 15. Trailhead Concept at Post Office/Rush River Commons



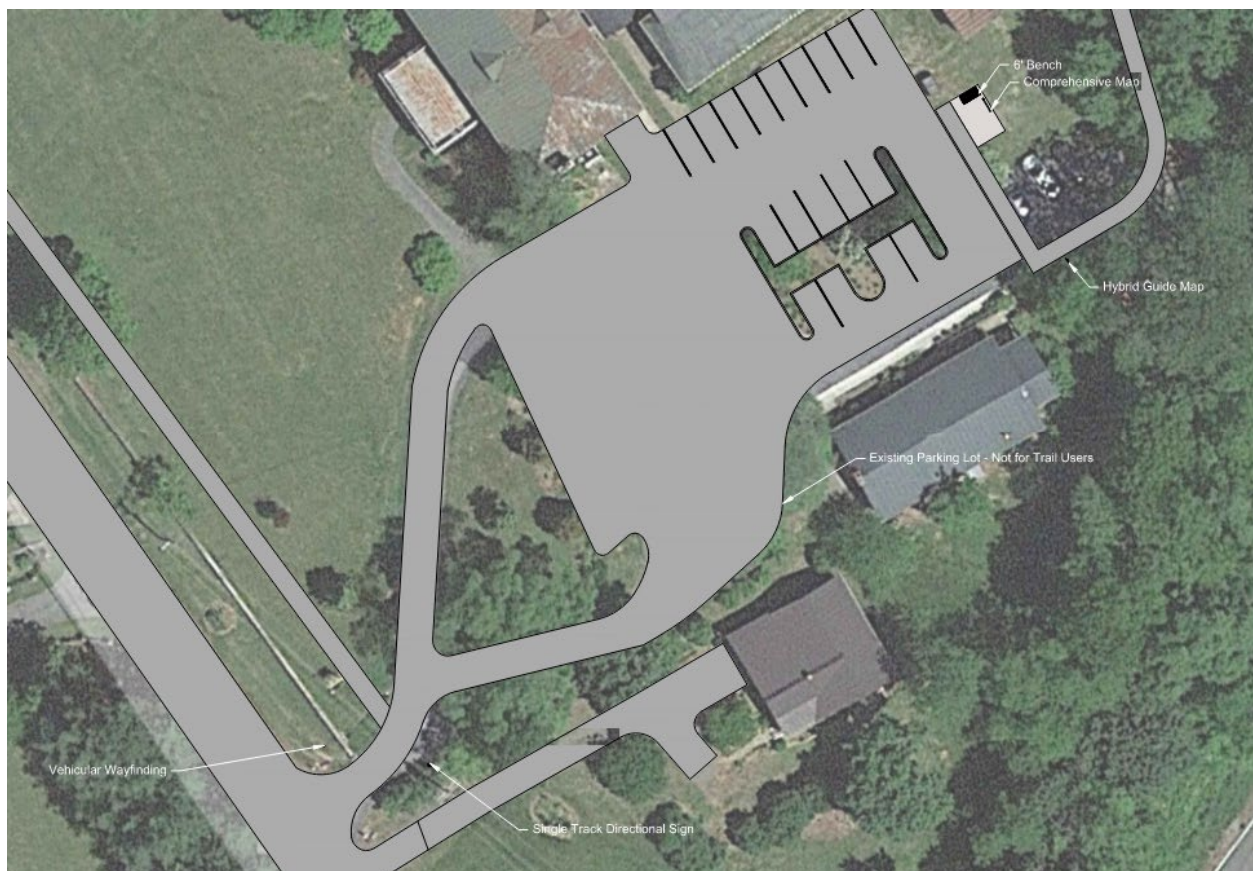
Trailhead B: The Washington School

The second trailhead would be located at the former Washington School building, which now houses residences and small offices. The trailhead will connect to the trail as well as sidewalk on Mount Salem Avenue. Recommendations are illustrated in Figure 16 and include:

- Wayfinding Signage
- Directional Signage
- System Map
- Benches

This concept is supported by the addition of sidewalk on Mount Salem Avenue, as well as a raised crosswalk for safe pedestrian crossing.

Figure 16. Trailhead Concept at the Washington School



Trailhead C: The Inn at Little Washington Loop Trail

The third trailhead would be located at existing footpath loop at the Inn at Little Washington. The trailhead will connect the existing trail to the new trail segment. It will be an opportunity for trail users to stop and rest while they enjoy the view of the Shenandoah Mountains across the field, as well as to attract guests at the Inn to explore the rest of the trail and the town beyond the Inn's property.

Recommendations are illustrated in Figure 17 and include:

- Wayfinding
- System map
- Adirondack style seating
- Interpretive signage to educate trail users about the Shenandoah Mountains and farm-to-table operations at the Inn as they look at the mountain range and farm animals
- Shade trees

A monument sign where the trail meets Piedmont Avenue is also recommended to draw attention to the trail from the street and direct people to the nearby trailhead.

Figure 17. Trailhead Concept at the Inn at Little Washington



Trailhead Design Elements

Specific design elements, such as materials and furnishings, will be selected as each project moves into the design phase. The reference images below provide general direction to illustrate the types of elements that could be incorporated. In addition to the proposed trailheads, mile markers could be installed along the route and mini system maps could be installed where the trail meets Main Street, Fodderstack Road, and Mount Salem Avenue to help trail users understand how to get to the town center using sidewalks. Using cohesive design elements and materials at each trailhead will help build recognition of the path system and can express Washington’s character using recurring local design elements like low stone walls. Durable, low-maintenance materials should be selected where possible.

<p>System Map</p> 	<p>Monument Sign</p> 	<p>Directional Signs</p> 
<p>Adirondack Chairs</p> 	<p>Picnic Tables</p> 	<p>Benches</p> 
<p>Mileage Markers</p> 	<p>Interpretive Signage</p> 	<p>Mini System Map</p> 

Design Considerations

The Northeast, Northwest, South Central, and Southeastern zones of the proposed path are suggested to be ADA compliant, with 5-foot-wide paths that are accessible to all users. Although the path will not be a solid paved surface, it is suggested to use Crusher Fines to create a natural look while meeting VDOT standards for accessibility. These materials should be a 4-inch based course of No. 21A's, topped with 2 inches of finely crushed limestone aggregate using 3/8-inch minus crushed fines or VDOT No. 10's. Other variations of crushed stone could be used but may not meet ADA standards.

Several locations along the proposed routes appeared to be wetlands or marshes or were soggy from recent rains. Parts of the Northwest Zone are suggested to be an elevated boardwalk of 6-foot width to minimize impacts. Virginia stream buffer requirements will need to be further analyzed during the Engineering Design Phase. Virginia statute requires a buffer for all state waters of 25 feet for unpaved trails.

The Southwest Zone of the proposed path is on more hilly terrain and is meant to have a more natural feel that will follow the existing topography. Thus, there may be locations that do not meet ADA Standards. To further retain the natural feel, a surface of compacted dirt is proposed in this zone. Signage should be provided at the entrances to this section of the trail to indicate that it is not accessible and direct users who need ADA accessible facilities to how to use the sidewalks to reconnect with accessible sections.

While existing sidewalks within the Town of Washington are as narrow as 3 feet, VDOT Standards require sidewalk widths of 5 feet. In many cases, more narrow sidewalks will be required to fit site constraints, to be no narrower than 3 feet per ADA minimum requirements. In areas where the slope is 3:1 or greater, with a drop of 6 feet or greater or the sidewalk is adjacent to water or other obvious hazards within 5 feet of the edge of walkway, the addition of a handrail or retaining wall becomes necessary.

Crosswalks and curb ramps should be constructed to VDOT standards.

Documents used in selecting preferred design considerations:

- Virginia Subdivision Street Design Guide
- VDOT Complete Streets: Bicycle and Pedestrian Facility Guidelines
- VDOT Traffic Engineering Memorandum-376.1
- NACO National Trail Surfaces Study
- VA Riparian Buffers standards
- USAB Outdoor Developed Areas accessibility standards
- VDOT Preliminary Engineering Plan Design Standards

- VDOT Road Design Manual Appendix A-1
- Guide to the ABA Accessibility Standards Chapter 10

Cost Estimate

The following is a planning level cost estimate for the construction of the proposed sidewalk sections, trail sections, and trailheads. During the Engineering Design process, these values will likely change as the design is finalized. The estimated values are based on VDOT prices for rural settings, adjusted for inflation. Using the VDOT Cost Estimating Tool, the estimates are presented below as ranges, with a low-end and high-end estimate for each project. Estimated costs for crossing treatments, curb and gutter or other drainage improvements, right-of-way/utility allowances, and contingencies are included in the overall sidewalk cost estimates. The range in estimates accounts for additional expenses that may be needed for some projects, such as retaining walls or other features. Additional detail about the cost estimate assumptions is available in the attached Planning Level Cost Opinion.

Figure 15. Washington Trail Cost Estimate Summary – Segment 1

	Trail Segment 1 – Northeast Zone - ADA	
	Low	High
Project Length (Miles)	.42	
Subtotal Roadway Cost	\$310,000	\$536,667
Right-of-way and Utilities Cost ¹	\$46,500	\$187,833
Total Roadway Cost ²	\$336,500	\$724,500
TOTAL PROJECT COST³	\$445,625	\$905,625

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 16. Washington Trail Cost Estimate Summary – Segment 2

	Trail Segment 2 – Northwest Zone - ADA	
	Low	High
Project Length (Miles)	.25*	
Subtotal Roadway Cost	\$207,727	\$366,212
Right-of-way and Utilities Cost ¹	\$51,932	\$128,174
Total Roadway Cost ²	\$259,659	\$494,386
TOTAL PROJECT COST³	\$524,621	\$950,369

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency. *Assumes longest path

Figure 17. Washington Trail Cost Estimate Summary – Segment 3

	Trail Segment 3 – Southwest Zone - Natural	
	Low	High
Project Length (Miles)	.95*	
Subtotal Roadway Cost	\$608,182	\$1,026,970
Right-of-way and Utilities Cost ¹	\$152,045	\$359,439
Total Roadway Cost ²	\$760,227	\$1,386,409
TOTAL PROJECT COST³	\$950,284	\$1,733,011

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency. *Assumes longest path

Figure 18. Washington Trail Cost Estimate Summary – Segment 4

	Trail Segment 4 – South Central Zone - ADA	
	Low	High
Project Length (Miles)	.09	
Subtotal Roadway Cost	\$91,136	\$165,227
Right-of-way and Utilities Cost ¹	\$22,784	\$57,830
Total Roadway Cost ²	\$113,920	\$223,057
TOTAL PROJECT COST³	\$142,401	\$278,821

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency.

Figure 19. Washington Trail Cost Estimate Summary – Segment 5

	Trail Segment 5 – Southeast Zone - ADA	
	Low	High
Project Length (Miles)	.31	
Subtotal Roadway Cost	\$187,500	\$312,500
Right-of-way and Utilities Cost ¹	\$46,875	\$109,375
Total Roadway Cost ²	\$234,375	\$421,875
TOTAL PROJECT COST³	\$292,969	\$527,344

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency.

Figure 20. Washington Sidewalks Cost Estimate Summary – Main Street

	Washington Sidewalks – Main Street	
	Low	High
Project Length (Miles)	.76	
Subtotal Roadway Cost	\$455,00	\$1,250,152
Right-of-way and Utilities Cost ¹	\$113,750	\$437,553
Total Roadway Cost ²	\$1,023,750	\$2,937,856
TOTAL PROJECT COST³	\$1,279,688	\$3,672,320

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 21. Washington Sidewalks Cost Estimate Summary – Harris Hollow Road

	Washington Sidewalks – Harris Hollow Road	
	Low	High
Project Length (Miles)	.22	
Subtotal Roadway Cost	\$99,063	\$295,919
Right-of-way and Utilities Cost ¹	\$24,766	\$103,571
Total Roadway Cost ²	\$222,891	\$695,409
TOTAL PROJECT COST³	\$278,613	\$869,261

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 22. Washington Sidewalks Cost Estimate Summary – Piedmont Avenue

	Washington Sidewalks – Piedmont Avenue	
	Low	High
Project Length (Miles)	.25	
Subtotal Roadway Cost	\$109,375	\$329,299
Right-of-way and Utilities Cost ¹	\$27,344	\$115,255
Total Roadway Cost ²	\$246,094	\$773,853
TOTAL PROJECT COST³	\$307,617	\$967,317

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 23. Washington Sidewalks Cost Estimate Summary – Warren Avenue

	Washington Sidewalks – Warren Avenue	
	Low	High
Project Length (Miles)	.25	
Subtotal Roadway Cost	\$129,375	\$369,299
Right-of-way and Utilities Cost ¹	\$32,344	\$129,255
Total Roadway Cost ²	\$291,094	\$867,853
TOTAL PROJECT COST³	\$363,867	\$1,084,817

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 24. Washington Sidewalks Cost Estimate Summary – Mount Salem Avenue

	Washington Sidewalks – Mount Salem Avenue	
	Low	High
Project Length (Miles)	.09	
Subtotal Roadway Cost	\$54,375	\$151,269
Right-of-way and Utilities Cost ¹	\$13,594	\$52,944
Total Roadway Cost ²	\$122,344	\$355,482
TOTAL PROJECT COST³	\$152,930	\$444,353

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 25. Washington Sidewalks Cost Estimate Summary – Gay Street

	Washington Sidewalks – Gay Street	
	Low	High
Project Length (Miles)	.19	
Subtotal Roadway Cost	\$101,875	\$280,284
Right-of-way and Utilities Cost ¹	\$25,469	\$98,099
Total Roadway Cost ²	\$229,219	\$658,668
TOTAL PROJECT COST³	\$286,523	\$823,335

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Figure 26. Washington Trailheads Cost Estimate Summary – Trailheads

	Trailheads	
	Low	High
Number of Trailheads	3	
Subtotal Trailhead Cost	\$75,000	\$225,000
Right-of-way and Utilities Cost ¹	\$26,250	\$78,750
Total Trailhead Cost	\$101,250	\$303,750
TOTAL PROJECT COST²	\$126,563	\$379,688

¹ Low end estimate assumes 25% and high end assumes 35% ² Includes crossings ³ Includes contingency

Attachments

Attached is a Trails and Sidewalks Conceptual Plan Set, Trailhead Conceptual Plan Set, and Planning Level Cost Opinion.