



# Mendota Trail to Downtown Bristol Connector

*Feasibility Study and Pre-Engineering Plan*

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Cover image: Existing section of the Mendota Trail

# Acknowledgments

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## Project Stakeholders and Partners

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- Micah Bray, Transportation Planning Manager, Bristol Metropolitan Planning Organization
- Bobby and Steve Cheers, Mountain Sports and Mendota Trail Conservancy
- Will Clear, Squabble State Cidery and Mendota Trail Conservancy
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- Beth Rhinehart, President and CEO, Bristol VA/TN Chamber of Commerce
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# Introduction

This chapter provides an overview and background of the project followed by the project vision and goals, planning process overview, and a summary of relevant past plans. The project vision and goals were developed based on the City of Bristol's original request for proposals for this project, plus a discussion of overall vision and goals among project committee members during the June 2025 Kickoff Meeting.





# Overview

The City of Bristol, VA received grant funding from the Virginia Tobacco Region Revitalization Commission, the Appalachian Regional Commission, and the Mendota Trail Conservancy to study the feasibility of a multimodal connection between the Mendota Trail and Downtown Bristol. Specifically, the study is focused on connecting approximately three miles, from the Mendota Trail’s southernmost trailhead at I-81 to Cumberland Square Park in Downtown Bristol.



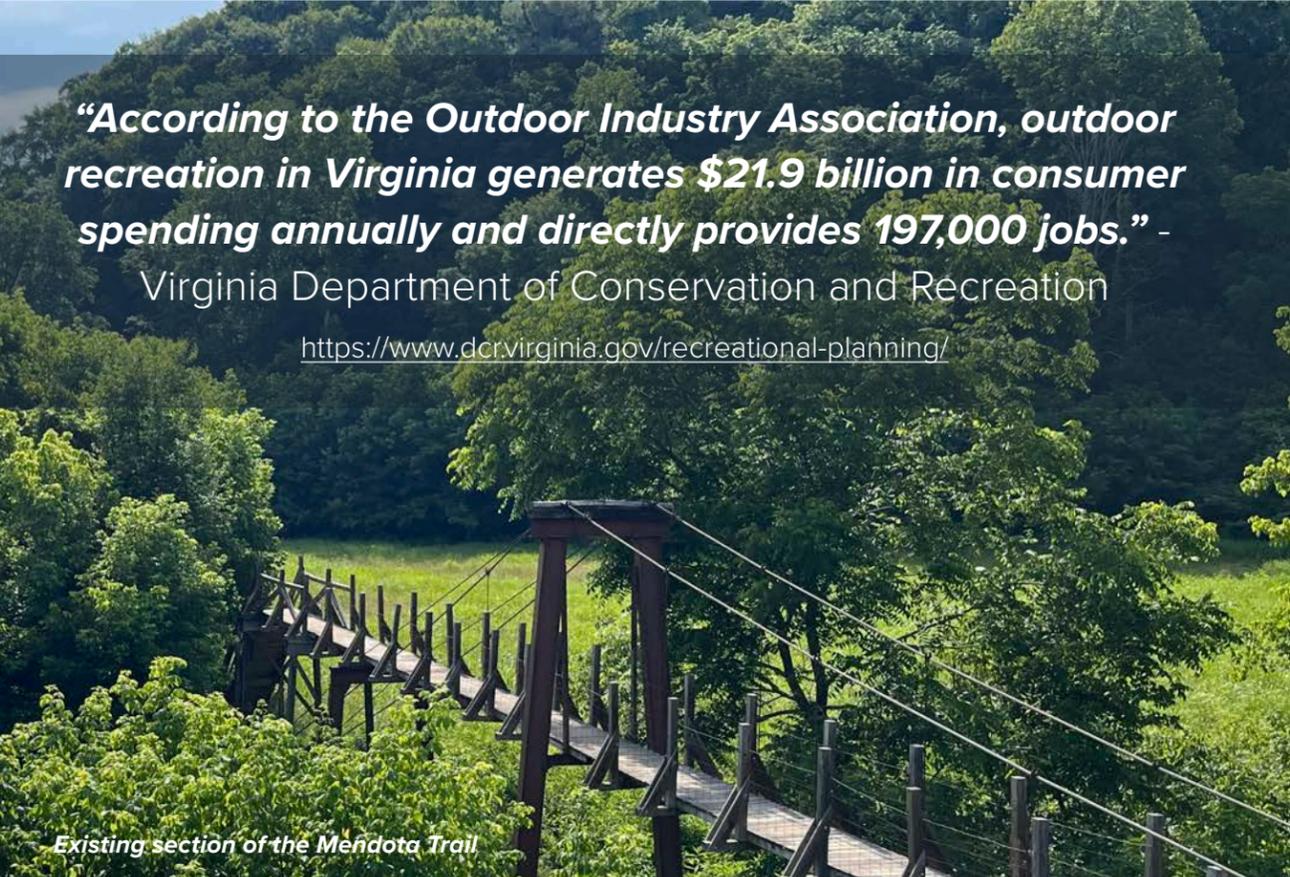
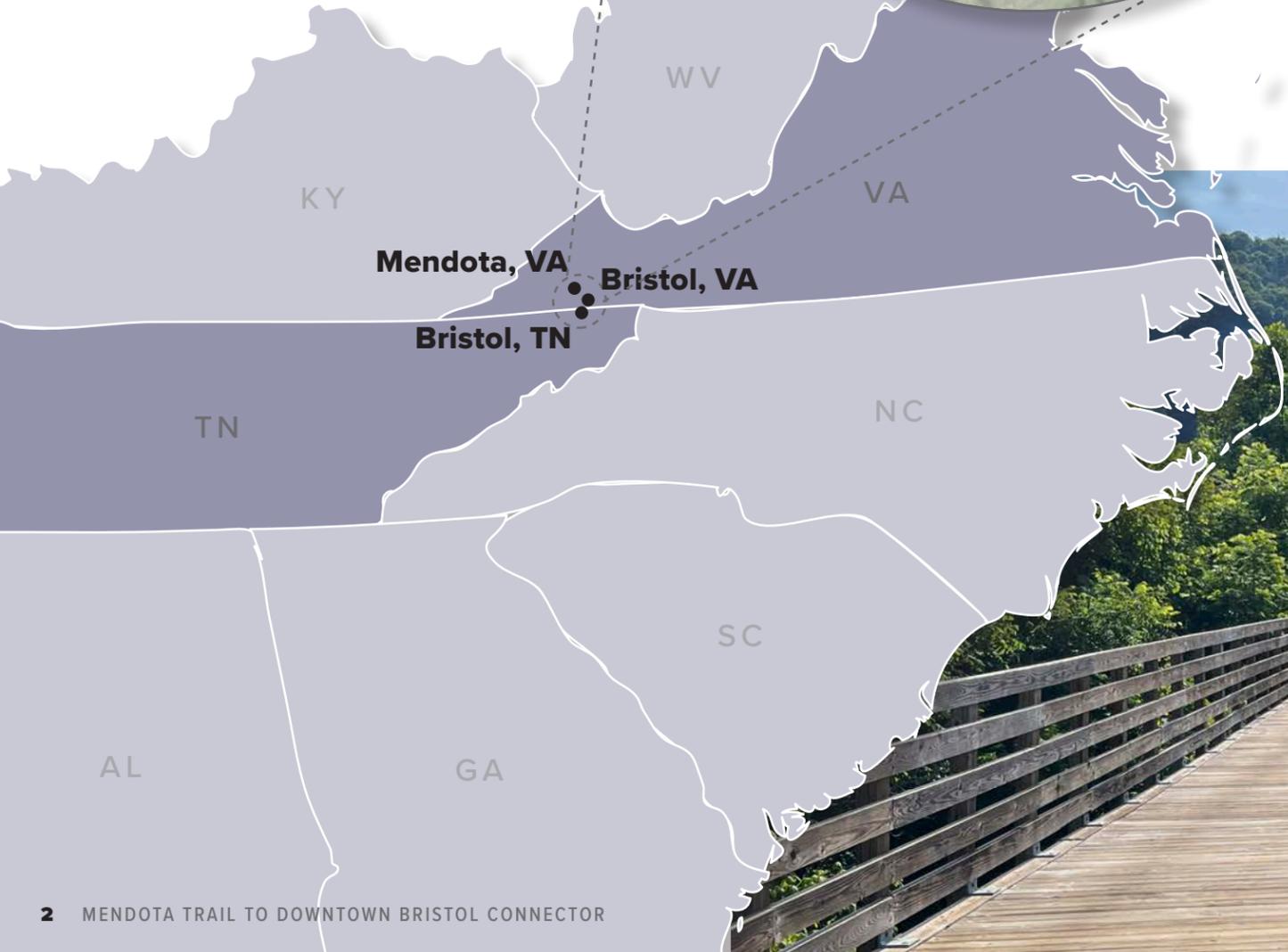
# Background

The Mendota Trail is a 12.5-mile hiking and biking recreational corridor, spanning countryside and forests on gentle grades between Bristol and Mendota in Washington County, Virginia. All trestlework has been completed and the trail is fully open to visitors.

The trail features three main trailheads, including Bristol’s trailhead at I-81. Access to Bristol’s trailhead is currently constrained by a lack of a dedicated space for people walking and bicycling, motor vehicle speeds, visibility on nearby roads, and other issues outlined in this report.

Development of this greenway connector is considered a regional priority for Mendota Trail stakeholders, public officials, and tourism supporters, as documented in existing city

plans. With a high rate of return, investments in trails contribute significantly to local economies and tourism, particularly in rural areas, by creating desirable places for people to visit, live and work. Trails also create more attractive, safer communities, increase property values and tax revenues, enhance marketability, and increase home sales or leases faster than conventional development. Every \$1.00 of trail construction returns \$1.72 annually from local businesses ([Institute for Transportation Research and Education](#)). Expansion of the trail will increase its usage, thereby increasing the many benefits associated with trails, while also better positioning Bristol to tap into Virginia’s \$21.9 billion outdoor recreation economy.



**“According to the Outdoor Industry Association, outdoor recreation in Virginia generates \$21.9 billion in consumer spending annually and directly provides 197,000 jobs.”** -

Virginia Department of Conservation and Recreation

<https://www.dcr.virginia.gov/recreational-planning/>

Existing section of the Mendota Trail



# Vision

Creating safe access for people walking and bicycling between downtown Bristol and the trailhead will contribute to regional revitalization and support economic development opportunities for new and existing businesses. The trail's proximity to the greater population center of the City will promote greater well-being and healthier lifestyles for both residents and visitors, increase property values, and will attract new businesses and a younger workforce to the City.

# Goals



Safe Trail Access



Health and Well-being



Trail Tourism and Outdoor Recreation



Economic Development

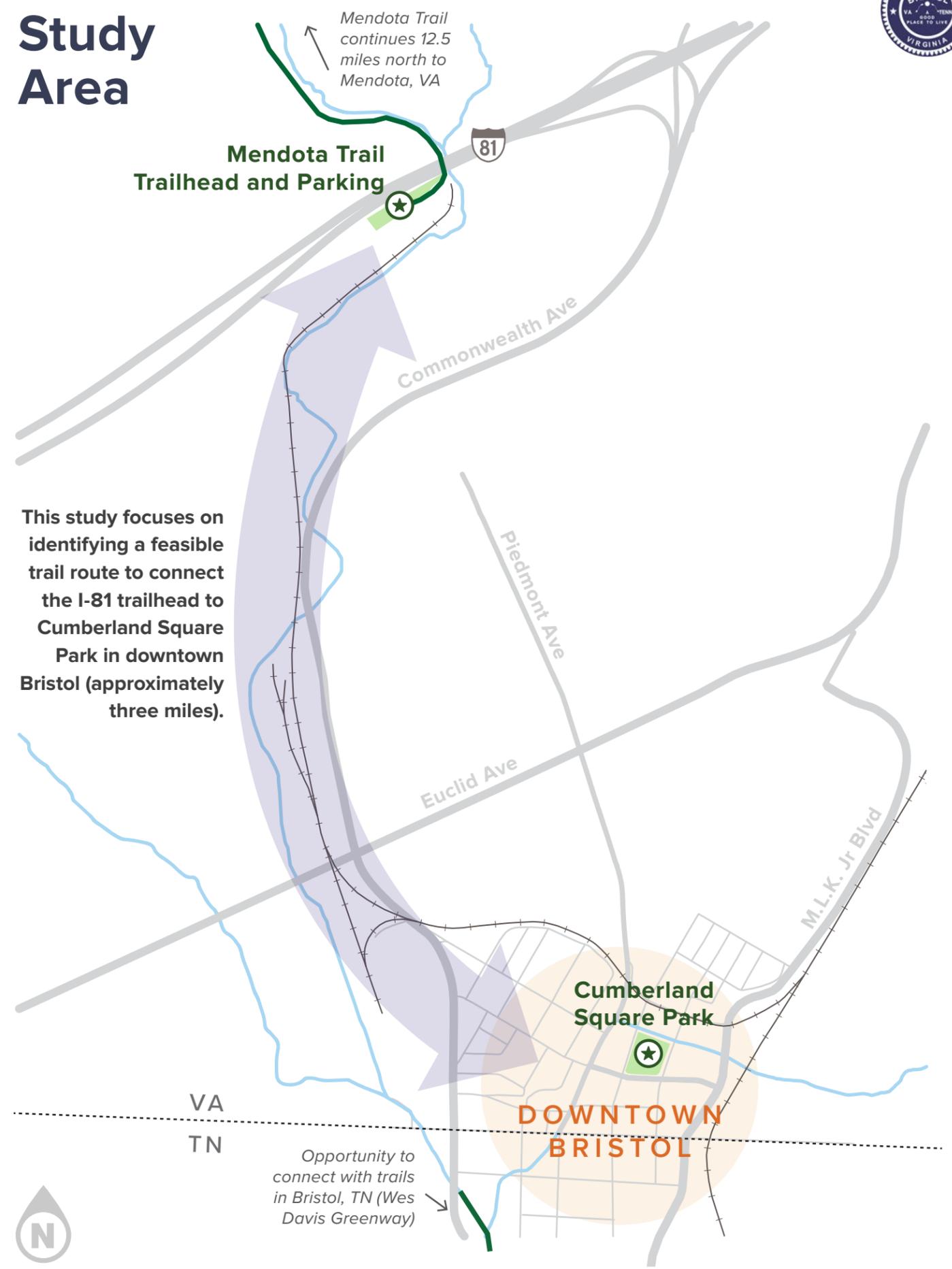


Revitalization



Workforce Attraction

# Study Area



This study focuses on identifying a feasible trail route to connect the I-81 trailhead to Cumberland Square Park in downtown Bristol (approximately three miles).



# Process and Timeline

This study was conducted in 2025 and early 2026, following the approximate steps and timeline shown below.





# Relevant Existing Plans

## Bristol Forward: The Bristol, Virginia Comprehensive Plan (2024)

The Bristol Forward plan provides a vision to help policymakers make decisions. This plan supports the Mendota Trail to Downtown Bristol Connector in several important ways, most importantly through the community vision it establishes:

- **Community Vision for Transportation:** “Residents and visitors have the freedom to safely and easily navigate the city -and nearby region- by walking, biking, driving, or riding transit.”

- **Community Vision for Public Health:** “Bristol is a green, resilient, and healthy community with clean air and water, active living for all generations, and accessible food options and health care services.”

The plan also provides practical support for this study, by providing a recent and relevant set of maps and analysis related to:

- Future Land Use and Character (p. 21)
- Roadway Network, Average Daily Traffic, Crashes, Multimodal Network, Sidewalk Network, and Trail Network (Transportation Chapter)

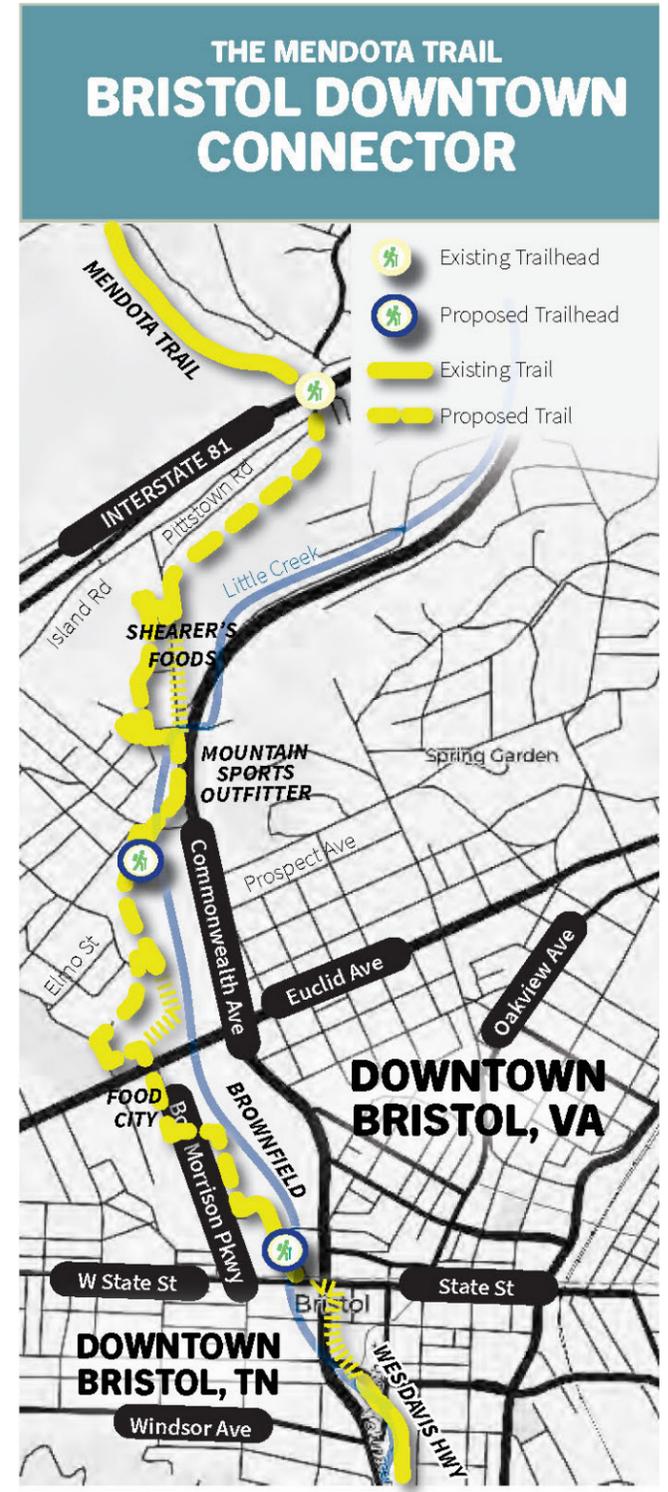


Bristol Forward: The Bristol, Virginia Comprehensive Plan (2024), showing the existing and proposed Mendota Trail corridor in green.

## Mendota Trail Master Plan (2021)

This master plan, developed by the Mendota Trail Conservancy, includes a conceptual route for a “Bristol Downtown Connector” from I-81 to State St. Key elements of the route include:

- Aim for 10-12 foot paved greenway, but may need to use sidewalk or low-traffic on-road connections in some areas.
- Proposed route follows rail bed from I-81 to Shearer’s Foods then provides several options: 1) between active rail line and Commonwealth Ave, 2) on west side of Commonwealth Ave, or 3) combination of private parcels and easements west of Commonwealth Ave.
- On-road or sidewalk connection on Keys St.
- Trail in floodplain of Little Creek; option to use Crescent Dr and reconfigure wide lanes on Food City property.
- Trail along Bob Morrison Blvd and brownfield redevelopment site.
- Ends on west side of Commonwealth Ave with suggested connection in Sullins St ROW to downtown.
- Proposed trailheads at Randolph St (undeveloped private properties) and State St (vacant industrial parcels).



Concept from Mendota Trail Master Plan (2021)



Mendota Trail Connector Concept. Taken from the Mendota Trail Master Plan, the map presents options to connect Downtown Bristol to the Mendota Trail.



### Beaches to Bluegrass Trail Master Plan (2015)

The VA Department of Conservation and Recreation developed this plan to guide development of the statewide Beaches to Bluegrass Trail (B2B) which is envisioned as a shared-use trail that connects Virginia Beach to the Cumberland Gap. Bristol and the Mendota Trail are part of the overall B2B network.

that could connect the two cities' downtowns at Williams St/Georgia Ave, MLK Jr. Blvd, and the rail corridor between McNeil St and Sullins St.

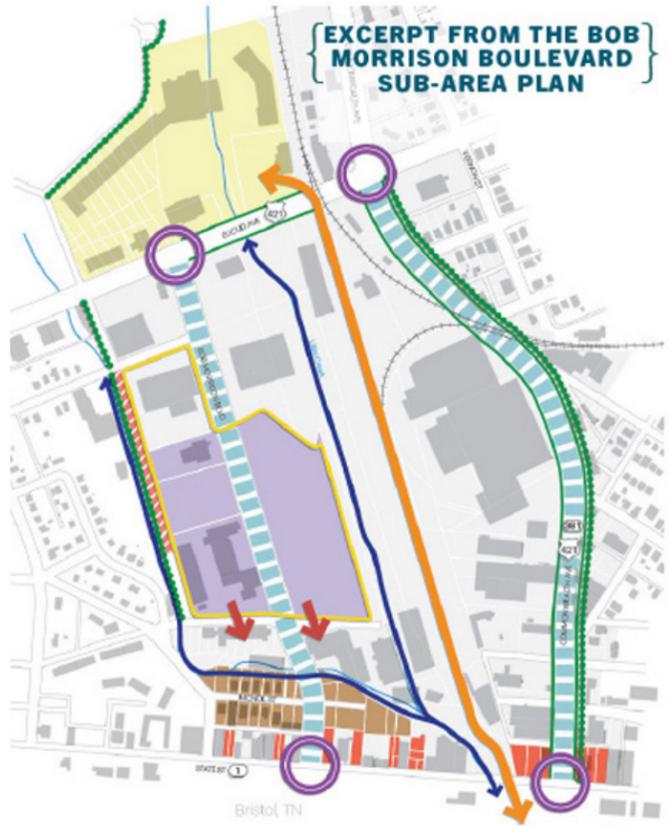
### Bristol, TN West State Street Corridor Study (2023)

Bristol, TN undertook this study to develop specific transportation recommendations to improve safety, mobility, and access and encourage redevelopment along West State Street. Intermediate recommendations showed two options for State St from Euclid Ave to Commonwealth Ave. Option A includes a buffered cycle track while B does not add any bike facilities. The study's long-term vision for this section expands the existing ROW and includes buffered bike lanes.

### Bob Morrison Boulevard Sub-Area Plan (from Bristol Forward, 2024)

This sub-area plan is featured in the Bristol Forward Comprehensive Plan (p. 83). Key elements include several potential corridors for connectivity (left to right/west to east):

- Along Division St/Susong Branch, from Euclid Ave to State St (blue line)
- Along Bob Morrison Blvd, from Euclid Ave to south of State St (green dash)
- Along Little Creek, from Euclid Ave to south of State St (blue line)
- Along the former rail corridor, from Euclid Ave Shopping Center to south of State St (orange line)
- Along Commonwealth Blvd, from Euclid Ave to State St (green dash)



Conceptual improvements from the Bob Morrison Boulevard Sub-Area Plan (page 83 of the Bristol Forward Comprehensive Plan), showing the proposed connections from the Euclid Shopping Center area and Downtown Bristol.

### SMART SCALE Commonwealth Ave and Euclid Ave Intersection Improvements (2023, SMART SCALE Round 5, Project ID 9173)

SMART SCALE is Virginia's competitive funding process for transportation projects, evaluating and scoring applications based on their ability to address critical needs. The Bristol MPO submitted this project under the High Priority Projects Program (HPP), and it is funded at \$4.3 million. The project will modify the intersection to improve safety and efficiency. Pedestrian-specific improvements include adding ADA-compliant curb ramps, high-visibility crosswalks, and pedestrian signals.

### Cumberland Square Park Small Area Plan (2025, in development)

This plan could include a redesign of Cumberland Square Park; redesign of the nearby plaza and adjacent parking area; a concept design for Piedmont Avenue as a festival street and destination; public improvements to Lee Street, Winston Alley, and Moore Street; identification of infill development and parking improvements; and private sector facade enhancements. Recommendations for this small area plan and the Mendota Trail to Downtown Bristol Connector should be coordinated.

### Bristol, TN Comprehensive Trails and Greenways Master Plan (2017)

This plan from Bristol, VA's sister city of Bristol, TN includes many proposed greenway routes



# Existing Conditions

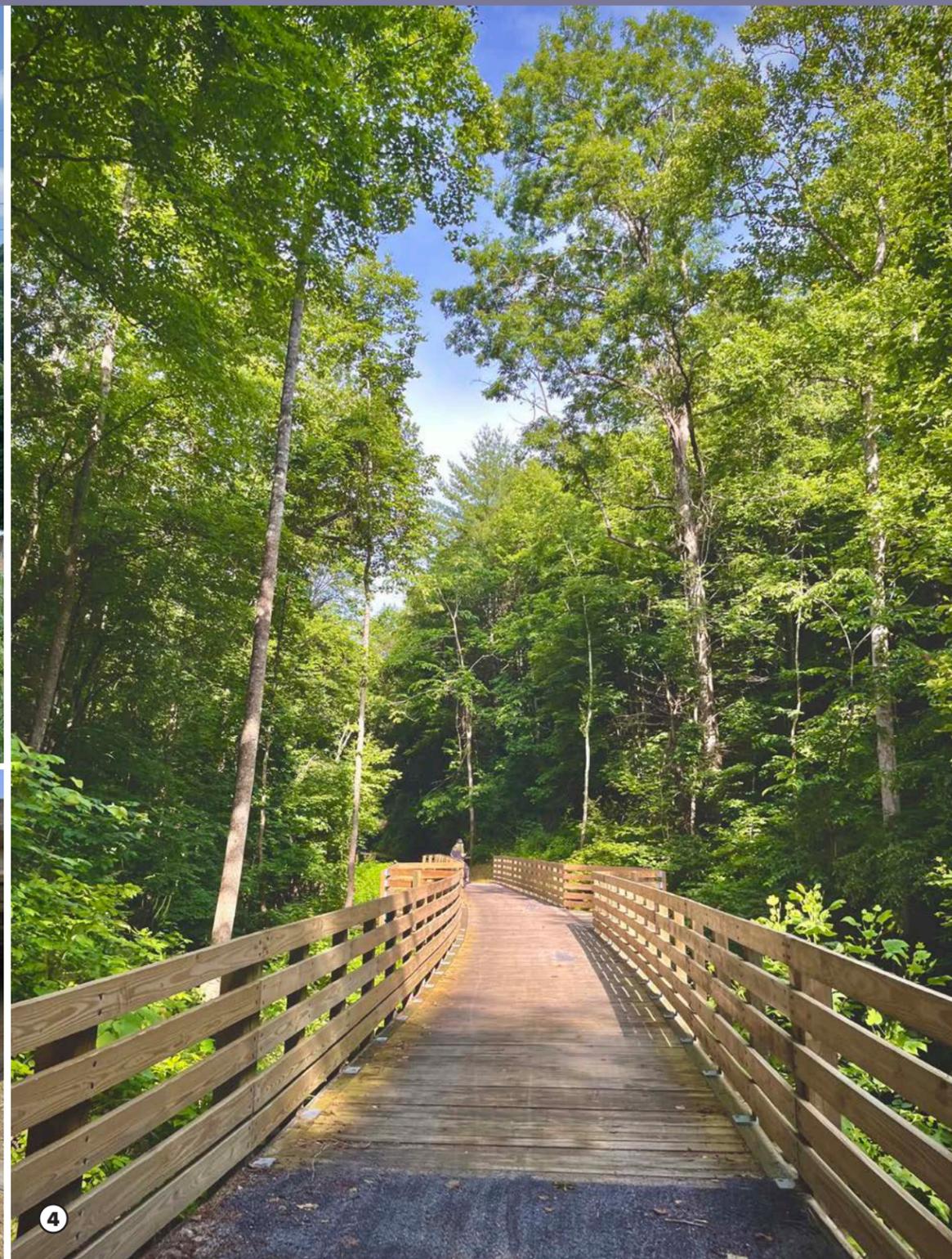
This chapter provides an overview of existing conditions including photos from field work along the corridor and a series of study area maps focusing on environmental conditions, transportation data, and study area destinations.



Field tour of the study area in Spring 2025



1



4



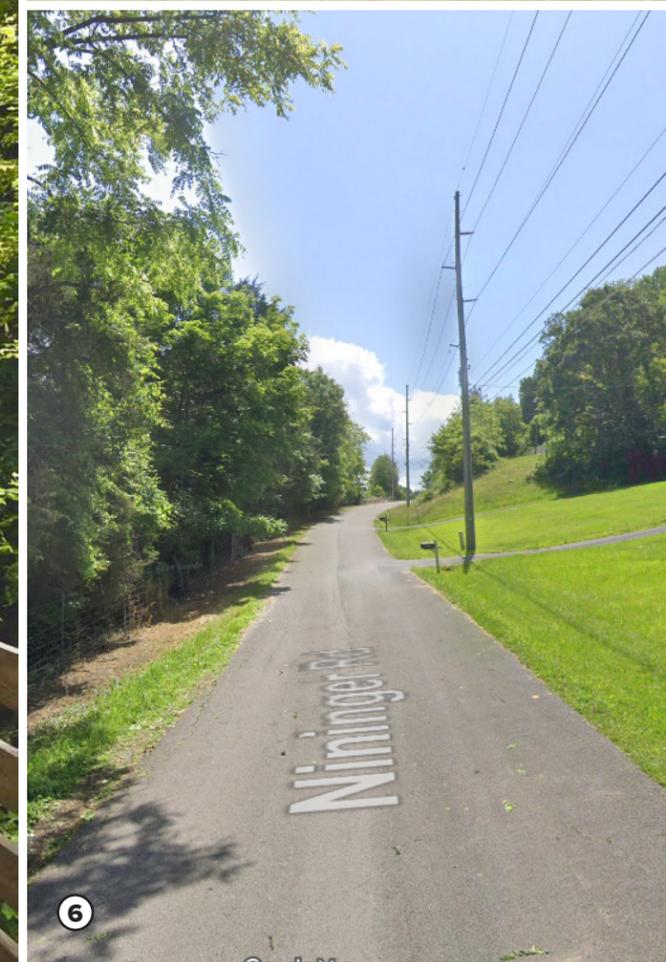
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2



3



6

# Fieldwork Photo Inventory

- 1 Trailhead at the current southern terminus of the Mendota Trail near I-81.
- 2 G&G Country Store on Arrowhead Ln could connect to the rail-trail.
- 3 Underpass at Jayde Ln would be a constraint for trail development on that corridor, but does have shoulder space on each side.
- 4 Existing section of the Mendota Trail.
- 5 Old railroad bed as seen from Pittstown Rd.
- 6 Ninninger Rd looking south



7



8



9



11



10



12

- 7 Along Little Creek corridor, west of Associated Asphalt, looking north
- 8 Pittstown Rd, looking north
- 9 Elkton Ln, looking north
- 10 Little Creek, near Food City, looking south
- 11 Susong Creek, near Gene Malcolm Stadium, looking south
- 12 View from Crescent Dr, looking south

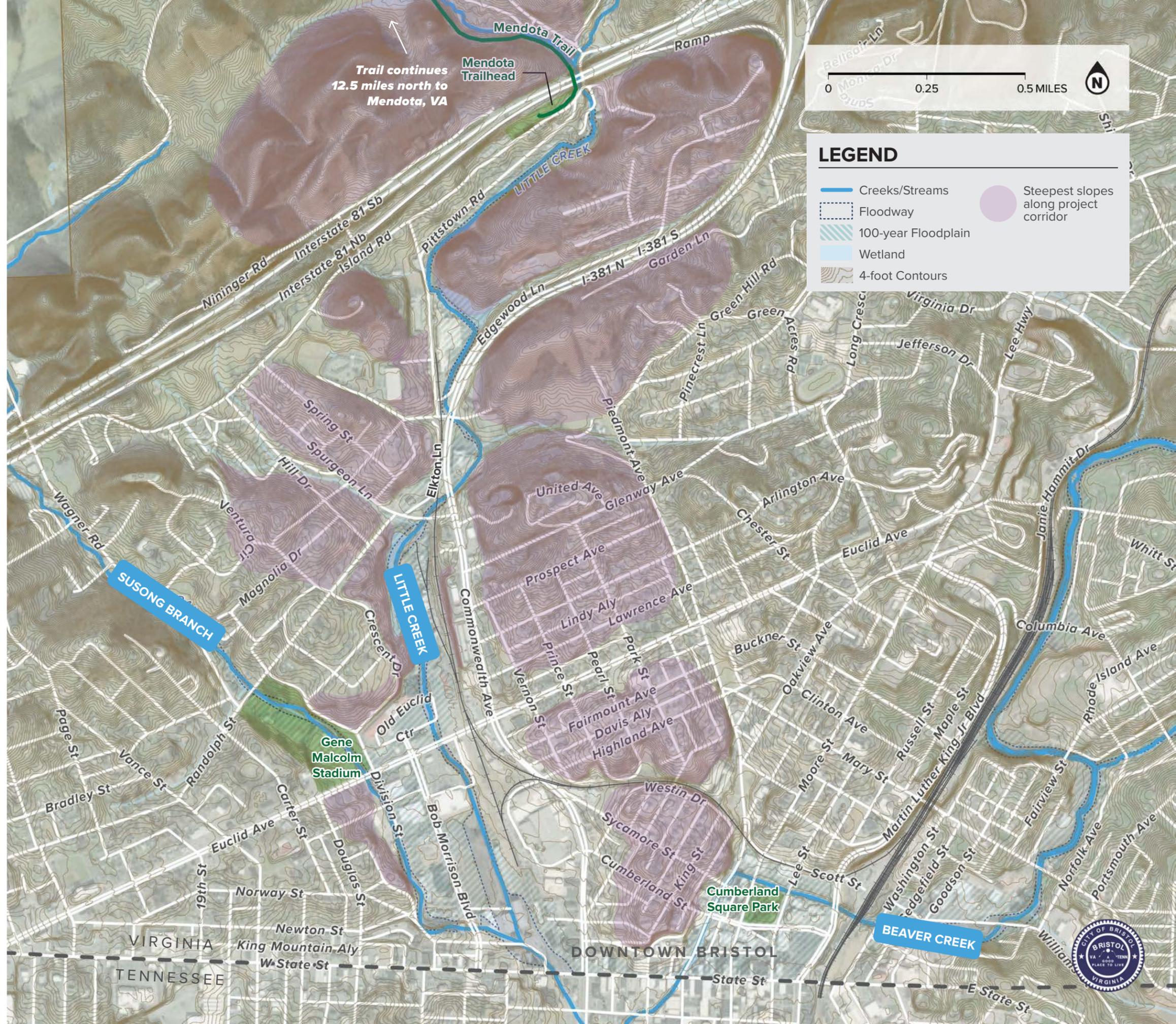
MAP 1:

# Environmental Conditions

The key environmental considerations influencing routing at this scale, in this study area, include topography and hydrology.

**Topography:** Slope (or grade) is an important factor in the overall user experience, and gentle grades are generally preferred over steep climbs. Steep slopes also present design challenges, such as requiring switchbacks or rerouting trail alignments that are less direct.

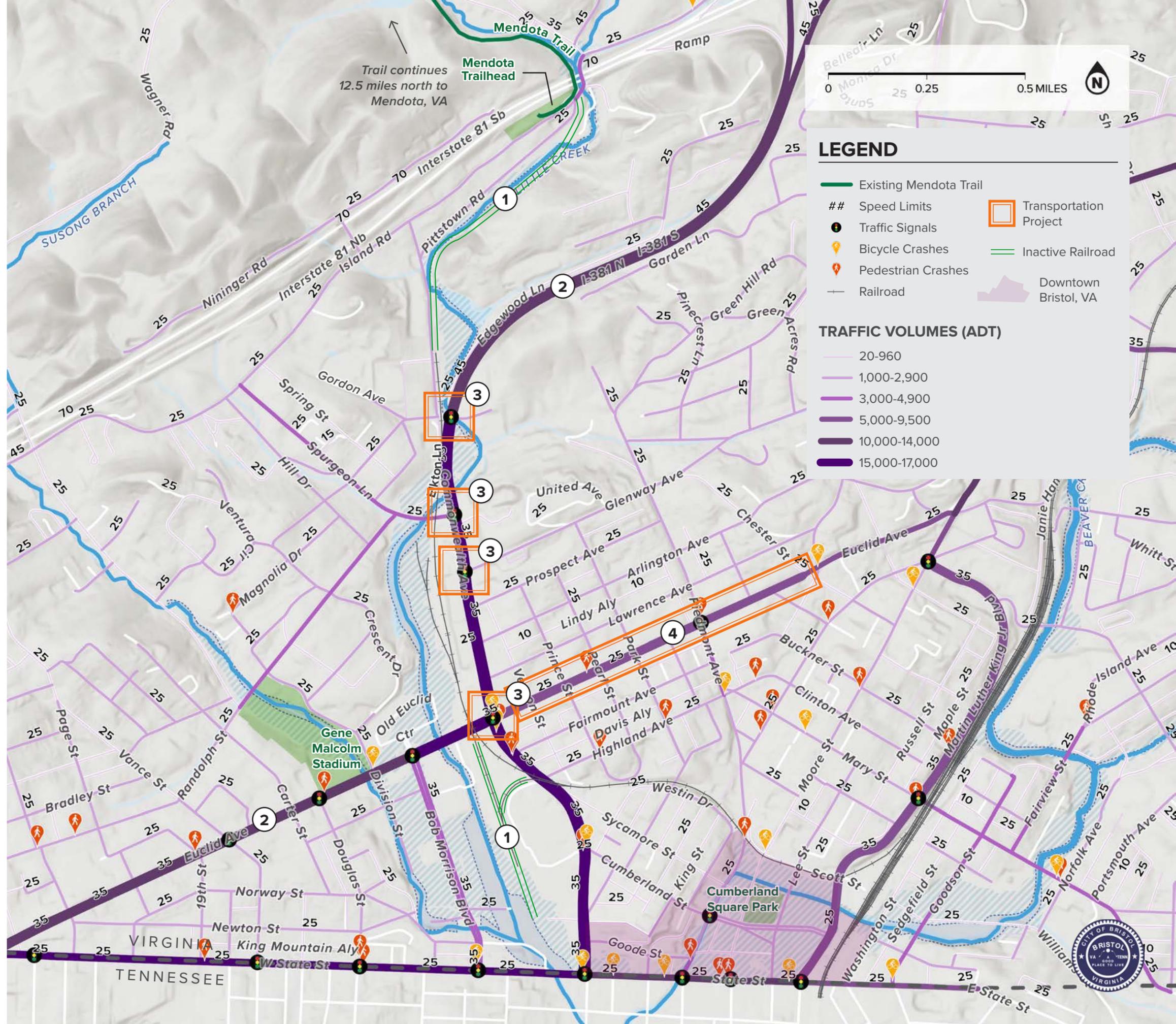
**Hydrology:** Creek corridors, such as Susong Branch and Little Creek are natural paths of least resistance, as they are flatter and often within natural and undeveloped corridors that can often accommodate a trail. However, trail routing and design should also account for wetlands, floodways, floodplains, varying soil types, vegetative buffers, and wildlife habitats that often share these same corridors.



# Transportation Conditions

Key transportation-related opportunities for trail development include unused rail corridors and upcoming streetscape projects that could incorporate improvements for walking and bicycling. Key constraints include high volume roadways that divide the study area; a history of pedestrian crashes and bicycle crashes in the study area; and limited roadway right-of-way for adding new walking and bicycling infrastructure. The numbered conditions below correspond to the map at right:

- 1 Short sections of unused railroad may offer opportunities for future trail development.
- 2 High volume roadways divide the study area, including: Commonwealth Ave (running north-south); Euclid Ave (southwest-northeast); and State St (east-west along the southern edge of the study area)
- 3 VDOT has several programmed intersection improvements along Commonwealth Ave (as part of UPC #122928, Local HSIP Systemic Signal Design project); these include crosswalks along Commonwealth Ave, as well as improved crossing across Commonwealth at signalized intersections (Keys St, Spurgeon Ln, Glenway Ave, and Euclid Ave).
- 4 As part of a separate City project, this section of Euclid Ave is slated for removal and replacement of damaged sidewalk and diseased street trees. Loss of street trees negatively impacts conditions for people walking and bicycling. However, new, healthy trees will be added back, and in the process, there may be an opportunity to improve conditions for walking and bicycling along this corridor.



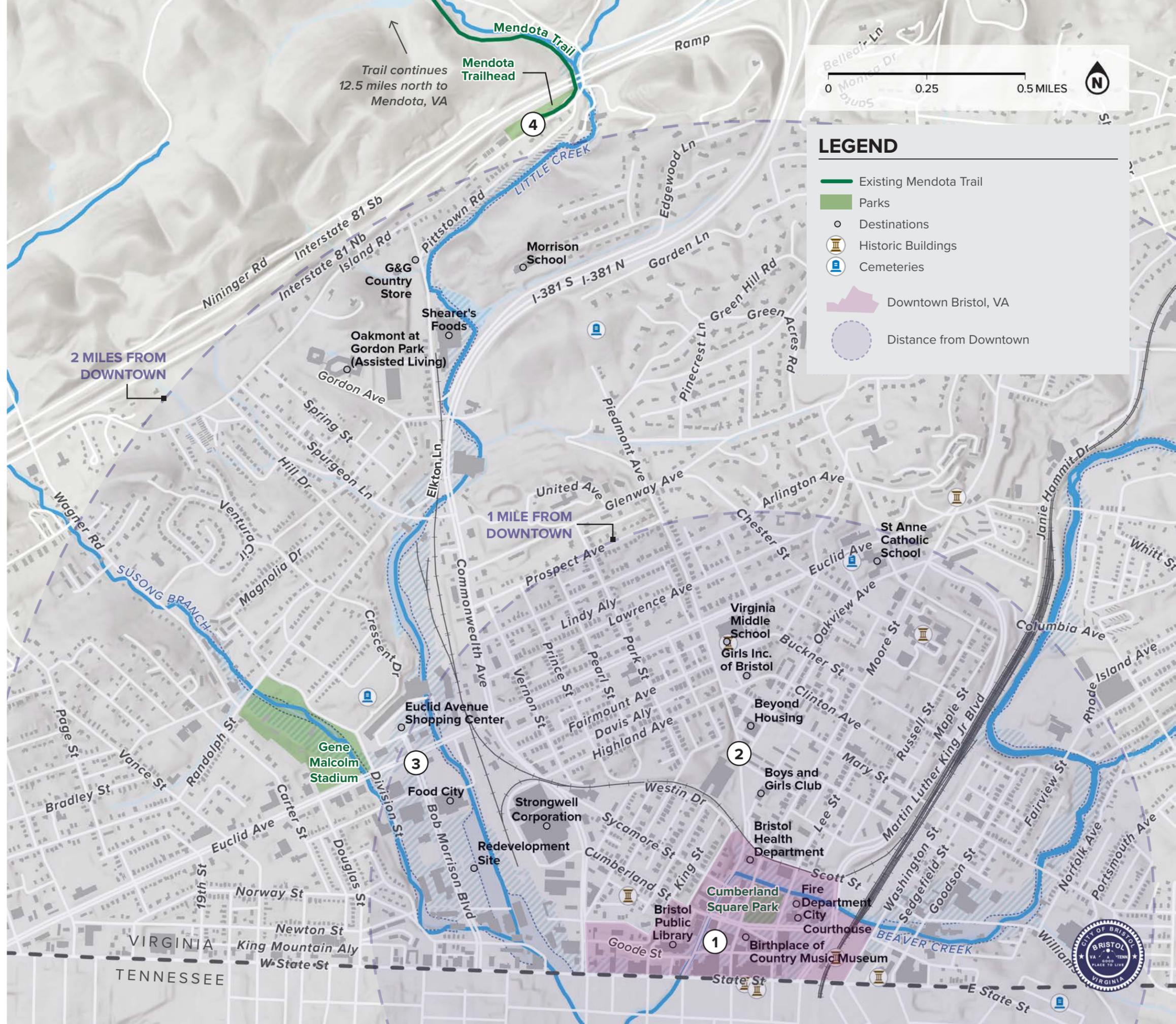
MAP 3:

# Destinations

Cumberland Square Park, the southern end point of the proposed trail connector, is centrally located near many downtown Bristol destinations. Generally, destinations in the study area are clustered around several key areas:

- 1 **Downtown Bristol** is the heart of the city and home to government services, museums, the library, retail, and restaurants.
- 2 **Piedmont Ave** has several social services and community organizations, including Bristol Health Department, Beyond Housing, and the Boys and Girls Club, plus Bristol Middle School.
- 3 **Euclid Shopping Center** has everyday destinations including groceries, retail, and workplaces. It also borders Gene Malcolm Stadium and a site along Bob Morrison Blvd that will be redeveloped.
- 4 **Bristol's Mendota Trailhead** has several local businesses nearby, including the G&G Country Store, which could gain business from trail users.

One factor in selecting a trail route is the opportunity for connections to additional local destinations, such as parks, grocery stores, schools, government services, retail/dining, and employment hubs. Connecting to where people want to go will help the trail become a part of everyday life in Bristol.





# Concept Alternatives

This chapter outlines and summarizes the main alternatives for trail routing along with the opportunities and constraints found along the routes. These concept alternatives evolved during the planning process, based on feedback collected during the kickoff meeting, initial landowner and stakeholder meetings, and the public workshop.





MAP 5:

# Opportunities and Constraints: Northern Section

# Opportunities # Constraints

- 1 Redesign of this intersection would be needed for trail users' safety.
- 2 Connection to Mendota Trailhead.
- 3 An inactive rail line owned by Norfolk Southern has not been used for many years, and is part of the original Mendota Rail Line.
- 4 Transition from inactive to active rail; the trail would need to leave the rail line.
- 5 A very steep hillside would require gradual ramping up within the VDOT right-of-way; VDOT would need to approve of use.
- 6 Two options for the use of road ROW were explored; A3: The shoulder of Nininger Rd as a sidepath; and A2: Use of VDOT interstate ROW along the interstate sound wall; VDOT indicated this option would not be feasible due to drainage along the sound wall.
- 7 A3 would require passing under I-81 on Jayde Ln. There are currently no pedestrian/bike facilities in the underpass, but there is shoulder space. VDOT indicates this is likely not feasible for a sidepath.
- 8 B1 sidepaths would require cut/fill, retaining walls, working around stormwater drainage, switchbacks, and VDOT permission to move fencing.
- 9 Switchbacks/ramps would be needed to navigate steeper slopes in these areas.
- 10 ROW/Road redesign opportunities; B1: Redesign Gordon Ave where it dead ends; the existing roadway is very wide, providing room for a sidepath; C2: Key St could be redesigned with a sidewalk and Elkton Ln could be redesigned with a sidepath.
- 11 Parts of Elkton Ln are narrow and have little shade; Spurgeon Ln intersection would need to be redesigned for safety.



# Opportunities and Constraints: Southern Section

# Opportunities # Constraints

- 10 Trail could be just above the floodway and parallel or be within a sewer easement; these conditions restrict development options (other than a trail).
- 11 Trail could travel behind the strip mall, where there is a back-alley lane that could be redesigned to include a trail with buffer. There is also an existing small bridge over Little Creek just south of Associated Asphalt.
- 12 Traveling between the car wash and edge of railroad property leaves limited room for a trail; further investigation would be needed to explore visible utilities.
- 13 Pedestrian crossing of Commonwealth Ave is currently challenging and uncomfortable; VDOT has plans for intersection improvements, but they are limited to what is already designed.
- 14 Trail could ascend/descend as a side path on Crescent Dr.
- 15 A route through the parking area was determined infeasible due to lack of landowner support for lanes restriping.
- 16 Division Street can be converted into a one-way street allowing for a sidepath on the west side. Susong Creek offers an opportunity for enhancing the creek with native vegetation.
- 17 Bob Morrison Blvd could have a future traffic light somewhere between Euclid Ave and State St, as part of redevelopment. The future intersection could be designed to accommodate the trail.
- 18 Trail could connect to the Little Creek corridor and a major redevelopment site.

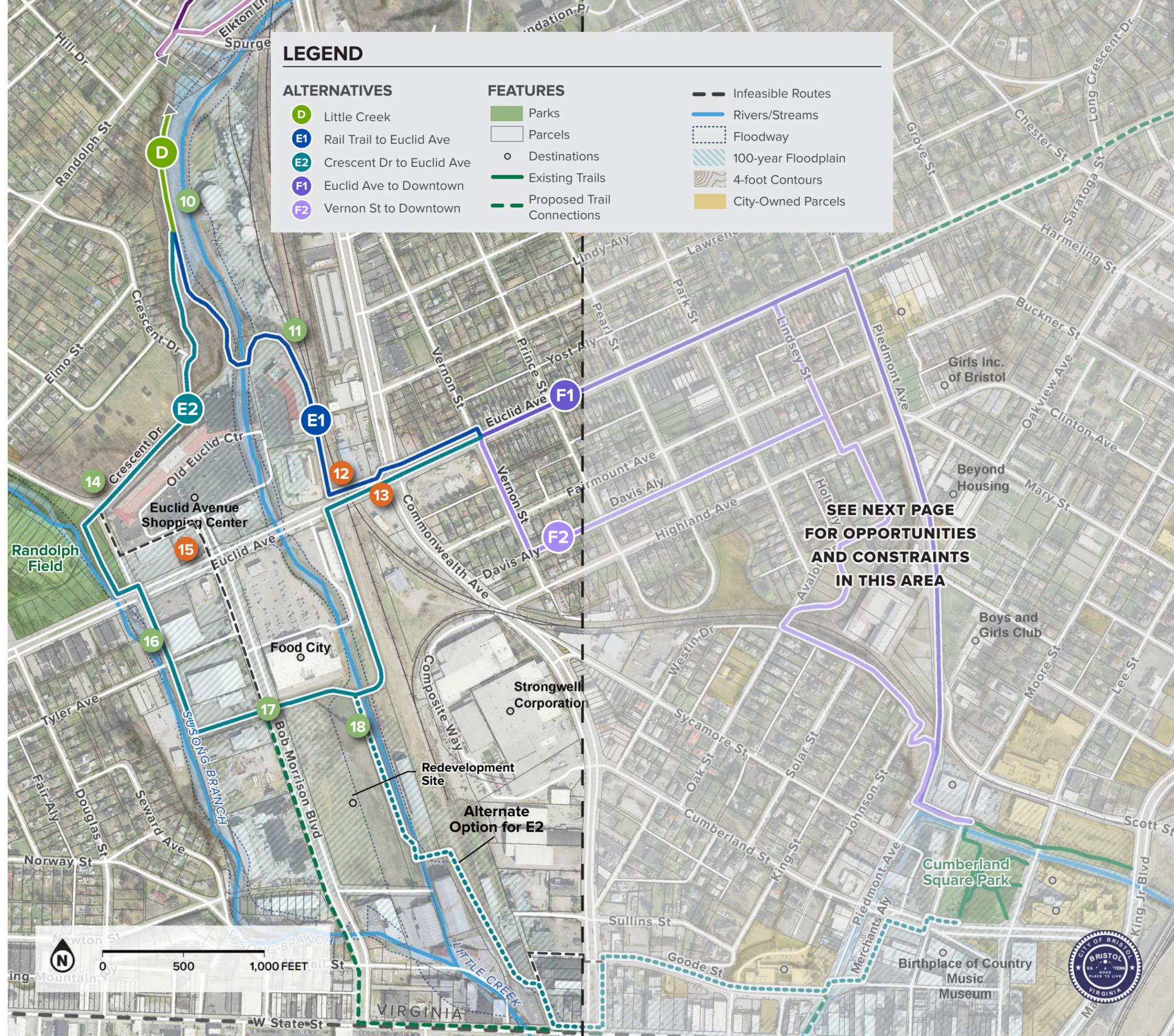
## LEGEND

### ALTERNATIVES

- D Little Creek
- E1 Rail Trail to Euclid Ave
- E2 Crescent Dr to Euclid Ave
- F1 Euclid Ave to Downtown
- F2 Vernon St to Downtown

### FEATURES

- Parks
- Parcels
- Destinations
- Existing Trails
- Proposed Trail Connections
- Infeasible Routes
- Rivers/Streams
- Floodway
- 100-year Floodplain
- 4-foot Contours
- City-Owned Parcels

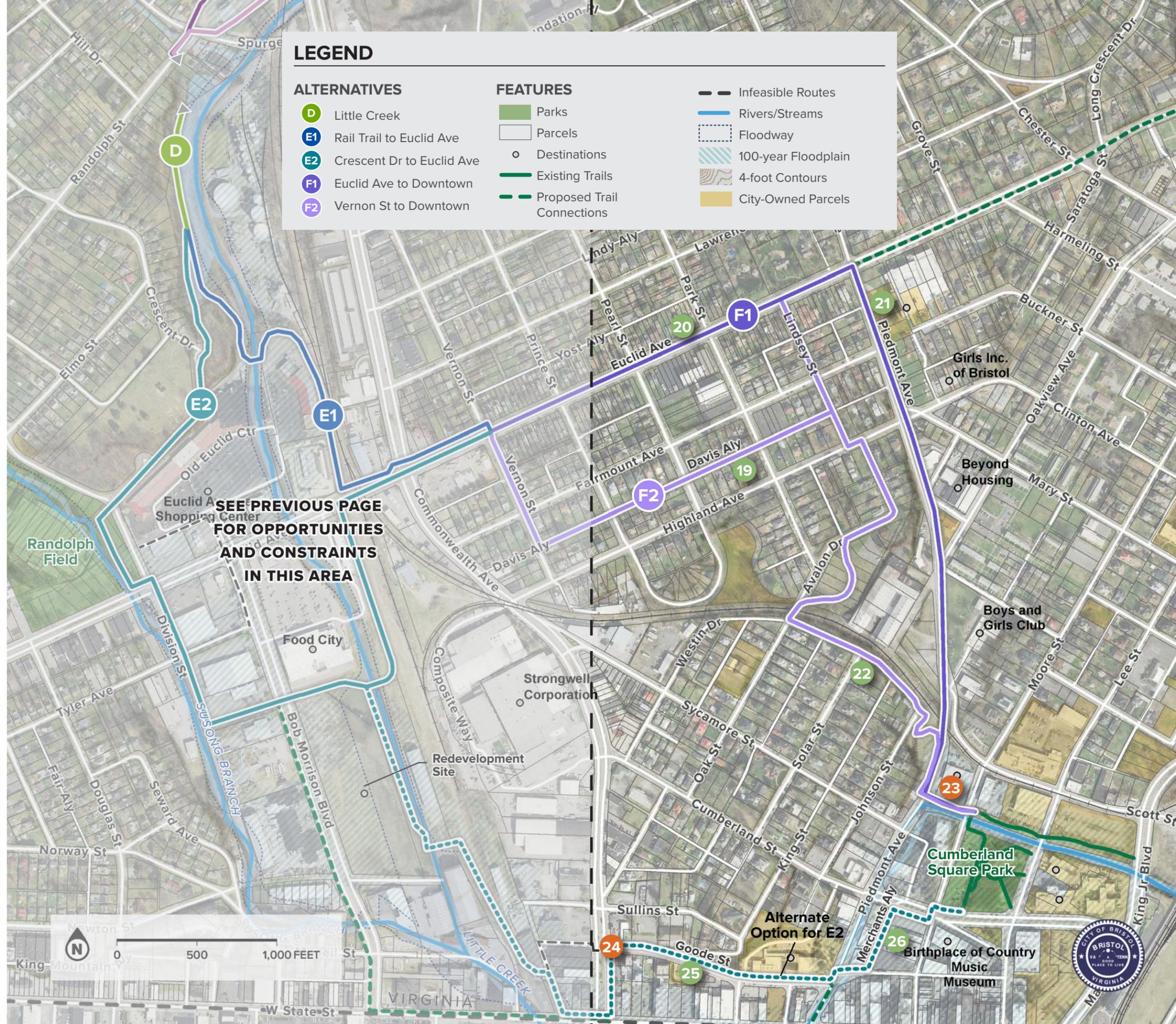


SEE NEXT PAGE FOR OPPORTUNITIES AND CONSTRAINTS IN THIS AREA

# Opportunities and Constraints: Southern Section (continued)

# Opportunities    # Constraints

- 19 Davis Aly could be considered for trail routing, with pavement and landscaping improvements.
- 20 Euclid Ave has a very wide center median that could serve as a long linear park (as part of the Veterans Memorial). Would require working with neighborhood to keep healthy dogwood trees and replace diseased trees.
- 21 Piedmont Ave has potential for a trail via road reconfiguration, or use of adjacent public land to connect a middle school, an underserved community with affordable housing, the Boys and Girls Club, and other destinations; a challenge for this route is the constrained space under the railroad underpass.
- 22 Westin Dr could be converted to one-way to accommodate a trail down and then a switchback down to Piedmont Ave.
- 23 A wall currently blocks access to Cumberland Square Park, but redesigning the Bristol Health Department parking lot and opening of the wall could make this connection possible.
- 24 Crossing Commonwealth Ave at Goode St would require a signalized mid-block crossing, and VDOT indicated it would be too close to the signal at State St.
- 25 Trail would require elimination of parking along one side of Goode St.
- 26 Conversion of Merchants Aly to one-way could accommodate the trail.





# Trail Typologies

## A Variety of Trail Experiences

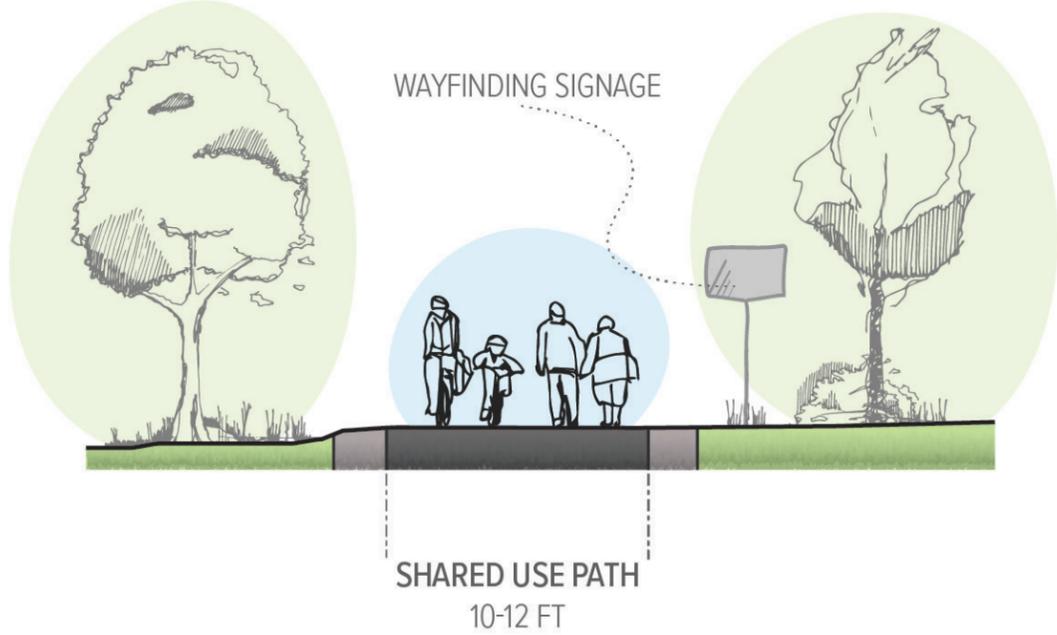
Each proposed trail route alternative has its own unique combinations of trail types and design characteristics, or “typologies”. The trail typologies that would apply to each section of a trail route can be seen on page 21. These typologies vary greatly in many ways, including: their size, level of separation from vehicular traffic, cost, and the overall experience they provide for trail users.

The following graphics provide a more detailed view of what each of these typologies may look like.

## Shared Use Path

A shared use path provides a travel area separate from motorized traffic for bicyclists, pedestrians, skaters, wheelchair users, joggers, and other users. Shared use paths can provide a low-stress experience for a variety of users using the network for transportation or recreation. Shared use paths can be paved or unpaved.

### Typical Cross-Section:



### Examples:



Mendota Trail



Cumberland Square Park, Bristol, VA



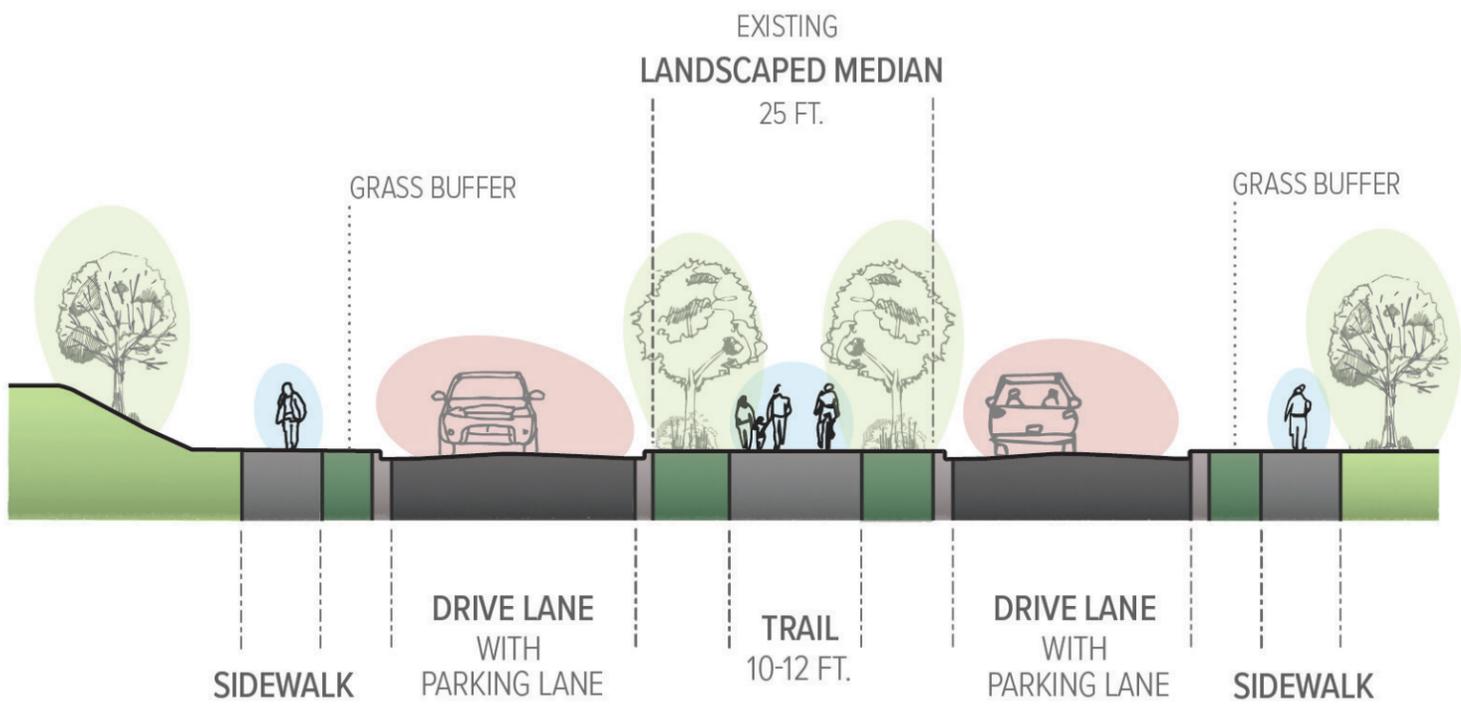
Steele Creek Park, Bristol, TN



### Trail in Landscaped Median

A wide pathway located in a landscaped median, with planted areas separating the trail from one-way vehicular traffic on both sides. This typology is only applicable on Euclid Ave, in the existing median.

#### Typical Cross Section:



#### Example:



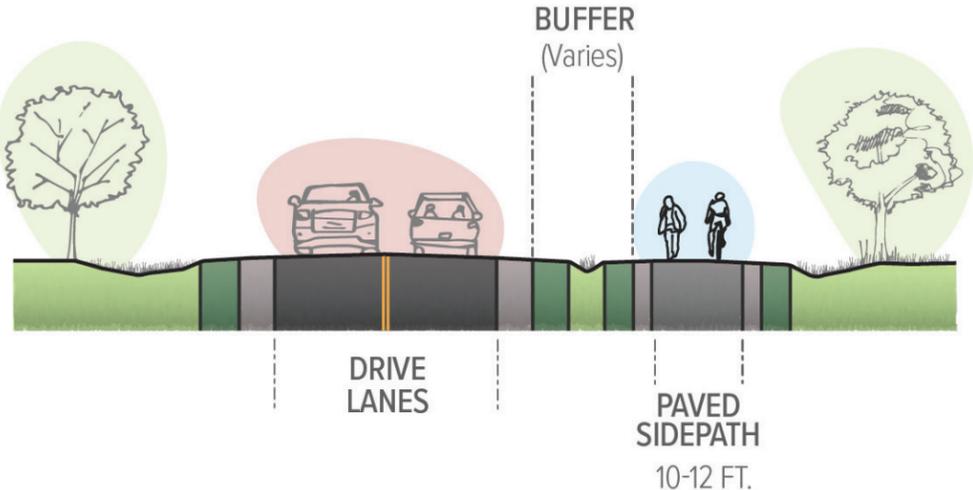
Trail in landscaped median. Memphis, TN.

**Draft Note:**  
Resolution of images to be updated

### Sidepath

A sidepath is a bidirectional shared use path located immediately adjacent and parallel to a roadway. Sidepaths can offer a high-quality experience for users of all ages and abilities as compared to on-roadway facilities in heavy traffic environments, allow for reduced roadway crossing distances, and maintain rural and small town community character. Sidepaths are typically paved.

#### Typical Cross Section:



#### Examples:



Hanging Rock Battlefield Trail. Roanoke, VA.



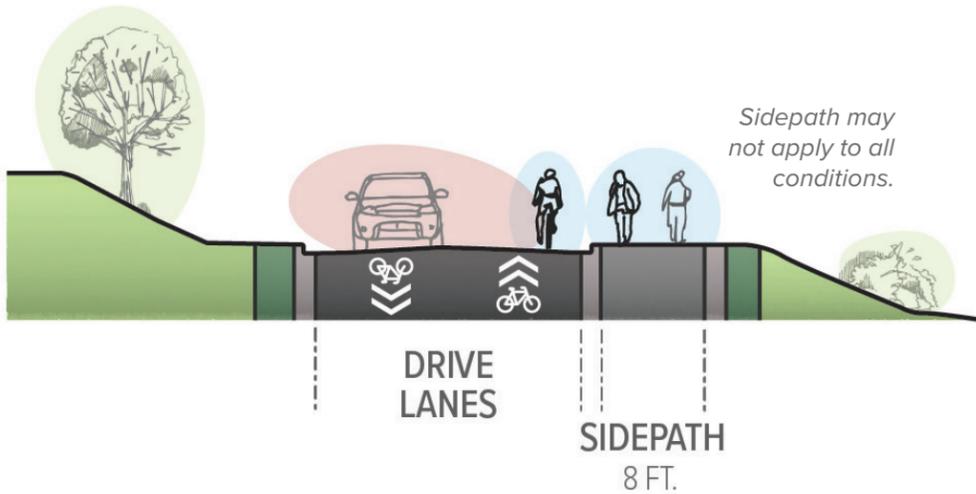
Laurel Creek Trail. Damascus, VA.



### Shared Low-Traffic Road and/or Sidepath

Where shared use paths or sidepaths are not feasible, some routes could be considered along streets that have low motor vehicle traffic volumes and slow speeds. A combination of improvements could be provided in these cases, including sidewalks, high-visibility crosswalks, curb extensions, traffic calming, shared bicycle lane markings, wayfinding features, and other similar features.

#### Typical Cross-Section:



#### Examples:



Neighborhood greenway sign example.



Virginia Creeper Connector Trail. Abingdon, VA.

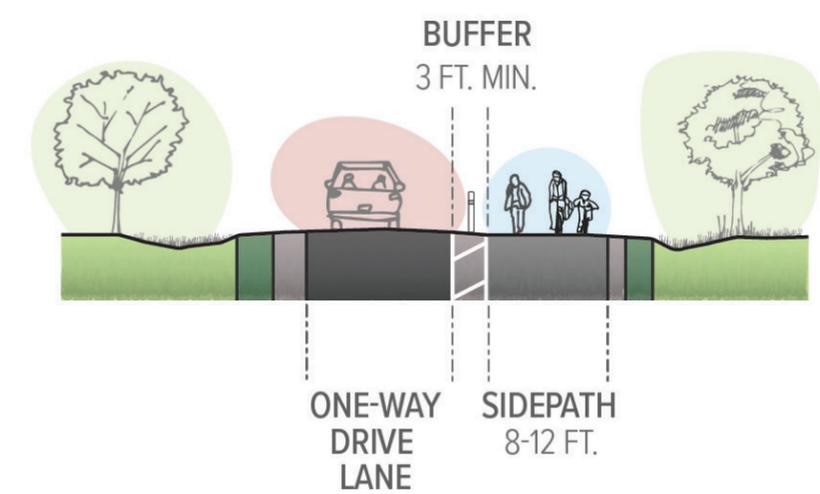


Bike boulevard pavement marking.

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to be updated

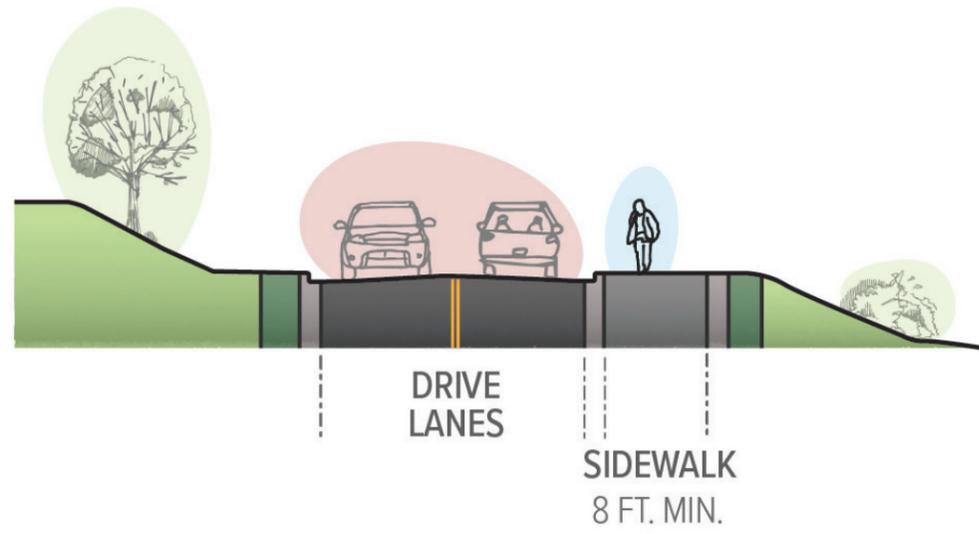
### One-Way Road Conversion with Sidepath

The conversion of an existing vehicular roadway to a one-way road, with a 10-12 ft. wide sidepath alongside it, separated from the road by a landscaped area or other buffer.



### Concrete Sidewalk

A concrete sidewalk at least 8 feet in width provided directly adjacent to the roadway.

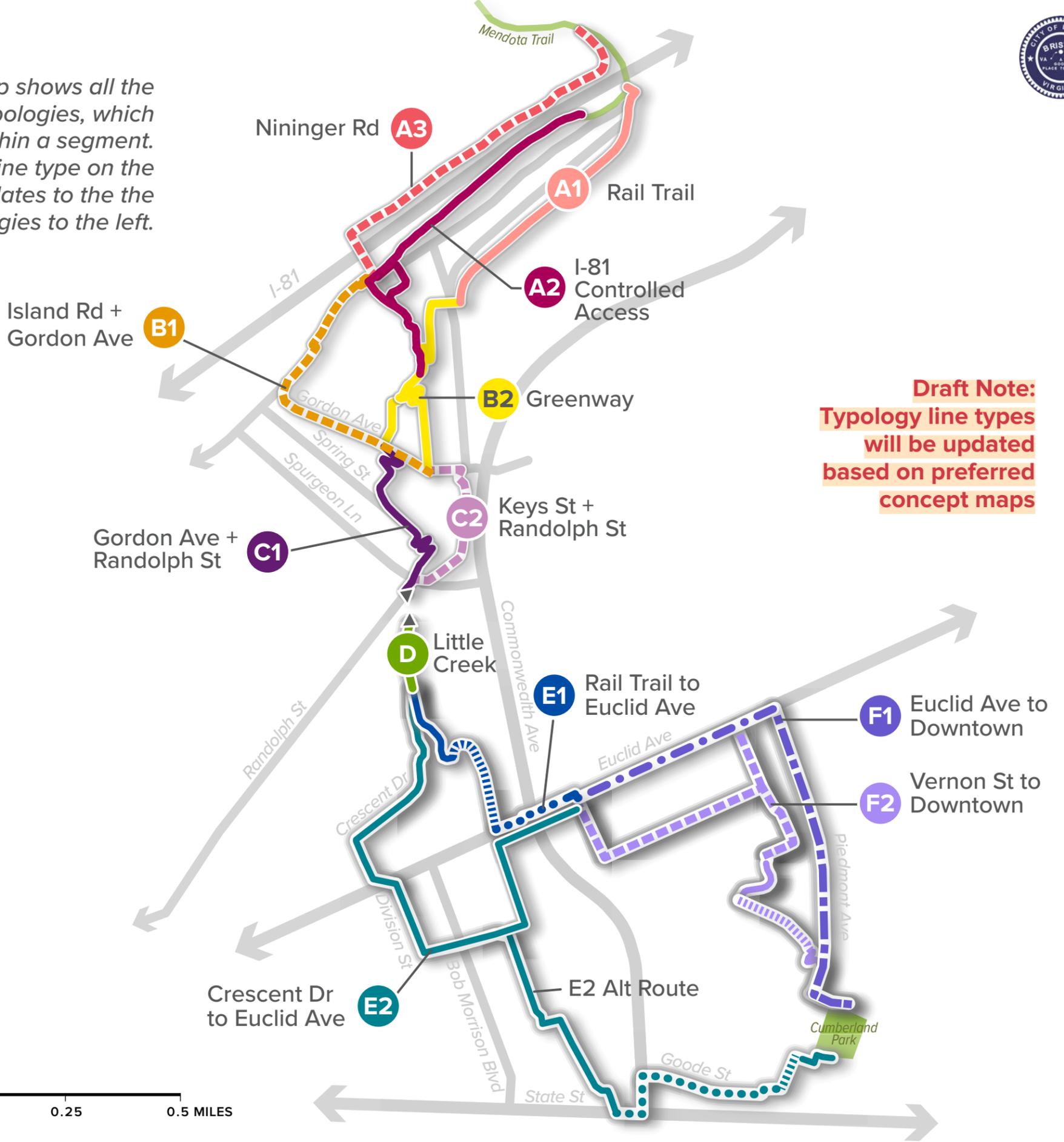




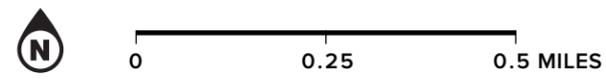
# Trail Typologies Map

This Map shows all the proposed trail typologies, which can vary within a segment. Refer to the line type on the map which correlates to the the trail typologies to the left.

- Shared Use Path (10-12' wide)
- Trail in Landscaped Median
- Sidepath
- Shared Low-Traffic Road and/or Sidepath
- One-Way Road Conversion with Sidepath
- Concrete Sidewalk (8' wide)



**Draft Note:**  
Typology line types will be updated based on preferred concept maps



# Engagement Summary

This chapter provides an overview of the engagement process, including the Kickoff Meeting, promotion of the study, the Public Open House Workshop, and initial outreach to project stakeholders, landowners, and project partners.





# Public and Stakeholder Engagement

## Project Kick Off Meeting

The purpose of this meeting was to review the overall scope of the project and discuss project opportunities, constraints, vision, and goals. Attendees included the project Steering Committee, listed in the Acknowledgments page of this study. This page summarizes the key points from the meeting.

### Study Purpose and Scope

The study purpose was described as follows: To identify multiple potential trail routes, evaluate feasibility, estimate costs for a preferred alignment, and outline actionable steps for implementation. While considered pre-engineering, the study will provide sufficient design detail and cost estimates to support grant applications.

### Opportunities and Constraints in the Study Area

- The northern terminus at the Bristol Trailhead presents challenges at the Pittstown intersection, with potential options including use of highway right-of-way or nearby road corridors.

- An existing railbed along Little Creek offers a potential alignment.
- Spurgeon Lane presents a difficult crossing that may require engineering redesign.
- South of Spurgeon Lane, a wide corridor along Little Creek could support a viable trail route.
- Multiple routing options exist near Euclid Avenue, including connections toward industrial areas, downtown, Park Street/Weston Drive, or Piedmont Avenue.
- A safe crossing of Commonwealth Avenue is required, with several possible locations and improvement strategies.

### Route Considerations and Connectivity

- Routing on the north side of the interstate may not significantly limit trail use.
- Piedmont Avenue offers strong scenic value and potential eligibility for transportation funding.
- Connections to the Lee Highway Shared Use Path are desirable.
- Eastern routes provide greater overall connectivity, with interest in adding a southern spur via Bob Morrison Road.

- There is sufficient right-of-way on the east side of Piedmont for bike facilities.
- If Crescent Dr is used, safety improvements such as lighting would be necessary.
- Western routes offer stronger connections to dining and recreation destinations.
- Wooded greenway environments are generally perceived as more comfortable than urban segments.

### Vision, Goals, and Community Considerations

- The trail is envisioned as a signature outdoor recreation asset that supports healthy lifestyles and reinforces the community's identity.

- Visibility and sense of place are important, with an emphasis on a linear park experience rather than a purely transportation facility.
- Community buy-in, particularly from nearby neighborhoods and businesses, is critical to success.
- Safety—both real and perceived—is a top priority, especially at busy crossings and during peak traffic times.
- The trail should support reinvestment, economic growth, and long-term sustainability in urban areas.
- Coordination with ongoing multimodal, recreation, and small area planning efforts is encouraged to maximize connections and regional alignment.



Spring 2025 Project Kick Off Meeting



# Project Announcements

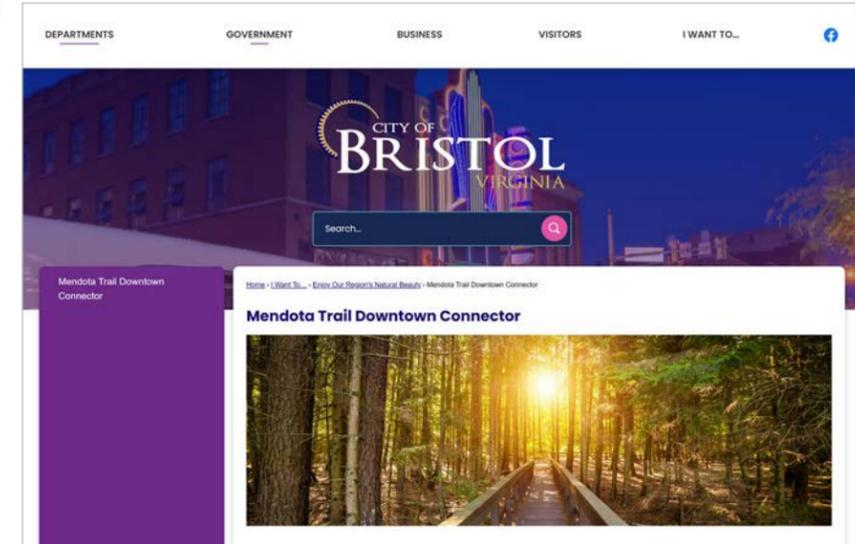
The project was announced and promoted on television, in newspapers, and online through social media and on the City of Bristol's website.



Project announcements on WCYB News 5.



Project Summary at Open House Workshop



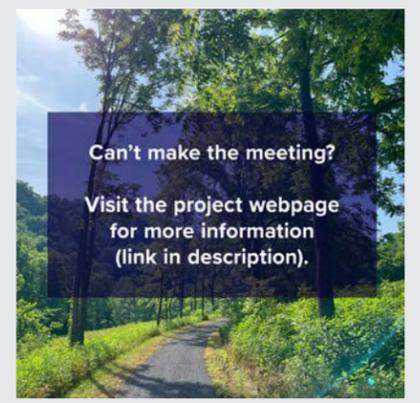
Project website homepage



Project announcements on WJHL.



## Project Social Media Posts





# Public Open House

A public open house workshop was held on October 15, 2025, welcoming the community to provide input on their preferred trail routes through Bristol, their preferred trail types, and more. Project information was presented and feedback was gathered from approximately 40 attendees through a variety of methods, including interactive posters, mapping exercises, comment forms, and open communication opportunities with members of the project team.

Overall, support for the project was strong, with the majority of participants expressing excitement for the potential benefits the trail connection could bring to the Bristol community.



A project team member and open house attendee discuss potential trail routes.



Attendees and project team members discuss trail route options with mapping exercises.

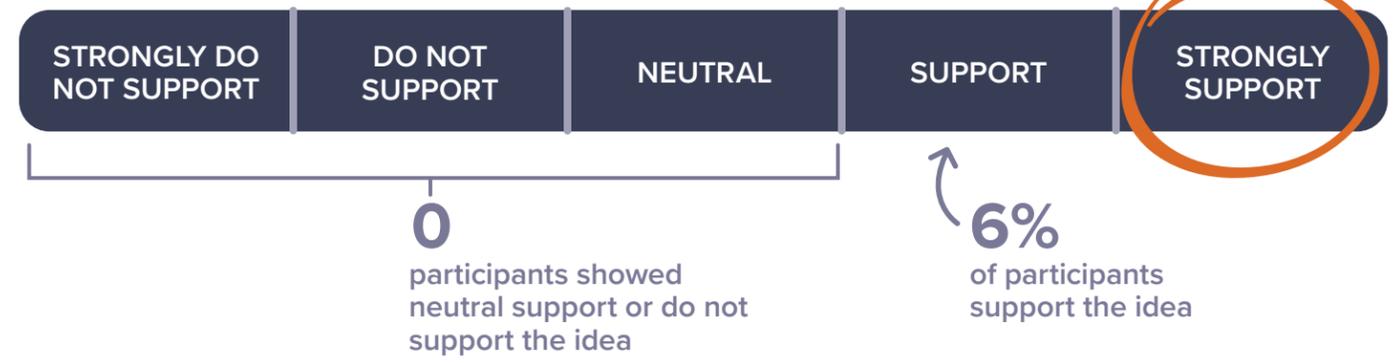
## Level of Support

We Asked: Do you support the idea of creating a trail connection from the Mendota Trail Trailhead to Cumberland Square Park in downtown Bristol?



**94%**

of participants **STRONGLY SUPPORT** the idea!



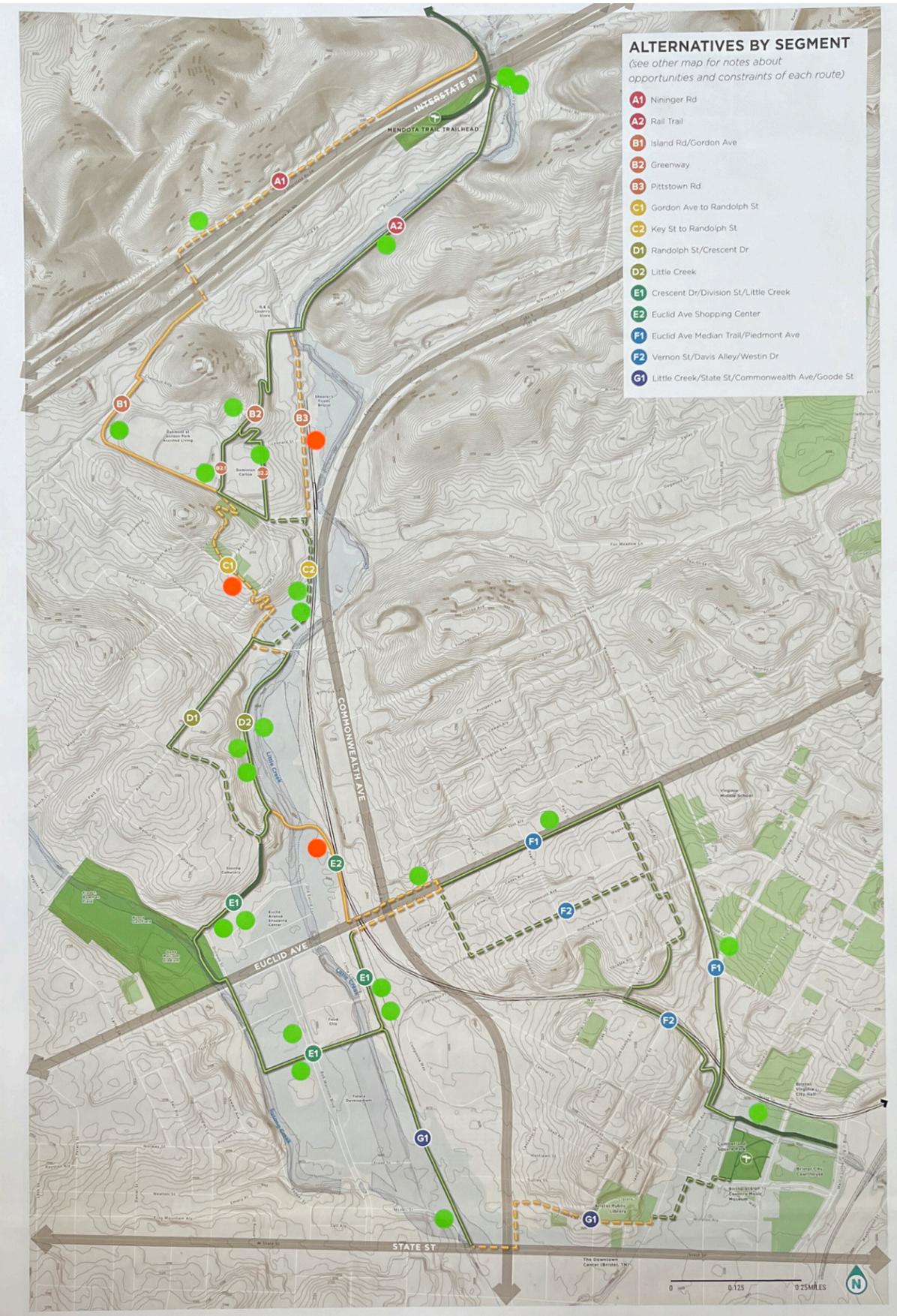
*The trail will bring more outdoor opportunities for citizens, plus encourage tourism and downtown utilization.*

*Yes! We need to connect the trail with downtown and other amenities to help make Bristol a destination.*

*Our town has so much to offer and easier connections to the trail would only improve upon existing draws.*

*A trail encourages a community to get outside and get healthier!*

Quotes selected from comment forms.



# Public Open House: Alternatives Feedback

Open house participants provided feedback on their preferred trail route alternatives, using green dots for preferred and red dots for not preferred (see input map at left). They also provided written comments about the route alternatives (examples provided below).

- A1: Too steep at entrance to trail and has BVU lines; Rail trail seems most appropriate
- A1: Don't prefer unless we could revisit moving to south side of I-81
- A1: Don't support A1 due to high traffic on I-81 and frequent accidents
- A1: Nininger route is longer but may be safer
- A2: Preferred - away from traffic
- B2: Greenway allows Oakmont residents access
- B3: Too congested
- B3: Don't support - narrow routes, high traffic; B3 is dangerous
- C1: Don't support - small streets, steep grade
- C2: Better grade
- D1: Link w/ public property, private businesses, creek
- D2: BVU power station access
- E1: Bring to ballfields
- E1: Preferred - away from traffic
- E2: Concerned about safety crossing Euclid; I like using the "future development" area; Link with rec facility, small businesses, food, and parking
- F1: Euclid median needs improved access for kids and lower income residents; F1 is longer; F2 more terrain
- F2: Prefer F2, off traffic/congestion
- F2: Quieter, less traffic and more scenic
- F1: Watch out for dogwoods
- F1: Not sure what to think about the Euclid route, might be cool but not sure if it would ruin the character of the historic street/neighborhood
- G1: Connect to TN amenities!

## Public Open House: Trail Types

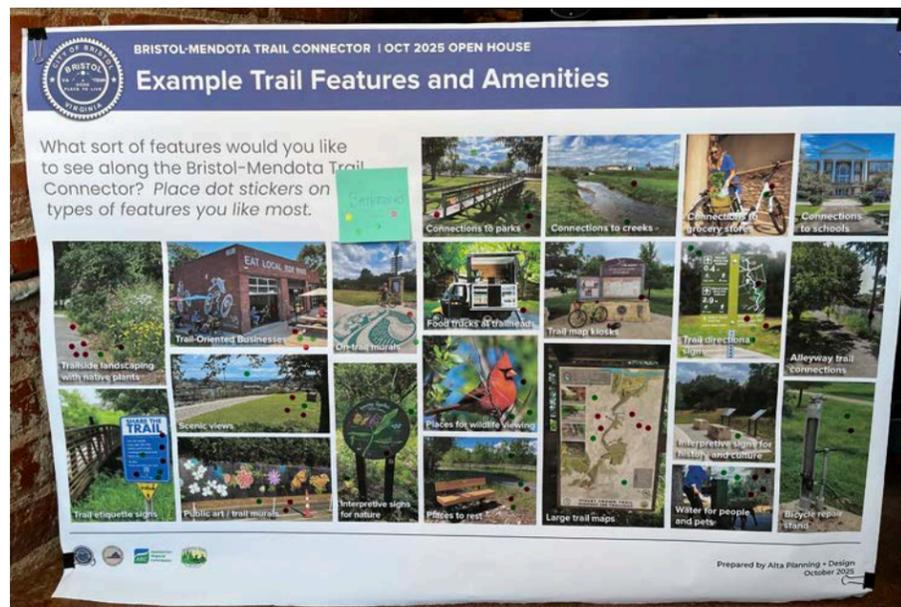
Attendees were asked to express their level of support for 3 trail types: Shared Use Paths, Sidepaths, and On-Street Routes.

- 
  - **Shared Use Paths** were fully supported by 100% of participants in this exercise.
- 
  - **Sidepaths** were supported by most participants, with comments suggesting that wide barriers with natural elements be required to separate the paths from vehicular traffic.
- 
  - **On-Street Routes** received primarily “neutral” support, with many participants expressing an understanding that this trail type may be necessary in some locations, but should be used sparingly.

## Public Open House: Trail Features and Amenities

Attendees were asked to show us their most desired trail features and amenities. The following amenities received the most support:

- Signage (trail etiquette signs, trail maps, and directional signage)
- Connections to parks
- Landscaping with native plants
- Places to sit and rest
- Water stations for people and pets



## Initial Stakeholder, Landowner and Project Partner Outreach (ongoing)

Landowner and project partner outreach is a continuing and iterative process. The following groups were considered as a starting point and were contacted during this study.

- **The Conservation Fund** (for coordination with the owners of several railroad corridors in the study area)
- **VDOT & MPO** (for discussion of key roadway corridors and intersections in the study area)
- **Bristol Virginia Utilities (BVU)** (for discussion of key corridors with BVU utilities and field tour of the Little Creek corridor near Associated Asphalt)
- **Associated Asphalt** (for discussion and field tour of the Little Creek corridor just west of the Associated Asphalt site)
- **K-VA-T Food Stores** (initial outreach only to communicate bigger picture of project)
- **Mendota Trail Conservancy Volunteers** (informal input and interviews to learn about the process of the creating the existing sections of trail, and insights for the potential connector trail)

Continued coordination with these and other groups, including individual landowners where necessary, should be considered as ongoing after this study is complete. **See the Action Steps in the Implementation chapter for more information.**



From top: Field tour with staff from multiple city departments and the Mendota Trail Conservancy; field tour with Bristol Public Works; landowner corridor tour with Associated Asphalt and BVU.

# 5 Preferred Concept

This chapter provides guiding principles for trail development, an overview of the proposed trail corridor, recommended trail phasing, and a closer look at each phase of the proposed corridor.





# Guiding Principles for the Proposed Trail

The following principles reflect project goals and input from the committee, public, and City staff.

They also align with best practices for trail development in general, and can help guide decisions.



Trails should be **SAFE**

This trail should be physically safe and perceived as safe by users. Safe means minimal conflicts with vehicular traffic, and use of clear pavement markings and directional signage. Safe also means education about trail safety and etiquette, as well as crime prevention through environmental design.



Trails should be **ECONOMICALLY VIABLE**

Trail investments should create significant economic benefits, elevating community pride and prosperity. Trails should also provide alternatives to more expensive modes of transportation and offer opportunities for savings in personal costs of transportation. Where possible, improvements in the right-of-way should stimulate, reinforce, and connect with adjacent private improvements.



Trails should be **EASY TO NAVIGATE**

A comprehensive wayfinding system helps users navigate the trail and plan their trips, and may include directional signage, kiosks, brochures/paper maps, and online components such as a website or app. As an extension of the Mendota Trail, the Bristol-Mendota Trail Connector could use wayfinding and branding consistent with the existing trail.



Trails should be **FOR PEOPLE OF ALL AGES AND ABILITIES**

Cyclists, pedestrians, and persons with disabilities have a range of skill levels and mobility needs. The trail surface should be smooth, level, avoid steep slopes where possible, and be wide enough to accommodate users traveling at different speeds.



Trails should **ENHANCE COMMUNITY LIVABILITY**

The trail network should be compatible with the nature, history, and character of the environment. Context and scale should be given thoughtful consideration. Good design should integrate with and support the development of complementary land uses and should encourage preservation and construction of art, landscaping, and other items that add value to communities.



Trails should **HAVE A HIGH STANDARD OF DESIGN**

Trail designers and builders should reference national guidelines for trail facility design and locally established best practices, with the overall goal of consistency. In all cases, sound engineering judgment should be used specific to the trail segments being designed and constructed.



Trails should **CONNECT PEOPLE TO PLACES THEY WANT TO GO**

Where possible, this trail corridor should also provide connections to destinations such as parks, grocery stores, natural areas, schools, and downtown areas. The trail should also provide equitable access to neighborhoods, and should eventually include spur routes with sidewalks and bicycle lanes to connect to the trail.



Trails should be **BUILT WITH LONGEVITY AND MAINTENANCE IN MIND**

Trail funding opportunities are often limited to construction rather than maintenance purposes. Trail design and construction decisions should be made with this in mind, favoring more durable materials and lower-maintenance options when possible.

# The Proposed Trail

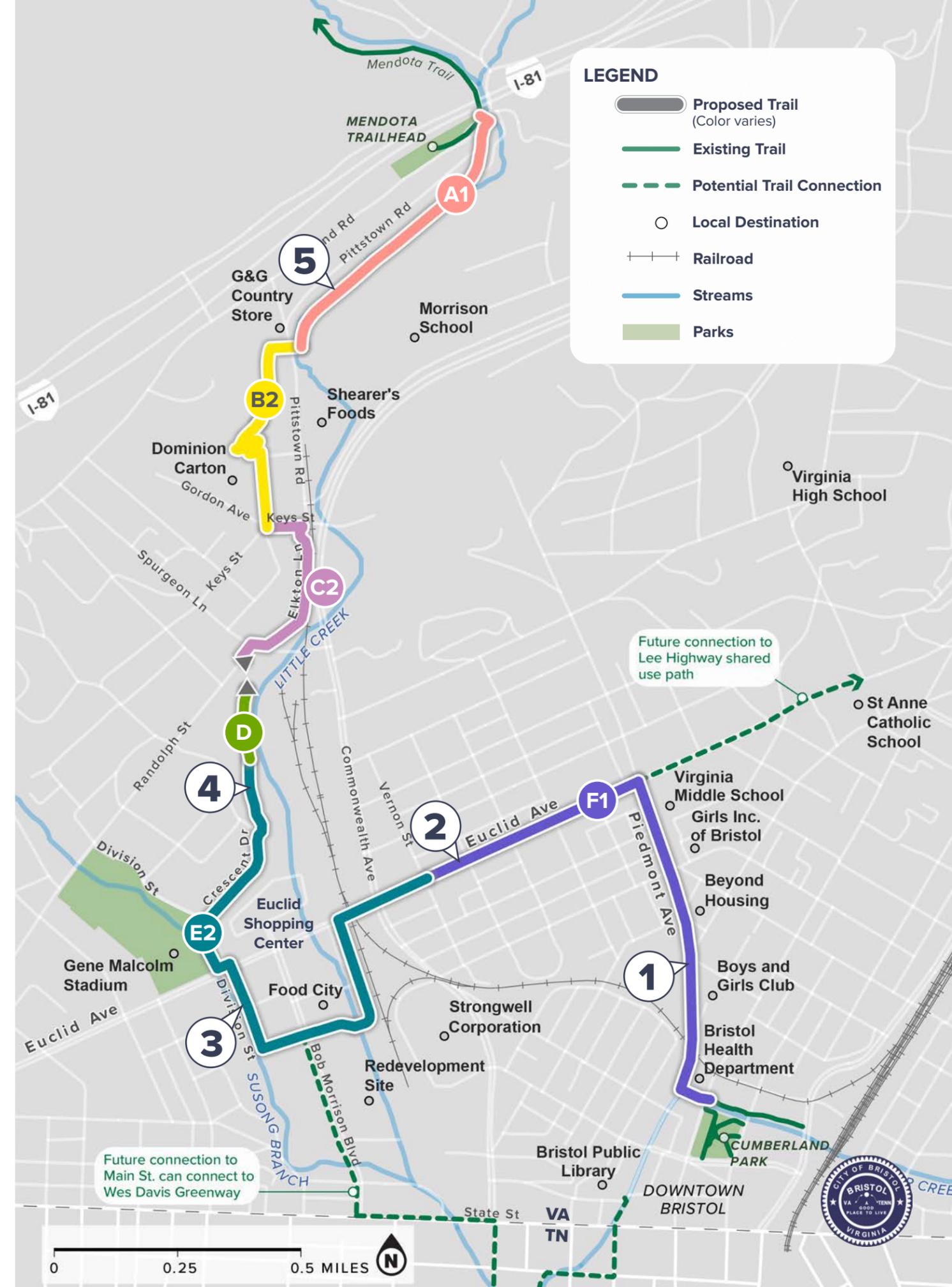
## Overview

The planned 3.5 mile trail connects Downtown Bristol (VA & TN) to the Mendota Trail. Below are snapshots of how the trail could look and feel on different sections. The map to the right indicates the preferred alternatives based on:

- Past plans (pp. 5-6)
- Field tours (pp. 7-9)
- Topography and hydrology (p. 10)
- Safety, for roadway crossings and separation from traffic (p. 11)
- Destinations connected (p. 12)
- Initial feedback from the public, stakeholders and project partners (pp. 22-27)



1. Example sidepath with buffer separating trail from roadway.
2. Rendering of Euclid Ave trail in center median, trail could serve as a linear park, enhancing the median as a Veterans memorial.
3. Rendering of Division St with a one-way conversion and enhancement of Susong Creek
4. The trail along Little Creek (existing photo).
5. Example of a trail with privacy fence to support respect of landowners and mitigate trespass.



# Trail Phasing

## Phase 1A

### Piedmont Ave.

**Description:** Travels north along Piedmont Ave. from Cumberland Park in Downtown Bristol to the intersection of Euclid Ave.

**Typology:** The majority is sidepath with 600-feet of bike lanes and sidewalks on the south end.

**Length:** 0.6 miles

**Estimated Cost:** \$3.48 million\*

**Key Connections:** Downtown Bristol, Cumberland Park, Bristol Health Department, Boys and Girls Club, Beyond Housing, Girls Inc., Virginia Middle School, and Euclid Ave.

## Phase 1B

### Euclid Ave. Veteran's Trail

**Description:** The trail travels through Euclid Ave's median, enhancing the corridor as a linear park and veterans memorial.

**Typology:** Trail in landscaped median

**Length:** 0.5 miles

**Estimated Cost:** \$3.58 million\*

**Key Connections:** Virginia Middle School, Commercial areas west of Commonwealth Ave (shopping, grocery, etc.).

## Phase 2

### Commerce to Creekside

**Description:** The trail travels from Euclid Ave., through the future redevelopment site, crossing Bob Morrison Blvd., along Division St. and Susong Branch, to Crescent Dr. and then along Little Creek, ending at Keys St.

**Typology:** A combination of shared use path, sidepath, and a one-way road conversion with sidepath (Division St.).

**Length:** 1.4 miles

**Estimated Cost:** \$4.17 million\*

**Key Connections:** Food City, Euclid Shopping Center, Gene Malcolm Stadium and ball fields, Little Creek, Susong Branch, and a possible redevelopment site.

## Phase 3

### Keys St. to Mendota Trailhead

**Description:** Travels north from Keys St, moving into some terrain that will require switchbacks, and then back down to G&G Country Store where it connects into an inactive rail line along Little Creek.

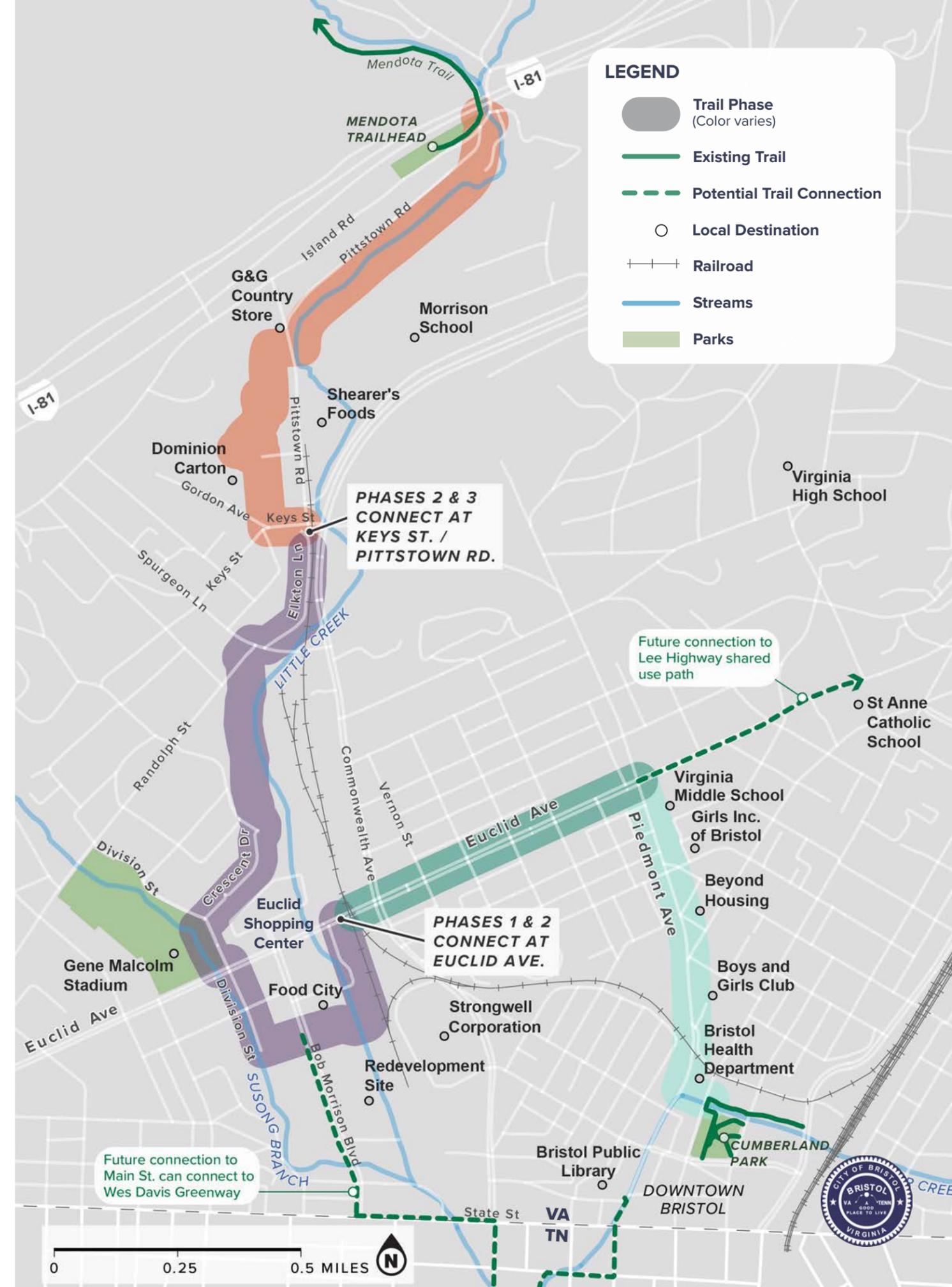
**Typology:** Shared low traffic road, sidewalk, and shared use path

**Length:** 1 mile

**Estimated Cost:** \$5.42 million\*

**Key Connections:** Little Creek, employers like Dominion Carton and Shearer's Foods, G&G Country Store, the Mendota Trailhead, and the 12.5 mile Mendota Trail.

\* Estimates are not based on an engineering design, and are for planning purposes only. They include a 30% contingency, multi-year inflation factors, design and permitting, VDOT oversight, and construction engineering inspection. See Appendix B for details.





# Phase 1A: Piedmont Ave.

**Description:** Travels north along Piedmont Ave. from Cumberland Park in Downtown Bristol to the intersection of Euclid Ave.

**Length:** 0.6 miles

**Key Connections:** Downtown Bristol, Cumberland Park, Bristol Health Department, Boys and Girls Club, Beyond Housing, Girls Inc., Virginia Middle School, and Euclid Ave.

**Potential Safety Improvements:** Crosswalk to connect dead-end sidewalk at Scott St. and Piedmont Ave.; Curb ramp and crosswalk striping improvements throughout corridor; narrowing excessive asphalt width where practical to reduce speeds and better balance the needs of all users.

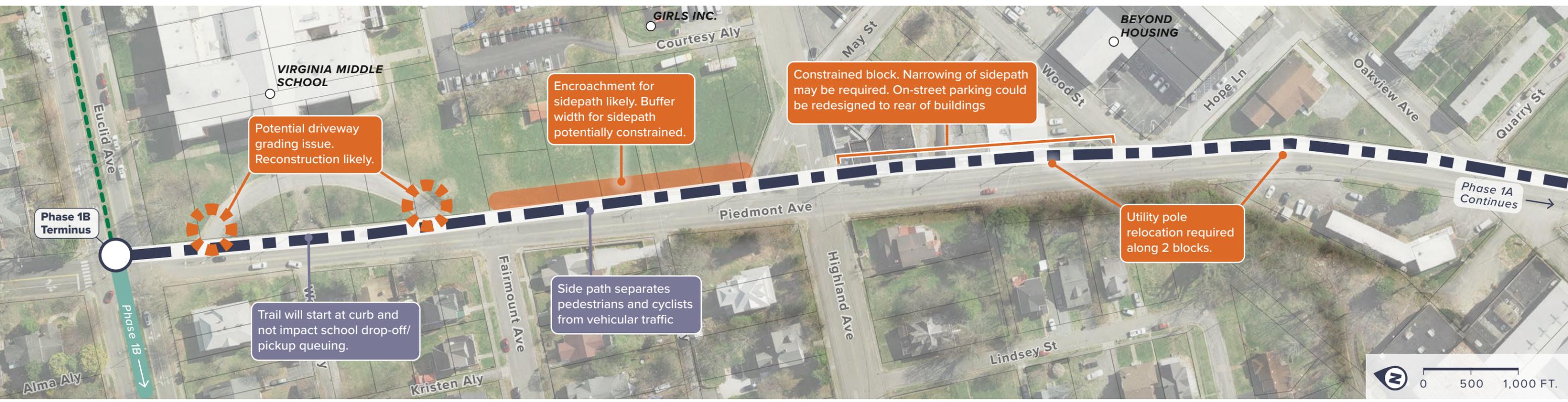
**Economic Development Opportunity:** Potential to revitalize businesses along Piedmont through higher visibility and foot traffic.

**Potential Partners:** Portions of the trail are out of the road right of way, including Virginia Middle School. Work with the school and adjacent property owners during design process to mitigate impacts to parking or use of property. VDOT's Safe Routes to School Program could be a partner related to both programming and infrastructure.

**Potential Funding Sources:**

- VDOT's Transportation Alternatives Program (TAP), some funds may be available for grant assistance.
- VDOT's Smart Scale Program (would need to be prioritized under the SMART SCALE program)
- Transportation Partnership Opportunity Fund (package with other phases)
- Appalachian Regional Commission (ARC) Arise Grant (package with other phases)
- Virginia Tobacco Region Revitalization Commission
- Recreation Trails Program (if used as a match)

**Acquisition Needs:** Work with Virginia Middle School, otherwise remaining trail is within public road right of way.

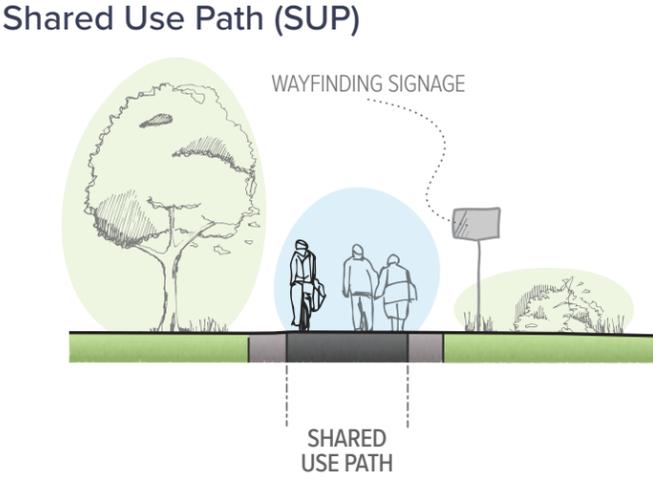
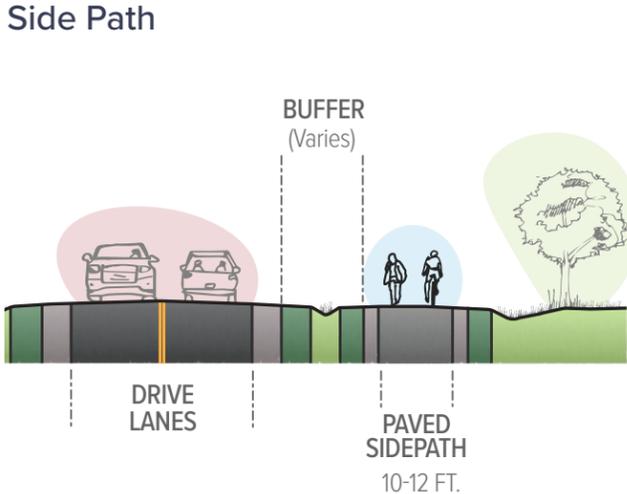




**Design Details**

A 10 ft. wide side path will make up the majority of the route, with an extension of an existing shared use path connecting the trail to Cumberland Park.

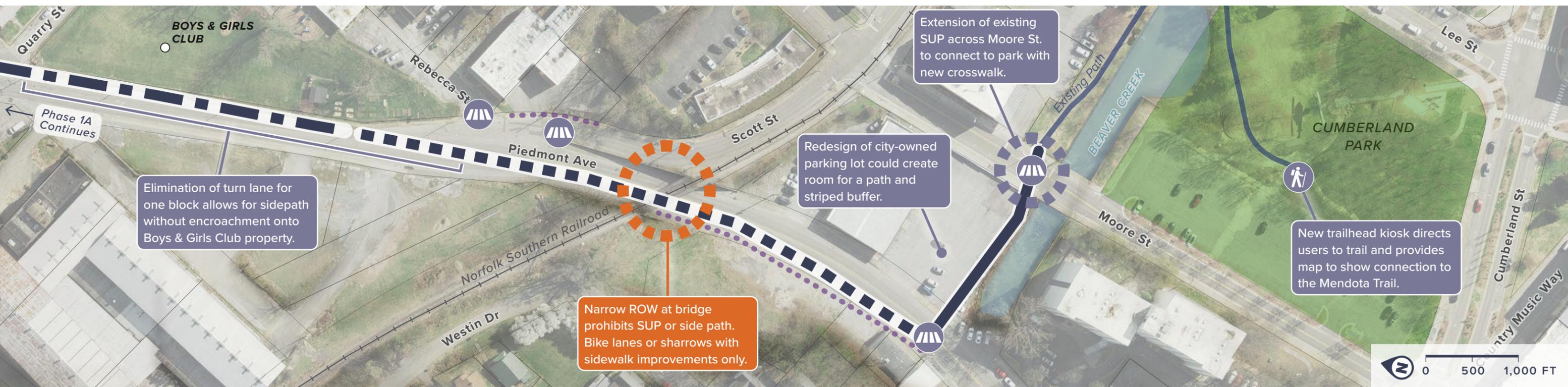
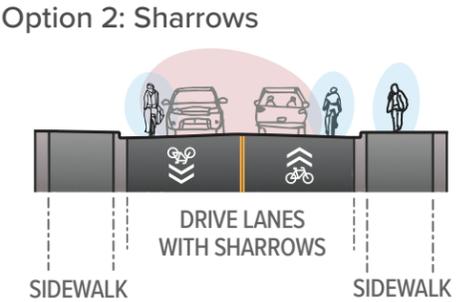
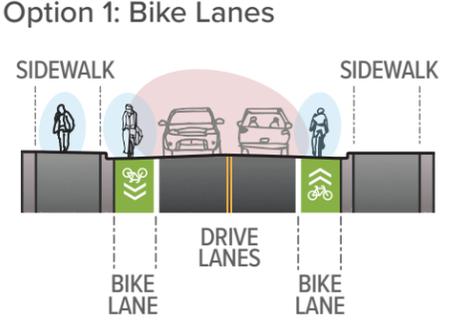
One constrained segment of the route (near the railroad bridge) will be limited to sharrows or bike lanes only. Along this segment sidewalk improvements are also proposed.



**Piedmont Ave. Bridge: Constrained Conditions**



The existing railroad bridge on Piedmont Ave. creates a constrained ROW, allowing for either bike lanes or sharrows.





# Phase 1B: Euclid Ave. Veteran's Trail

**Description:** The trail travels through Euclid Ave.'s median, enhancing the corridor as a linear park and veterans memorial.

**Length:** 0.5 miles

**Key Connections:** Gap connection to downtown Bristol, Virginia Middle School, residential neighborhoods, and a commercial hub, including Food City and the Euclid Shopping Center.

**Potential Safety Improvements:** Improved lighting; median SUP likely to reduce vehicle speeds; new ramps and improved pedestrian accommodations at Commonwealth Ave. and Euclid Ave. intersection; improved pedestrian crossing at railroad.

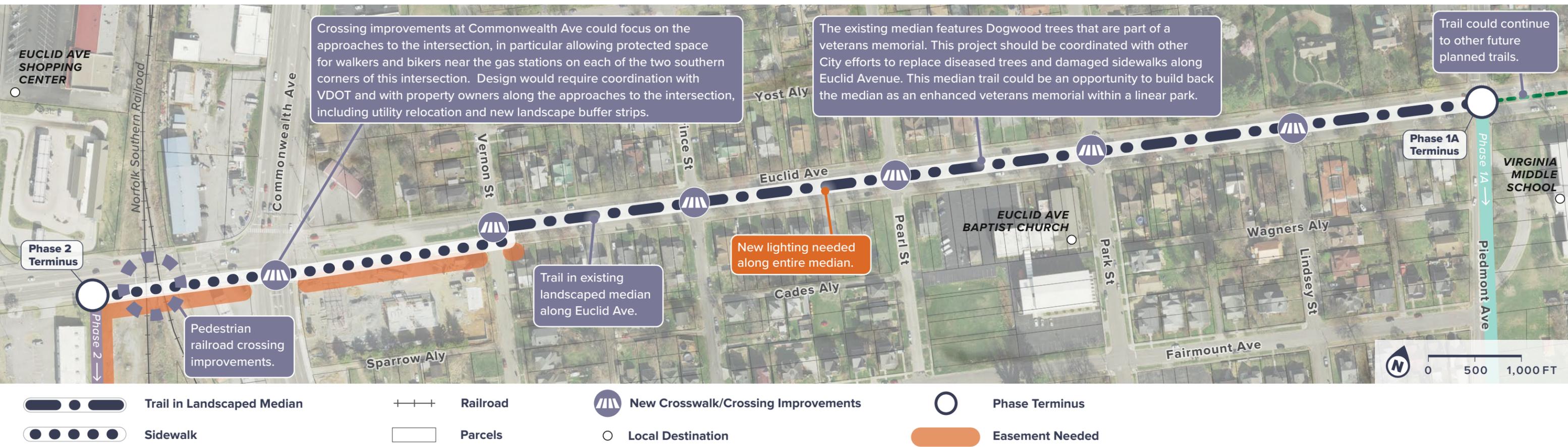
**Economic Development Opportunity:** Important gap connections to downtown and commercial services, including the Euclid Shopping Center, Food City, etc. Segment also has opportunity to be an attraction if designed to be a linear park, with landscaping and placemaking.

**Potential Partners:** Surrounding neighborhoods — if a linear park is desired, working with local volunteers to help maintain. VDOT's Safe Routes to School Program could be a supporter in helping activate ridership to school and support development of the trail.

**Potential Funding Sources:**

- VDOT's Transportation Alternatives Program (TAP), some funds may be available for grant assistance for this program.
- VDOT's Smart Scale Program (would need to be prioritized under the SMART SCALE program)
- Transportation Partnership Opportunity Fund (package with other phases)
- Appalachian Regional Commission (ARC) Arise Grant (package with other phases)
- Virginia Tobacco Region Revitalization Commission
- Recreation Trails Program (if used as a match)

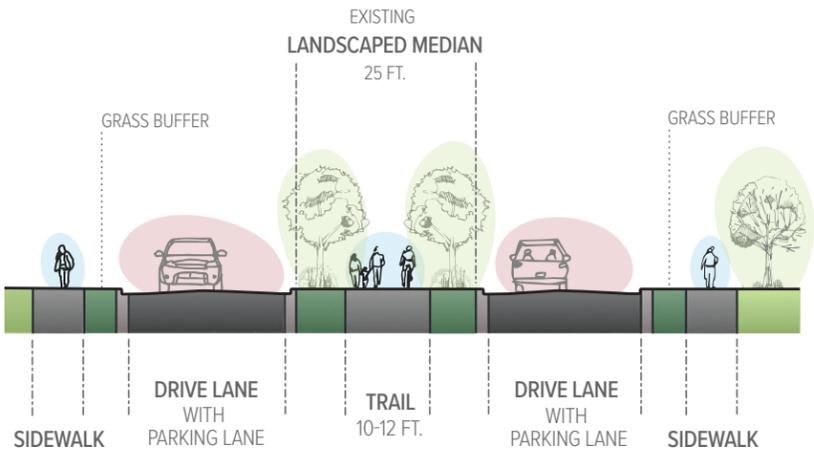
**Acquisition Needs:** Easements likely needed where shown on the map, including easement or purchase of Norfolk Southern property on western end.



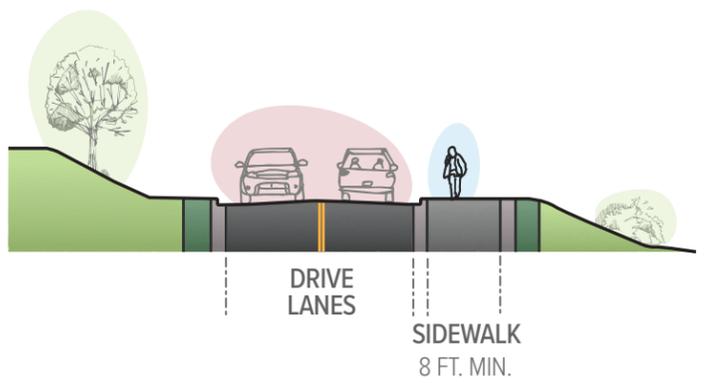
### Design Details

The majority of the trail in Phase 1B will be in the median of Euclid Ave., but enhanced with landscaping and lighting to give a feeling of a linear park. The trail will exit the median at Vernon St., and transition to a 10' wide concrete sidewalk.

### Trail in Landscaped Median



### Concrete Sidewalk (8-10' wide)



Artistic rendering of trail in existing landscaped median along Euclid Ave. © Alta

# Phase 2: Commerce to Creekside

**Description:** The trail travels south from Euclid Ave., through a possible redevelopment site, crossing Bob Morrison Blvd., along Division St., to Crescent Dr. and then along Little Creek, ending at Keys St.

**Length:** 1.4 miles

**Key Connections:** Food City, Euclid Shopping Center, Gene Malcolm Stadium, ball fields, Little Creek, and possible redevelopment site.

**Potential Safety Improvements:** Enhanced crossings with proper ADA ramps; extensive off-road trail segment which will keep non-motorized users separate from motorized users; placemaking along Division St. to encourage reduced vehicle speeds.

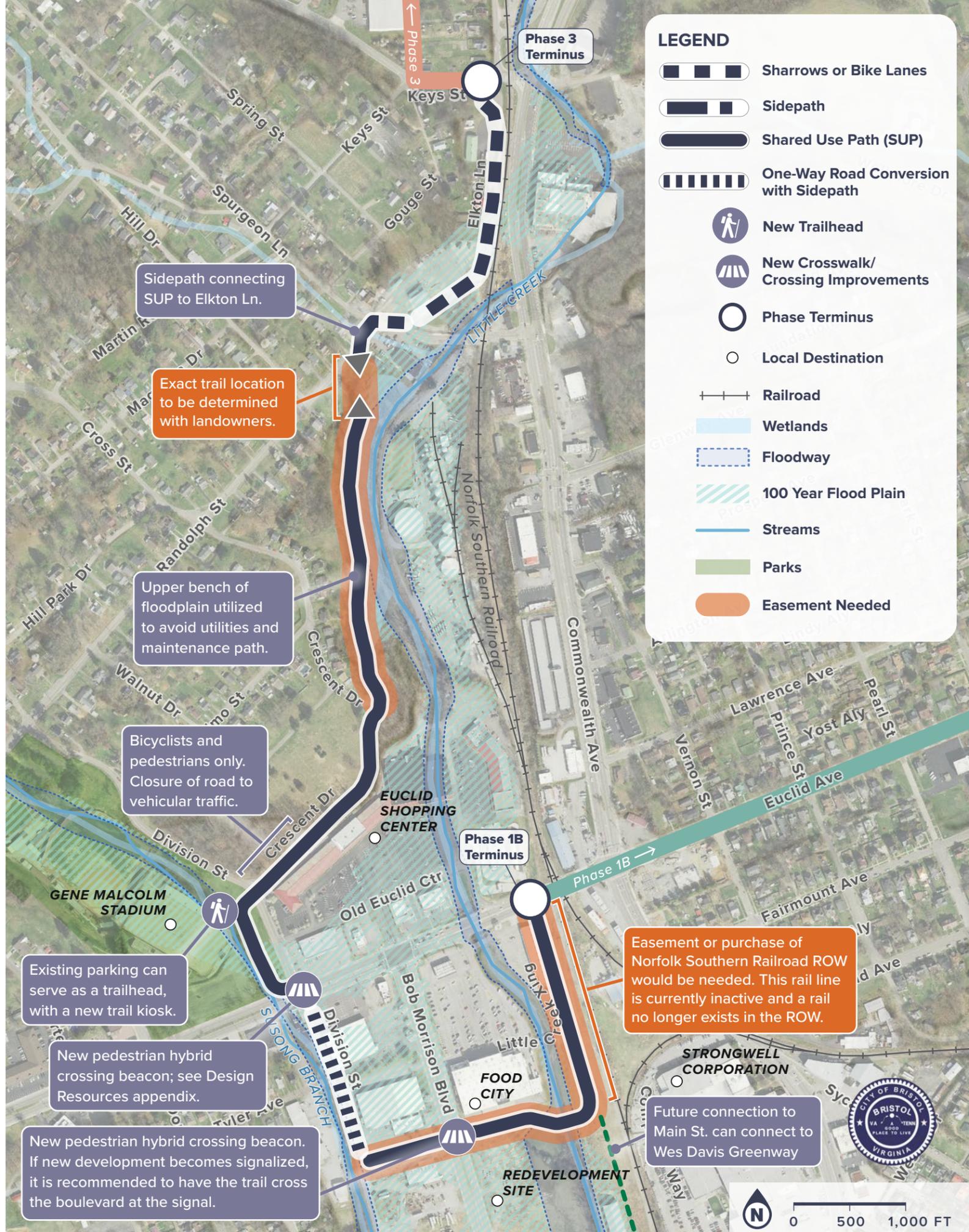
**Economic Development Opportunity:** Trail can be part of the revitalization of this commercial and industrial area, some of which could be redeveloped. The trail can play a critical role in activating this area for people walking and biking to parks, shopping, and the grocery store.

**Potential Partners:** Food City, businesses along the trail, the Euclid Shopping center, and the possible redevelopment site. Norfolk Southern will also need to be a partner for acquisition. VDOT for the crossing of state roads.

**Potential Funding Sources:**

- VDOT’s Transportation Alternatives Program (TAP), some funds may be available for grant assistance for this program.
- VDOT’s Smart Scale Program (would need to be prioritized under the SMART SCALE program)
- Transportation Partnership Opportunity Fund (package with other phases)
- Appalachian Regional Commission (ARC) Arise Grant (package with other phases)
- Virginia Tobacco Region Revitalization Commission
- Recreation Trails Program (if used as a match)

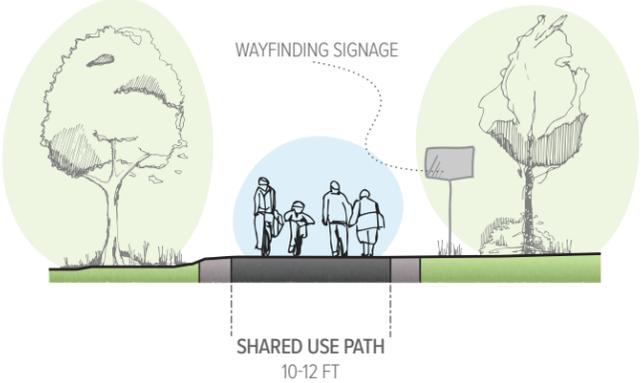
**Acquisition Needs:** Easement or purchase of inactive rail line from Norfolk Southern along creek just north of Food City. Easement needed through the possible redevelopment site and required to connect from Division St. to Bob Morrison Pkwy. Easements are needed along Little Creek and up to Randolph St. Otherwise, trail is within public right of way (Division Street, Bob Morrison Blvd, and Crescent Dr.).



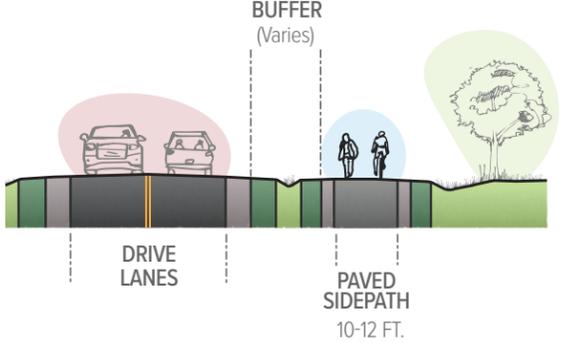
### Design Details

The majority of the trail in Phase 2 will be a shared use path (SUP). The segment along Division St. will convert the two-way road into a one-way road with a sidepath, separated from vehicular traffic with a buffer area with flexposts. The northernmost segment of the trail in this phase will be either sharrows or bike lanes, where ROW is constricted.

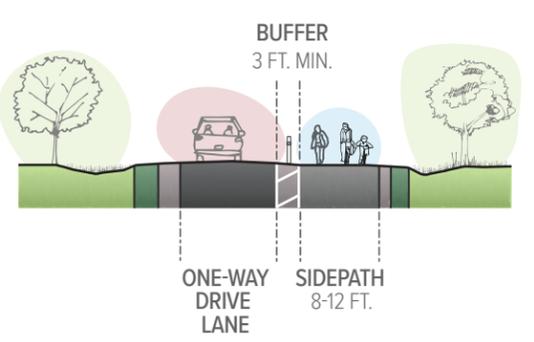
#### Shared Use Path (SUP)



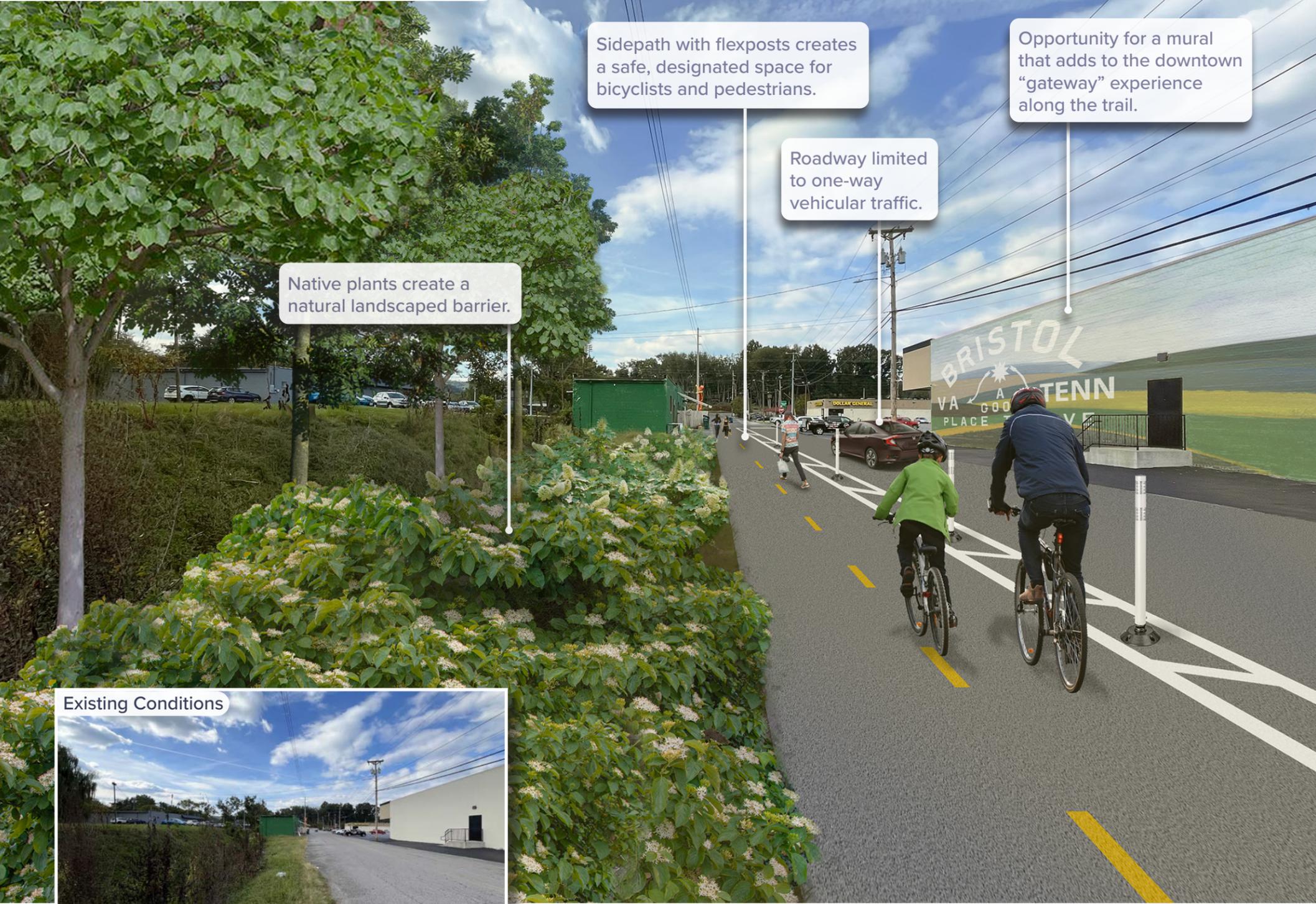
#### Sidepath



#### One-Way Road Conversion with Sidepath



### DIVISION ST. One-Way Road Conversion with Sidepath



Sidepath with flexposts creates a safe, designated space for bicyclists and pedestrians.

Roadway limited to one-way vehicular traffic.

Opportunity for a mural that adds to the downtown "gateway" experience along the trail.

Native plants create a natural landscaped barrier.

#### Existing Conditions



Artistic rendering of one-way road conversion with sidepath along Division St. © Alta

# Phase 3: Keys St. to Mendota Trailhead

**Description:** Travels north from Keys St, moving into some terrain that will require switchbacks, and then around G&G Country Store where it will connect into an inactive rail line along Little Creek.

**Length:** 1 mile

**Key Connections:** Dominion Carton, Shearer's Foods, G&G Country Store, the Mendota Trailhead, and the 12.5 mile Mendota Trail.

**Potential Safety Improvements:** Enhanced crossings with proper ADA ramps; extensive off-road trail segment to keep trail users separate from motorized users; sidewalk along Keys St. to give pedestrians their own space; geometric improvements at the Pittstown Rd./Island Rd. intersection to reduce vehicle speeds and promote safer movement through the intersection.

**Economic Development Opportunity:** Trail will connect several major employers and make the final connection to the Mendota Trail for full Bristol downtown to Clinch Mountain connectivity. Potential for development/redevelopment opportunity.

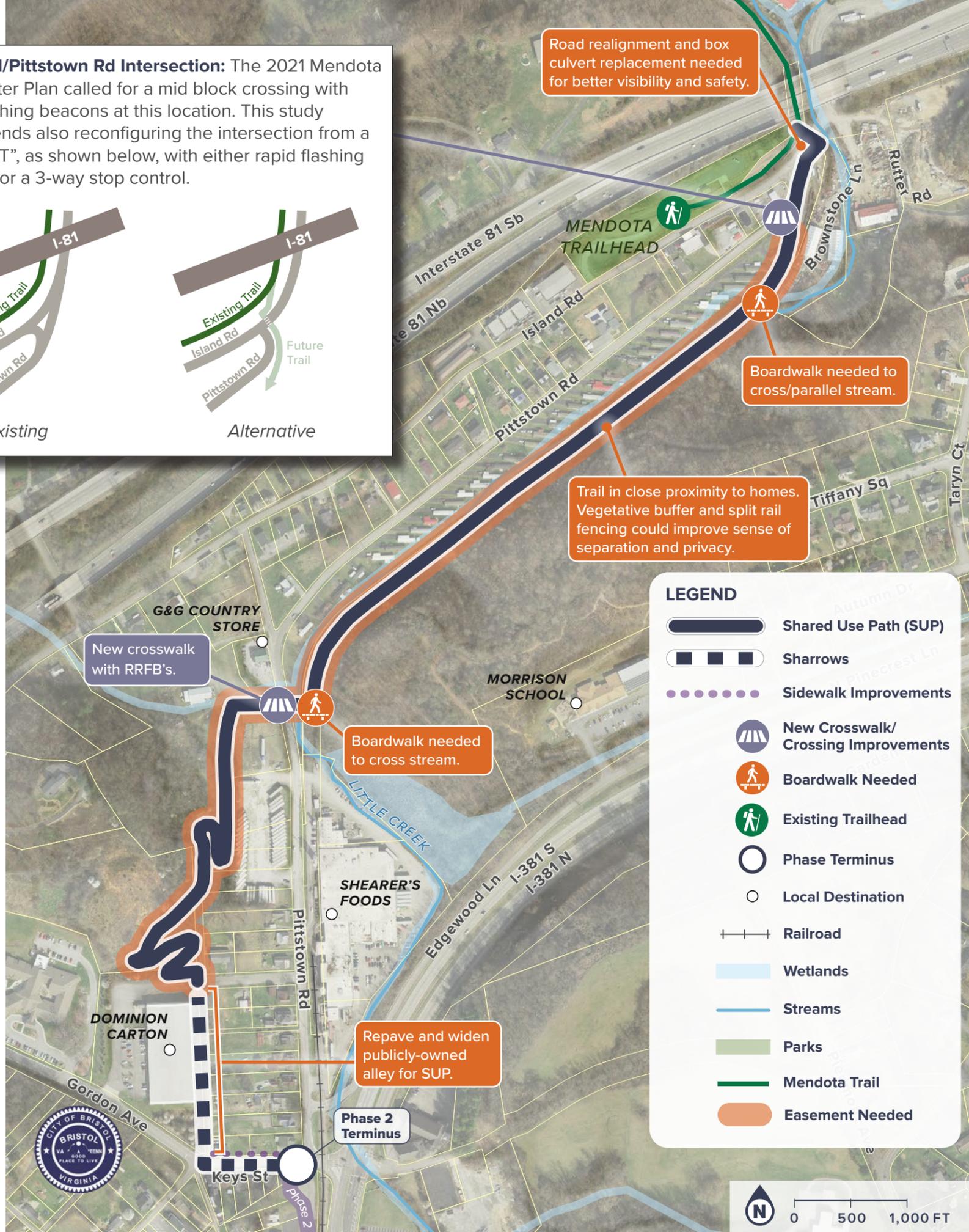
**Potential Partners:** Commercial business owners and employers whose employees can use the trail to commute, Norfolk Southern for the most north easement needed, and VDOT for the redesign of Pittstown/Island Rd. intersection.

**Potential Funding Sources:**

- VDOT's Transportation Alternatives Program (TAP), some funds may be available for grant assistance for this program.
- VDOT's Smart Scale Program (would need to be prioritized under the SMART SCALE program)
- Transportation Partnership Opportunity Fund (package with other phases)
- Appalachian Regional Commission (ARC) Arise Grant (package with other phases)
- Virginia Tobacco Region Revitalization Commission
- Recreation Trails Program (if used as a match)

**Acquisition Needs:** Easements needed for the entirety except for the short stretch of Keys St. and the publicly owned right of way behind Dominion Carton.

**Island Rd/Pittstown Rd Intersection:** The 2021 Mendota Trail Master Plan called for a mid block crossing with rapid flashing beacons at this location. This study recommends also reconfiguring the intersection from a "Y" to a "T", as shown below, with either rapid flashing beacons or a 3-way stop control.

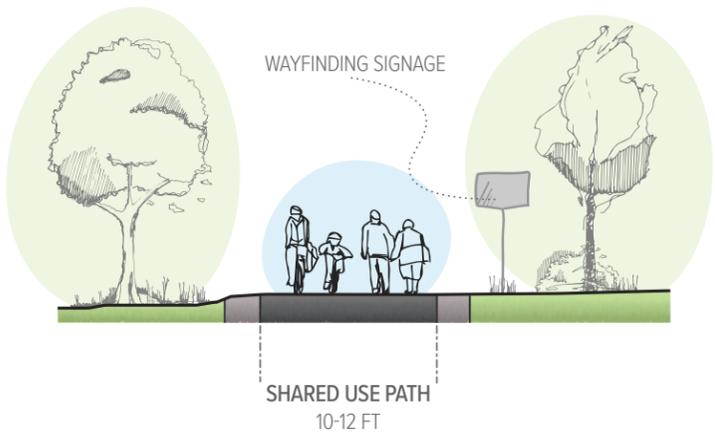




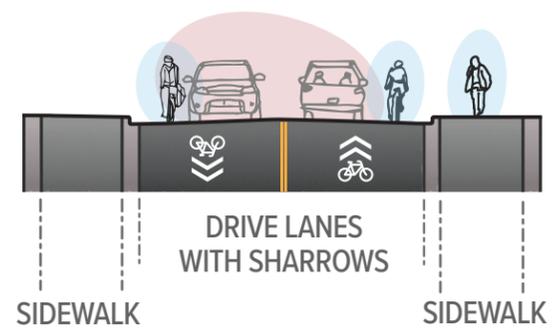
### Design Details

The majority of the trail within this Phase will be a shared use path (SUP), providing full separation of pedestrians/cyclists from vehicular traffic. A section of the trail at the southern portion of this Phase, behind Dominion Carton and along Keys St. will be sharrows.

### Shared Use Path (SUP)



### Sharrows



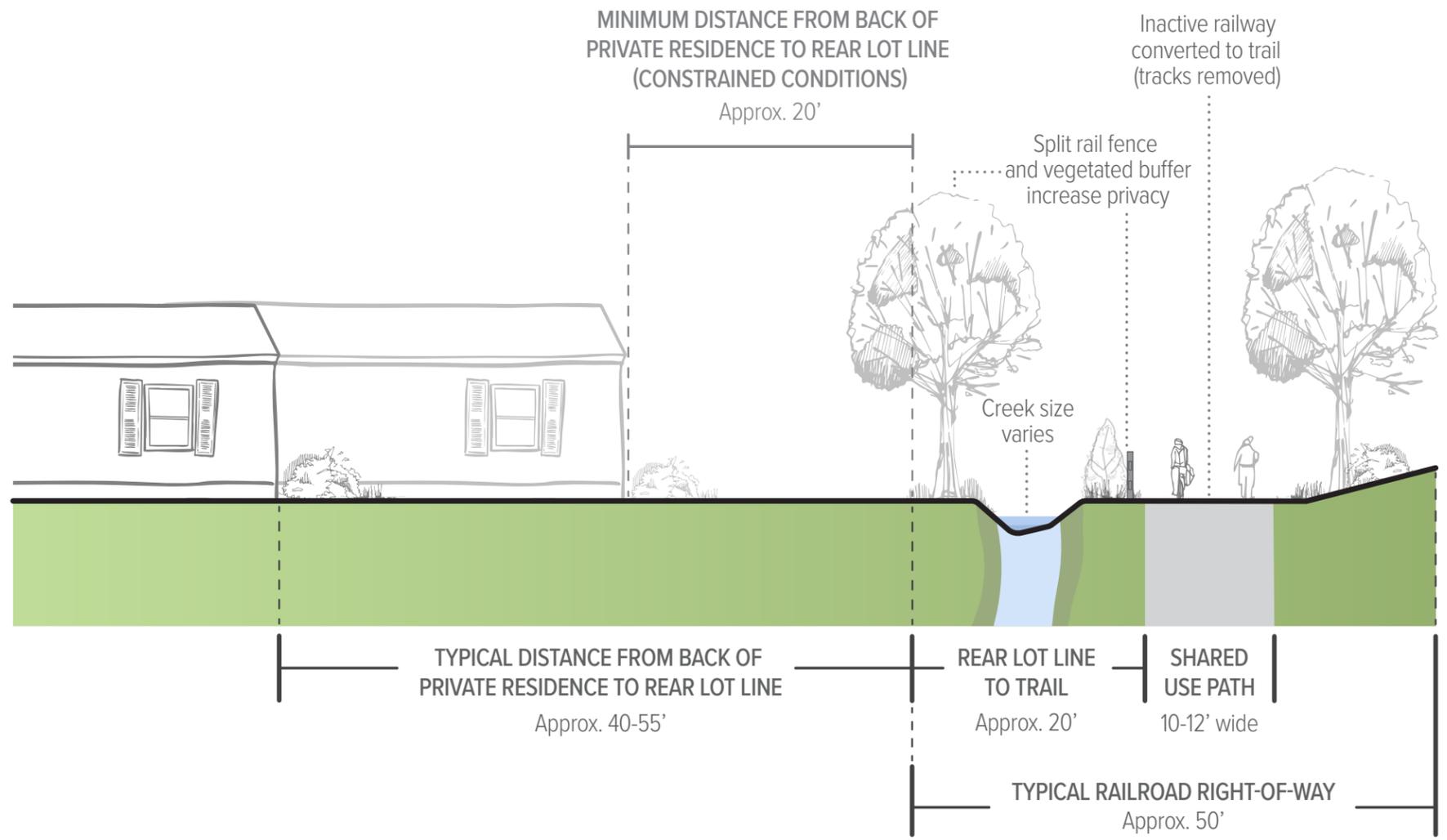
### Pittstown Rd. Private Residences and Trail Interaction

Along Pittstown Rd., a handful of private residences share a rear lot line with the inactive railway corridor that is proposed to be converted into a shared use path. Most of their backyards are between 40 and 55 feet deep (measured from the back of the residence to the rear lot line), though some are more constrained at closer to 20 feet deep.

The graphic below shows how the proposed trail may look and interact with the adjacent residential lots, for both a typical and constrained backyard condition, with design treatments to help increase separation and privacy from the trail.



Private residences along Pittstown Rd.



# Phase 1A Cost Estimate

		<b>PLANNING ESTIMATE</b>	
		<b>MENDOTA TRAIL PHASE 1A</b>	
LOCATION:	PIEDMONT AVENUE (BEAVER CREEK TO EUCLID AVENUE)		
DESCRIPTION:	200 LF OF 10FT WIDE ASPHALT SHARED USE PATH 600 LF OF BIKE LANES 2,700 LF OF 10FT WIDE CONCRETE SIDEPATH		
<b>TOTAL LENGTH:</b>	<b>0.6 MILE</b>		
CITY:	BRISTOL, VA		
CATEGORY		AMOUNT	
MOBILIZATION			\$78,000.00
EARTHWORK			\$164,000.00
ASPHALT			\$140,000.00
CONCRETE			\$516,250.00
DRAINAGE			\$240,000.00
STRUCTURES			\$25,000.00
MISCELLANEOUS ITEMS			\$235,000.00
<b>CONSTRUCTION COST SUBTOTAL (2026)</b>			<b>\$1,399,000.00</b>
CONTINGENCY	30%		\$419,700.00
UTILITIES (ABOVE GROUND)			\$195,000.00
<b>TOTAL CONSTRUCTION COST (2026)</b>			<b>\$2,014,000.00</b>
INFLATION FACTOR	3 YRS 6%		\$385,000.00
<b>CONSTRUCTION COST TOTAL (2029)</b>			<b>\$2,399,000.00</b>
DESIGN AND PERMITTING	15%		\$360,000.00
VDOT OVERSIGHT CHARGES	10%		\$240,000.00
CONSTRUCTION ENGINEERING INSPECTION (CEI)	20%		\$480,000.00
<b>TOTAL ESTIMATED PROJECT COST (2029)</b>			<b>\$3,479,000.00</b>

NOTE: ESTIMATE IS NOT BASED ON AN ENGINEERING DESIGN, AND IS FOR PLANNING PURPOSES ONLY.  
 ASSUMES LAP FUNDING  
 EXCLUDES RIGHT-OF-WAY COSTS.  
 UNDERGROUND UTILITY COORDINATION/RELOCATION COSTS UNKNOWN AND NOT INCLUDED.  
 EXCLUDES ANY SIGNAL UPGRADE WORK THAT MAY BE REQUIRED.

COMPUTED BY \_\_\_\_\_ BMB  
 DATE \_\_\_\_\_ 12/12/2025

# Phase 1B Cost Estimate

		<b>PLANNING ESTIMATE</b>	
		<b>MENDOTA TRAIL PHASE 1B</b>	
LOCATION:	EUCLID AVENUE (PIEDMONT AVENUE TO FOOD CITY PLAZA)		
DESCRIPTION:	2,000LF OF 10FT WIDE ASPHALT MEDIAN SHARED USE PATH 900 LF OF 10FT WIDE CONCRETE SIDEPATH		
<b>TOTAL LENGTH:</b>	<b>0.5 MILE</b>		
TOWN/CITY:	BRISTOL, VA		
CATEGORY		AMOUNT	
MOBILIZATION			\$84,000.00
EARTHWORK			\$90,000.00
ASPHALT			\$190,100.00
CONCRETE			\$276,000.00
DRAINAGE			\$110,000.00
MISCELLANEOUS ITEMS			\$760,000.00
<b>CONSTRUCTION COST SUBTOTAL (2026)</b>			<b>\$1,511,000.00</b>
CONTINGENCY	30%		\$453,300.00
UTILITIES (ABOVE GROUND)			\$110,000.00
<b>TOTAL CONSTRUCTION COST (2026)</b>			<b>\$2,075,000.00</b>
INFLATION FACTOR	3 YRS 6%		\$397,000.00
<b>CONSTRUCTION COST TOTAL (2029)</b>			<b>\$2,472,000.00</b>
DESIGN AND PERMITTING	15%		\$371,000.00
VDOT OVERSIGHT CHARGES	10%		\$248,000.00
CONSTRUCTION ENGINEERING INSPECTION (CEI)	20%		\$495,000.00
<b>TOTAL ESTIMATED PROJECT COST (2029)</b>			<b>\$3,586,000.00</b>

NOTE: ESTIMATE IS NOT BASED ON AN ENGINEERING DESIGN, AND IS FOR PLANNING PURPOSES ONLY.  
 ASSUMES LAP FUNDING  
 EXCLUDES RIGHT-OF-WAY COSTS.  
 UNDERGROUND UTILITY COORDINATION/RELOCATION COSTS UNKNOWN AND NOT INCLUDED.  
 INCLUDES INSTALLATION OF PEDESTRIAN SIGNALS AT EUCLID/COMMONWEALTH INTERSECTION (4 LEGS)  
 INCLUDES MODIFICATION TO RR CROSSING TO BETTER ACCOMMODATE PEDESTRIANS  
 EXCLUDES OTHER SIGNAL UPGRADE WORK THAT MAY BE REQUIRED.

COMPUTED BY \_\_\_\_\_ BMB  
 DATE \_\_\_\_\_ 12/12/2025

# Phase 2 Cost Estimate

		<b>PLANNING ESTIMATE</b>	
		MENDOTA TRAIL PHASE 2	
LOCATION:	RAILROAD TO KEYS STREET		
DESCRIPTION:	4,225LF OF 10FT WIDE ASPHALT SHARED USE PATH		
	875 LF OF 10FT WIDE CONCRETE SIDEPATH		
	1,250LF OF SHARED LANES AND RESURFACING		
	1,000LF OF EXISTING ROADWAY CONVERSION		
<b>TOTAL LENGTH:</b>	<b>1.4 MILE</b>		
CITY:	BRISTOL, VA		
	CATEGORY	AMOUNT	
	MOBILIZATION	\$101,000.00	
	EARTHWORK	\$250,000.00	
	ASPHALT	\$370,050.00	
	CONCRETE	\$246,575.00	
	DRAINAGE	\$115,000.00	
	MISCELLANEOUS ITEMS	\$745,250.00	
	<b>CONSTRUCTION COST SUBTOTAL (2026)</b>		<b>\$1,828,000.00</b>
	CONTINGENCY	30%	\$548,400.00
	UTILITIES (ABOVE GROUND)		\$35,000.00
	<b>TOTAL CONSTRUCTION COST (2026)</b>		<b>\$2,412,000.00</b>
	INFLATION FACTOR	3 YRS 6%	\$461,000.00
	<b>CONSTRUCTION COST TOTAL (2029)</b>		<b>\$2,873,000.00</b>
	DESIGN AND PERMITTING	15%	\$431,000.00
	VDOT OVERSIGHT CHARGES	10%	\$288,000.00
	CONSTRUCTION ENGINEERING INSPECTION (CEI)	20%	\$575,000.00
	<b>TOTAL ESTIMATED PROJECT COST (2029)</b>		<b>\$4,167,000.00</b>

NOTE: ESTIMATE IS NOT BASED ON AN ENGINEERING DESIGN, AND IS FOR PLANNING PURPOSES ONLY.  
 ASSUMES LAP FUNDING  
 EXCLUDES RIGHT-OF-WAY COSTS.  
 UNDERGROUND UTILITY COORDINATION/RELOCATION COSTS UNKNOWN AND NOT INCLUDED.  
 ASSUMES PHBS AT EUCLID/DIVISION AND BOB MORRISON.  
 EXCLUDES OTHER SIGNAL UPGRADE WORK THAT MAY BE REQUIRED.

COMPUTED BY \_\_\_\_\_ BMB  
 DATE \_\_\_\_\_ 12/12/2025

# Phase 3 Cost Estimate

		<b>PLANNING ESTIMATE</b>	
		MENDOTA TRAIL PHASE 3	
LOCATION:	KEYS STREET TO MENDOTA TRAIL TRAILHEAD		
DESCRIPTION:	300 LF OF 6FT WIDE SIDEWALK WITH SHARED LANES		
	4,500 LF OF 10FT WIDE ASPHALT SHARED USE PATH		
	600 LF OF ROADWAY REALIGNMENT		
<b>TOTAL LENGTH:</b>	<b>1 MILE</b>		
CITY:	BRISTOL, VA		
	CATEGORY	AMOUNT	
	MOBILIZATION	\$131,000.00	
	EARTHWORK	\$645,000.00	
	ASPHALT	\$498,400.00	
	CONCRETE	\$191,500.00	
	DRAINAGE	\$170,000.00	
	STRUCTURES	\$147,000.00	
	MISCELLANEOUS ITEMS	\$560,500.00	
	<b>CONSTRUCTION COST SUBTOTAL (2026)</b>		<b>\$2,344,000.00</b>
	CONTINGENCY	30%	\$703,200.00
	UTILITIES (ABOVE GROUND)		\$90,000.00
	<b>TOTAL CONSTRUCTION COST (2026)</b>		<b>\$3,138,000.00</b>
	INFLATION FACTOR	3 YRS 6%	\$600,000.00
	<b>CONSTRUCTION COST TOTAL (2029)</b>		<b>\$3,738,000.00</b>
	DESIGN AND PERMITTING	15%	\$561,000.00
	VDOT OVERSIGHT CHARGES	10%	\$374,000.00
	CONSTRUCTION ENGINEERING INSPECTION (CEI)	20%	\$748,000.00
	<b>TOTAL ESTIMATED PROJECT COST (2029)</b>		<b>\$5,421,000.00</b>

NOTE: ESTIMATE IS NOT BASED ON AN ENGINEERING DESIGN, AND IS FOR PLANNING PURPOSES ONLY.  
 ASSUMES LAP FUNDING  
 EXCLUDES RIGHT-OF-WAY COSTS.  
 UNDERGROUND UTILITY COORDINATION/RELOCATION COSTS UNKNOWN AND NOT INCLUDED.  
 EXCLUDES ANY SIGNAL UPGRADE WORK THAT MAY BE REQUIRED.

COMPUTED BY \_\_\_\_\_ BMB  
 DATE \_\_\_\_\_ 12/12/2025



# Implementation

This chapter describes recommendations for implementation, including action steps that can be applied by phase of development.

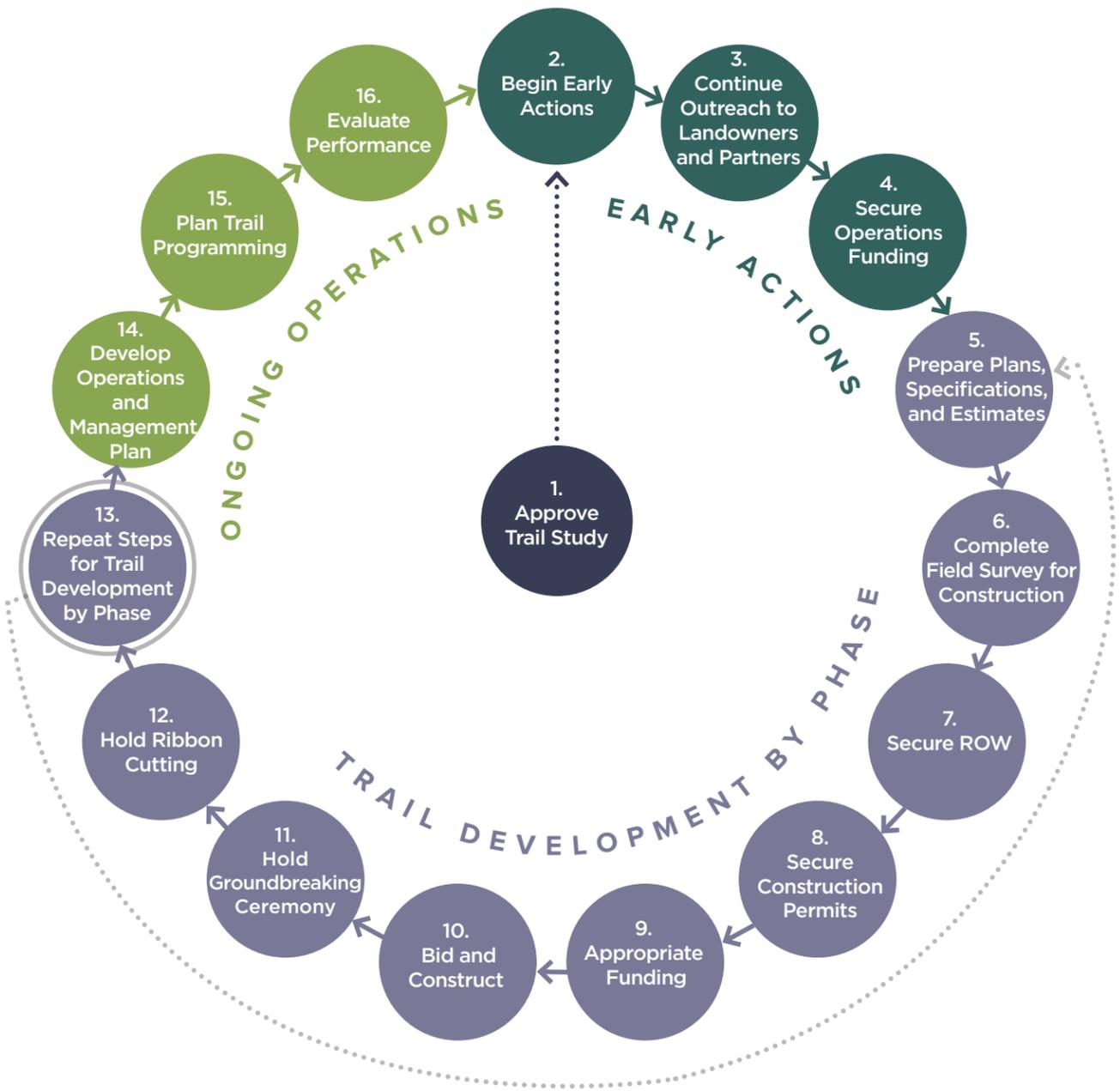


Ribbon cutting for the Gorge Trestles section of the Mendota Trail in 2022.



# Overview

Implementation action steps for trail development are shown below in the general order they are likely to occur. The actual order of steps may vary during implementation.



## INITIAL ACTION

### Step 1: Approve Trail Study

An important first step in the process is to have this study adopted by the City of Bristol. Adoption is an important first step as grant funding typically requires local government support through an adopted plan. Additionally, local government adoption signifies endorsement and approval of project development, operations, and management. Adoption does not commit funding to the project, but it does signify an intention to identify funding opportunities in the future, especially for matching funds to secure grants and leverage other opportunities for implementation.

***Adoption is an important first step as grant funding typically requires local government support through an adopted plan.***

## EARLY ACTIONS

### Step 2: Begin Early Actions

The City of Bristol, as lead agency, will coordinate with partners on various steps of the trail development process. This will mainly be achieved by continuing to host a quarterly meeting among an evolving set of project partners to assign action steps and report back on progress. Initially, the focus should include

identifying landowners and partners to continue outreach (Step 3) and potential funding resources (Step 4).

Concurrently, other staff and partners could meet to begin to identifying which trail funding opportunities to pursue for Phase 1, including ways to leverage funds across federal, state, local, private, and non-profit sources.

### Step 3: Continue Outreach to Landowners and Partners

The City of Bristol should continue landowner outreach and discussions with project partners. Initially, the focus should include identifying landowners (and/or neighborhood groups) to contact for input and coordination on trail concepts, routing, and potential easements. This could include groups such as the neighborhood near Euclid Ave/Veterans Memorial, Virginia Middle School, Associated Asphalt, BVU, and Food City, among others. Other outreach could include sharing updates on preferred trail alignments, addressing landowner questions as they arise, and providing draft trail easements for review.

A key partner for continued outreach and coordination is the Conservation Fund. This group was the lead organization working with Norfolk Southern on potential rail-trail projects before the 2025 merger began with Union



Pacific. As of late 2025, they were inquiring about the rail corridors in this study area through coordination with the consultants for this study, Alta Planning + Design.

The City should also consider reaching out to smaller individual landowners along the corridor where additional right-of-way or coordination is already known to be required. This could include discussing interest in trail easements or other right of way acquisition, ideas for addressing privacy through landscape screening and/or fencing, and discussing design concepts to set expectations about the look and feel of the trail. This initial step of outreach and sharing additional project information would be in advance of the actual right of way acquisition in Step 7.

The City could also consider nonprofit partnerships with local trail groups or land conservation groups for assisting with landowner outreach and assessing the potential for trail easements.

## Step 4: Secure Operations Funding

Securing operations funding includes recognizing the time and effort required for City staff to implement this project, and dedicating time and resources for those assigned to this project. Although it may change in the future, for the purposes of this plan, the lead staff for this project is assumed to be within the Community Development and Planning Department,

The City could assign the project lead to existing Community Development and Planning Department staff, or could consider funding a new full- or part-time position to support delivery of this project. If assigned to existing staff, workload and priorities should be discussed and adjusted to be sure there is adequate time to dedicate to the project. Ultimately, the goal is to support the staffing, advocacy, and leadership required to implement all phases of the project.

In addition to dedicating staff time, another key operations action will be to include project funding in the City's Capital Improvement Plan.

### TRAIL DEVELOPMENT ACTIONS

Steps 5 through 12 should be followed for each phase of the Bristol-Mendota Connector Trail. Once Phase 1 is completed, repeat the process for each subsequent phase.

## Step 5: Prepare Plans, Specifications, and Estimates for Phase 1

Step five in the process is to prepare plans, specifications, and estimates (PS&E) for the construction of Phase 1 of the Bristol-Mendota Connector Trail (the scope and length of the phases are defined in the previous chapter). The City can contract directly with a design development consultant to complete the

Phase 1 PS&E. These plans should meet the requirements of construction funding for each project phase. For example, if a phase is constructed with federal transportation funding, PS&E will need to address USDOT FHWA and VDOT design development requirements. PS&E documents will need to be reviewed and approved by local, state, and federal authorities. A separate work flow process for completing PS&E for each phase of the project should be prepared.

## Step 6: Complete Field Survey for Construction for Phase 1

In conjunction with Step Five, employ a qualified and registered land surveyor to work with the design development consultant to complete an accurate boundary, centerline and topographic survey of the phase one project corridor. The surveyor(s) will also be responsible for preparing plat maps for all rights-of-way and recording those rights-of-way at the applicable courthouse.

## Step 7: Secure ROW for Phase 1

Once preliminary PS&E drawings have been completed, it will be necessary to acquire all rights-of-ways necessary for project construction. This includes temporary and permanent rights-of-ways, easements, and rights of entry/access. The use of federal funding may require that all rights-of-way be acquired in compliance with the Uniform Relocation Act. There are a number of strategies that can be employed in the acquisition of rights-of-way and payment or fair compensation for such rights may be part of the process. Therefore, sufficient funding should be available to secure certain rights-of-way.

## Step 8: Secure Construction Permits for Phase 1

When the PS&E documents are complete, they should be used to secure or acquire entitlements and permits for project construction. These permits will include environmental, access, all construction activities (earth moving, erosion control, use of fill material, impacts to wildlife, etc.), and, in some instances, accessibility. A checklist of applicable permits should be prepared during the PS&E phase of the project.

## Step 9: Appropriate Funding for Phase 1

Typically, a variety of funding sources are used in combination to fund trail projects. This plan's Appendix provides a list of typical sources of funding from federal, state, and local public and private sources. The City of Bristol should be prepared to assist with matching funds for grants. In some cases, funding for both design and construction can be accomplished through a federal grant, although a project is more likely to be funded with design completeness, some level of environmental review, and high degree of project readiness. It is important to keep in mind that federal funding can often take 6 to 12 months just to get under contract.

## Step 10: Bid and Construct Phase 1

The next step will be to bid and award a construction contract for each phase of the project. Typically, bid packages for each phase will be prepared by the design development consultant. Depending on how the project is funded, a sponsoring agency will administer the bid, and oversee awarding a construction contract. The process of bidding and awarding a construction contract takes time, no less than three to four months and as much six to eight months depending on the approval process of the agency that awards the contract. Once a bid is awarded, the selected construction contractor will be given a specific number of working or calendar days to build the trail. It is normal for construction activities to take

between six months and one year to complete. Sometimes construction may take longer based on the complexity of a given project. If the project is federally funded, federal processes, requirements, and timelines must be followed.

## Step 11: Hold Groundbreaking Ceremony for Phase 1

For each phase, the City of Bristol and its partners should work together to host a groundbreaking ceremony. Make sure to invite and involve everyone who has worked in partnership to make a particular phase successful. Inviting elected officials can help build additional support for future phases; especially consider inviting those who seem less aware or supportive of segments of the trail in their area. Groundbreaking ceremonies will vary in size and celebration. Invite local media outlets to attend, arrange for interviews with key stakeholders, and document the celebration.

## Step 12: Hold Ribbon Cutting for Phase 1

Once construction is complete, it will be time for a second celebration and official public opening of the trail segment. As with the groundbreaking ceremony, it will be important to include all parties that made trail construction a success. A celebratory ride or walk should be included in the festivities.

## Step 13: Repeat Steps for Trail Development by Phase

Repeat steps five through twelve for remaining phases of the Bristol-Mendota Connector Trail. Each phase of the project will be unique, with a different set of challenges, opportunities, and constraints. It is not simply a matter of repeating the steps, but more an opportunity to use the steps as an outline to guide the process of future phases of development.

### ONGOING ACTIONS

## Step 14: Develop Operations and Management Plan

The City of Bristol will be responsible for maintaining the Bristol to Mendota Trail Connector. For all segments of the trail, operations, maintenance, and management are critical elements of project development. Like a city street system, park system, or utility networks, trails should be managed as highly valued public assets.

Trails require daily, weekly, and monthly attention as well as a systematic approach to maintenance to keep them functioning in the manner in which they were designed and constructed. The City of Bristol should secure operations funding to maintain the trail to a high standard.

## Step 15: Plan Trail Programming

The trail will be an ideal landscape for programming and hosting of events. Some of these events can generate additional revenue for the City of Bristol to offset the costs associated with operations, maintenance, and management of the system.

The trail can also serve as an outdoor classroom where young and old alike can learn about local and regional history, experience the wonders of nature, and visit important cultural landscapes that are part of our community. The City can work with local historians, schools, and organizations on a case-by-case basis to make trail areas available for cultural, ecological, and environmental study. Typically, a local government will review and approve curricula and programs that include access and use of trails so that these programs are compatible with other non-programmed uses.

## Step 16: Evaluate Performance

Once the trail is opened for public use, the City of Bristol should work with its other partners to evaluate the trail's use and performance. For example, if transportation funds were used, how effective is the trail segment at providing alternatives to the use of cars for a specific trip? If environmental education was a primary emphasis of a particular segment, how effective has the segment been in serving the educational needs of school groups? Evaluations can be completed starting within one year of the official public opening of a given segment.



# Trail Design Resources





# Design Resources

Planners and project designers should refer to these and other design resources in developing the projects in this study, but they should not be used as the sole reference for detailed engineering design. The following national guidelines should also continue to be referenced. The pages that follow cover some key design topics relevant to this study.

## American Association of State Highway and Transportation Officials (AASHTO)

- Guide for the Development of Bicycle Facilities (Fifth Edition, 2024)
- Guide for the Planning, Design, and Operation of Pedestrian Facilities (Second Edition, 2021)

## The Federal Highway Administration (FHWA)

- Accessibility Guidance
- Design Guidance
- Facility Design
- Facility Operations
- Achieving Multimodal Networks (2016)
- Small Town and Rural Multimodal Networks Design Guide (2017)
- Guide for Improving Pedestrian Safety at Uncontrolled Crossing Locations (2018)

## National Association of City Transportation Officials (NACTO)

- Urban Bikeway Design Guide
- Urban Street Design Guide

## Safe Routes to School (SRTS) Non-Infrastructure

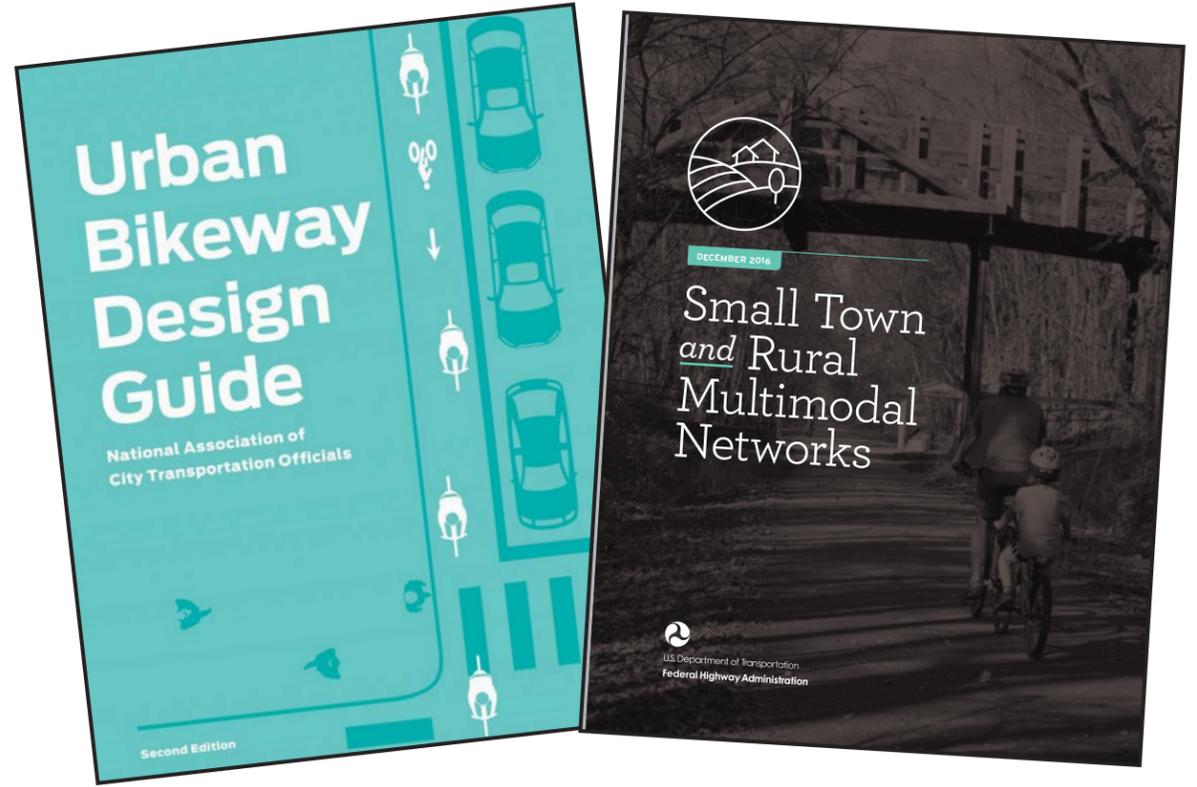
- National Center for Safe Routes to School
- National Partnership for Safe Routes to School

## US Access Board

- ABA Accessibility Standards
- ADA Accessibility Guidelines
- ADA Accessibility Standards
- Public Rights-of-Way, Streets & Sidewalks, and Shared Use Paths

## Manual on Uniform Traffic Control Devices (MUTCD)

- Part 4: Highway Traffic Signals
- Part 9: Traffic Controls for Bicycle Facilities



# Pedestrian Hybrid Beacons

## at Mid-Block Crossings or Unsignalized Intersections

Pedestrian hybrid beacons (PHBs) or High-Intensity Activated Crosswalks (HAWK) are used to improve non-motorized crossings of major streets. A hybrid beacon consists of a signal head with two red lenses over a single yellow lens on the major street, and a pedestrian signal head for the crosswalk. Hybrid beacons are only used at marked mid-block crossings or unsignalized intersections. They are activated with a pedestrian pushbutton at each end. If a median refuge island is used at the crossing, another pedestrian pushbutton can be located on the island to create a two-stage crossing.

### Typical Application

- Suitable for arterial streets where posted speeds are 30-45 mph and multiple travel lanes. In some cases, PHBs are also being implemented along 2-lane roadways.
- Where off-street bicycle facilities intersect major streets without signalized intersections.
- At intersections or midblock crossings where there are high pedestrian volumes.

### Design Features

- Hybrid beacons may be installed without meeting traffic signal control warrants based on engineering judgment if roadway speed and volumes are excessive for comfortable pedestrian crossings.

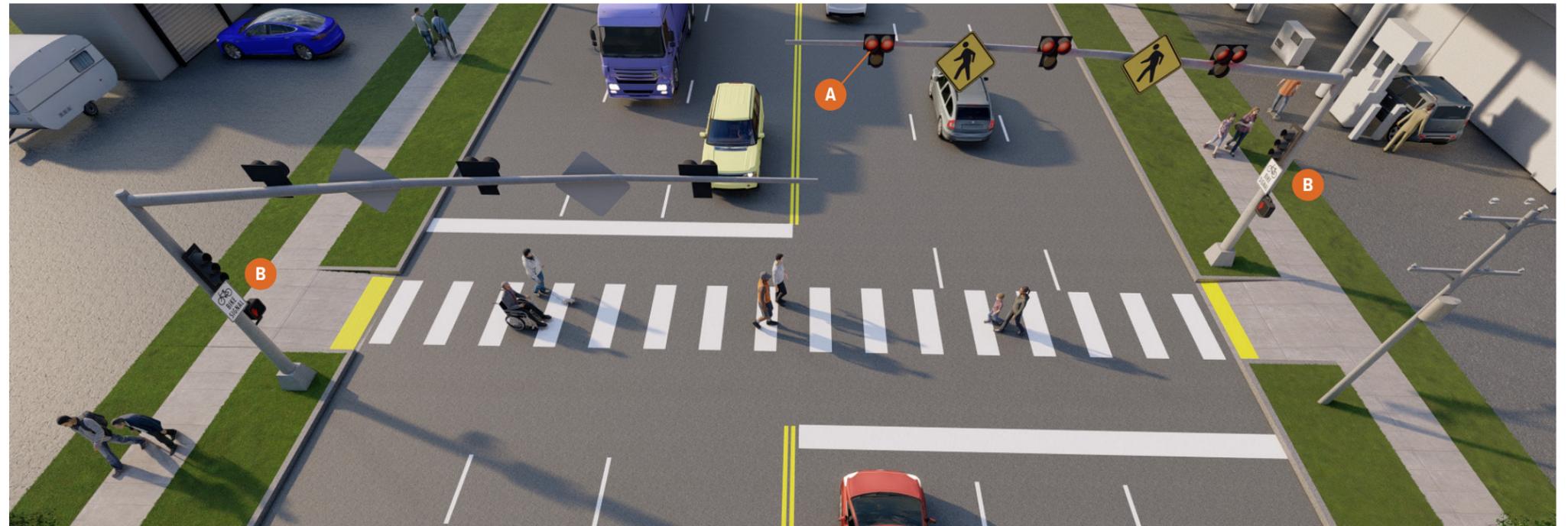
- If installed within a signal system, signal engineers should evaluate the need for the hybrid beacon to be coordinated with other signals. To maximize pedestrian compliance, the PHBs should activate on demand.
- Parking and other sight obstructions should be prohibited for at least 100 feet in advance of and at least 20 feet beyond the marked crosswalk to provide adequate sight distance.
- Crossings with a median refuge and no more than two lanes in each direction may utilize side mounted beacons for reduced cost and complexity.

### Further Considerations

- Hybrid beacons are normally activated by push buttons, but may also be triggered by infrared, microwave, or video detectors. If not on-demand, the maximum delay for activation of the signal should be two minutes, with minimum crossing times determined by the width of the street, but a much shorter delay is strongly preferred.
- Each crossing, regardless of traffic speed or volume, requires review to identify sight lines, potential impacts on traffic progression, timing with adjacent signals, capacity, and safety.

- The installation of hybrid beacons should also include public education and enforcement campaigns to ensure proper use and compliance.

- A** Signal heads for vehicles with 2 red lenses over 1 yellow lens over the street.
- B** Pedestrian pushbutton at each side of crossing should be located at an accessible level.

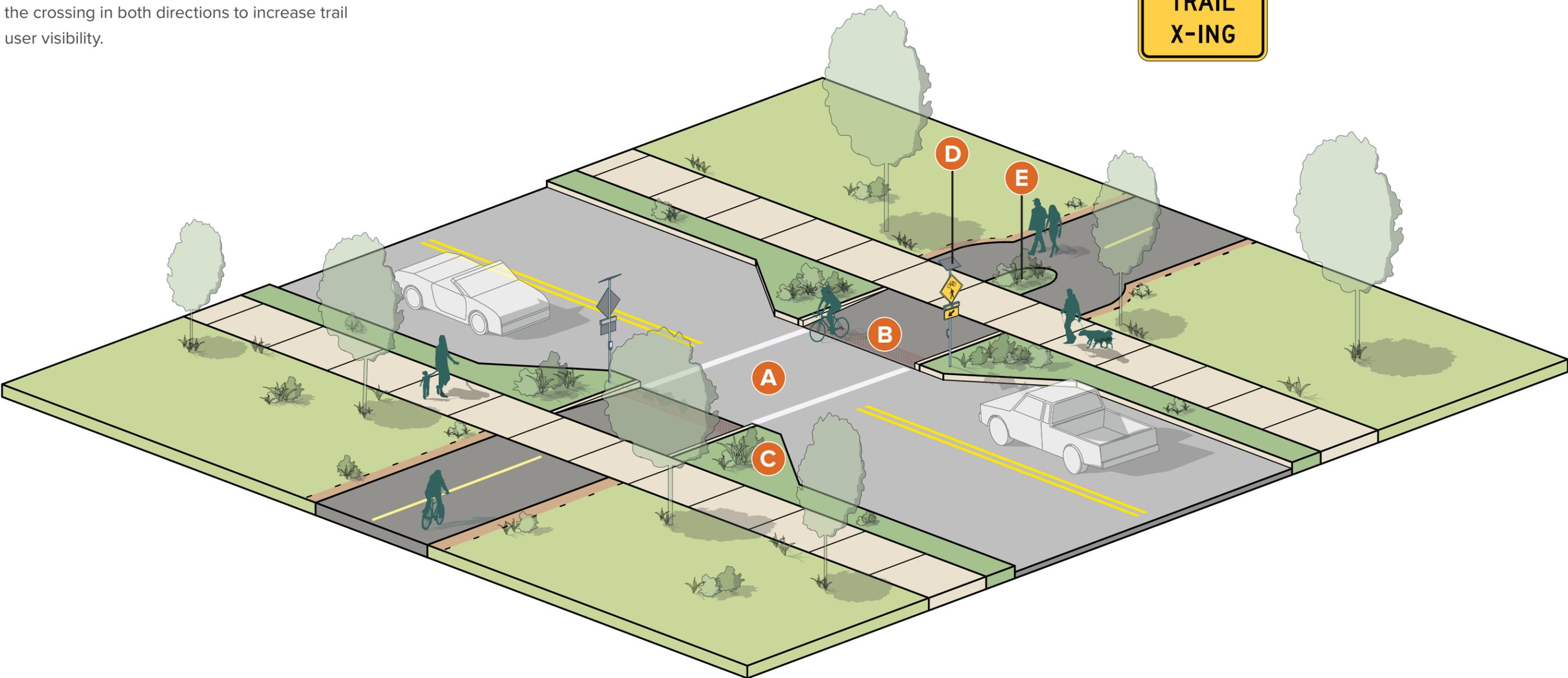




# Trails at Mid-Block Street Crossings

Whenever a trail intersects a roadway at a mid-block location, adequate measures should be implemented to provide a safe crossing. The preferred crossing treatment will depend on roadway context, but should include a marked crosswalk and trail crossing warning signage at a minimum. If on-street parking is present, parking should be restricted within 30 feet of the crossing in both directions to increase trail user visibility.

- A** Marked crosswalk
- B** Directional ramps; match width of trail
- C** Curb bulbouts decrease crossing distance and increase visibility of trail users
- D** Trail crossing signage at a minimum
- E** If needed, implement measures to restrict motor vehicle access



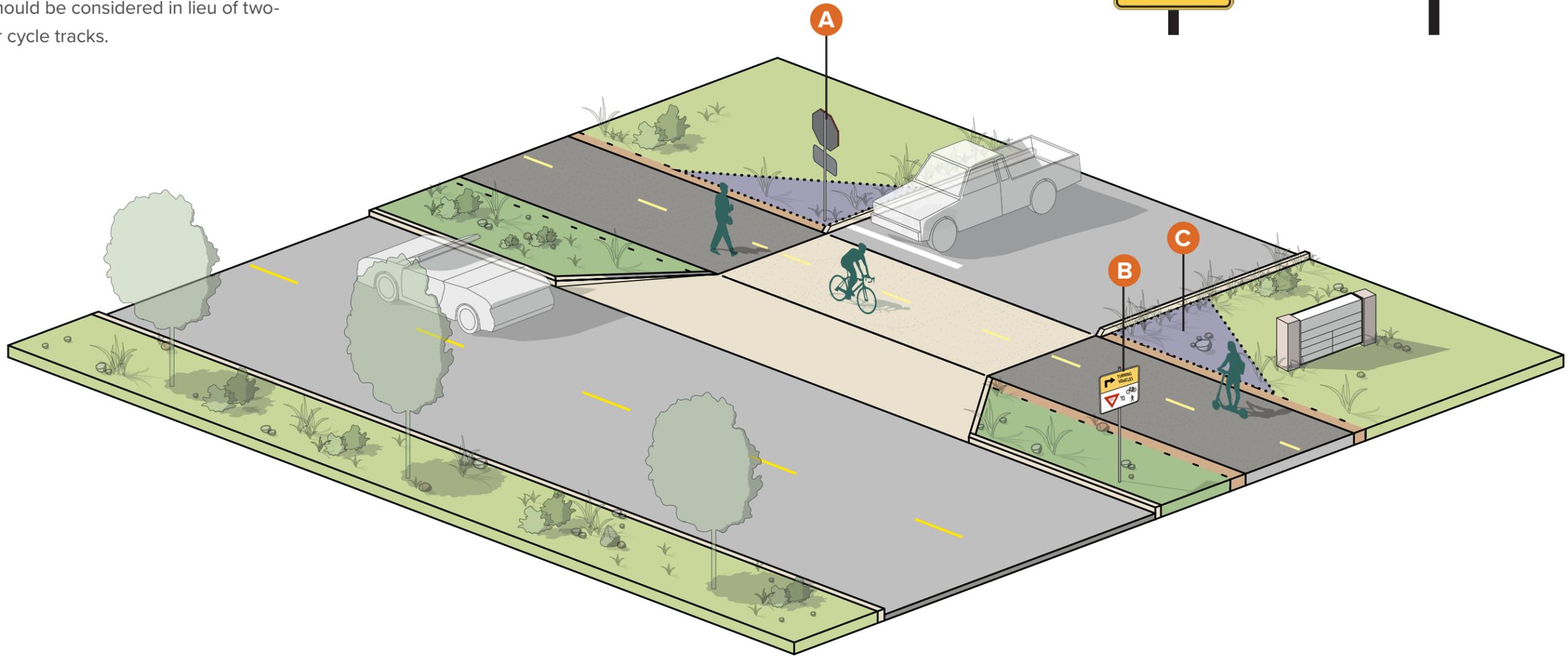


# Trails at Commercial Driveway Crossings

Commercial driveways present conflicts between trail users and motorists who may not expect two-way trail traffic. If right-of-way does not allow for a trail setback, signage and/or green conflict zone paint should be used to alert motorists of two-way trail traffic.

A high frequency of commercial driveways significantly diminishes the safety and comfort of trail users. In these cases, one-way separated bikeways should be considered in lieu of two-way trails or cycle tracks.

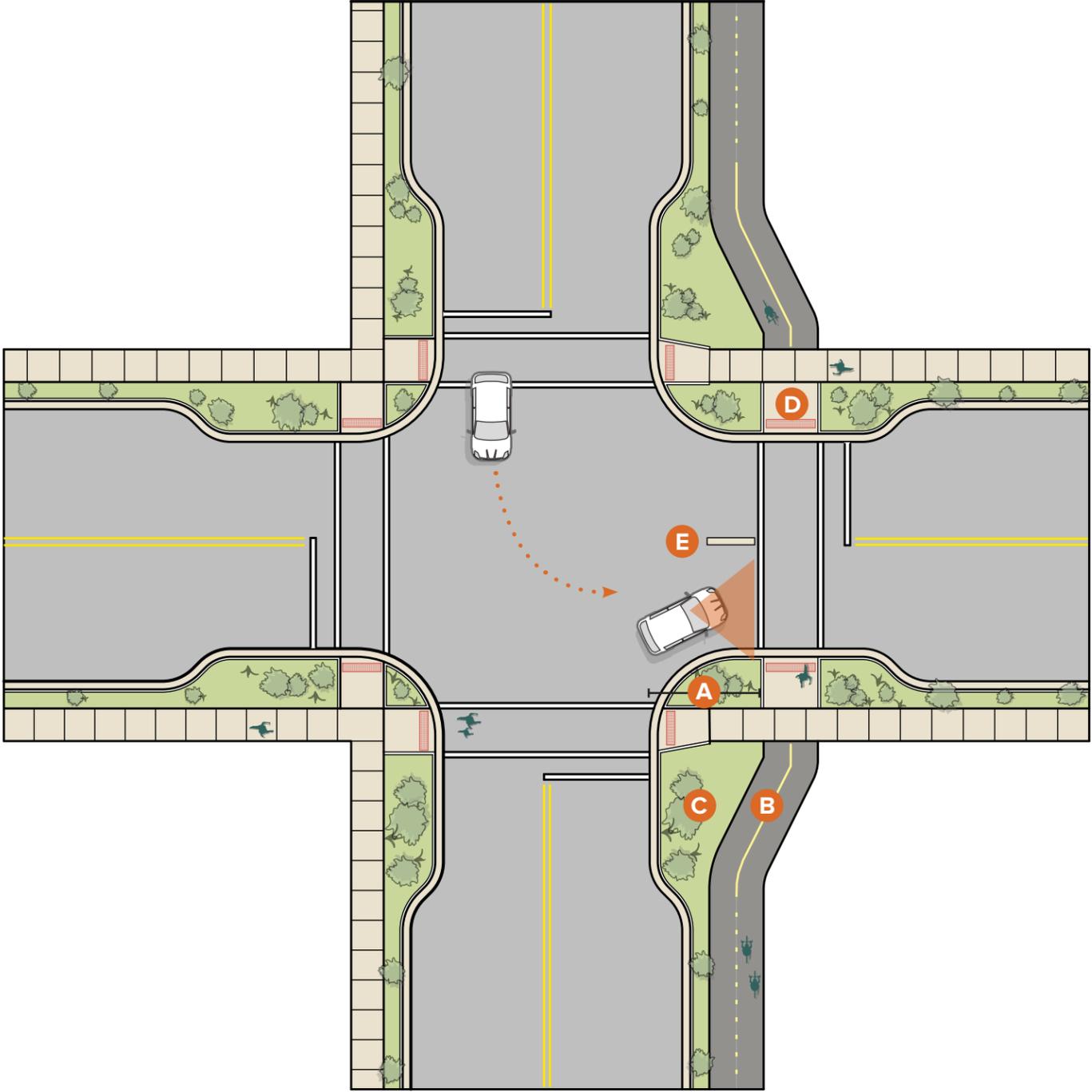
- A** Stop sign and/or stop bar plus “2-way bicycle cross traffic” signage (MUTCD W16-21P)”
- B** Right turning vehicles yield to pedestrians and bicyclists signage (R10-15, modified to show pedestrian AND bicycle icon)
- C** Maintain sight triangles in both directions, clear of tall vegetation and other obstructions, so drivers can see cross traffic



# Trails at Controlled Intersection Crossings

The design of trails through intersections should match the comfort and safety of the trail itself so that an intersection does not serve as a weak link in an otherwise comfortable route. Geometry, roadway characteristics, and right-of-way constraints vary from intersection to intersection; however, the following design principles should be followed when designing trails through intersections:

- Reduce vehicle speeds for both through and turning movements
- Provide a safe space for all modes to wait and yield to others
- Maximize the visibility of pedestrians and bicyclists to motorists
- Mitigate conflicts between bicyclists and pedestrians
- Make navigating the intersection clear and predictable for all modes



- A** Provide trail setback from parallel street; enough room for at least one vehicle to queue while yielding
- B** Solid yellow trail centerline in advance of potential conflict points with other modes
- C** Curb bulbouts/extensions at intersections to increase visibility of pedestrians and bicyclists waiting to cross, shorten crossing distances, and slow through and turning vehicle movements
- D** Directional ramps should be used, not apex/diagonal ramps
- E** Optional hardened centerline to reduce left turn radius and speed

# Pedestrians at Signalized Intersections

## Pedestrian Signal Heads

Pedestrian signal heads indicate to pedestrians when to cross at a signalized crosswalk. Pedestrian signal indications are recommended at all traffic signals except where pedestrian crossing is prohibited by signage.

Countdown pedestrian signals should be retrofitted at existing signals with older style pedestrian signals and on any new installation. Countdown signals have a crash reduction factor of between 25 and 52% in varied studies.

## Signal Timing and the Pedestrian Phase

Adequate pedestrian crossing time is a critical element of the walking environment at signalized intersections. The length of a signal phase with parallel pedestrian movements should provide sufficient time for a pedestrian to safely cross the adjacent street. The MUTCD recommends a walking speed of 3.5 ft per second.

At crossings where older pedestrians or pedestrians with disabilities are expected, crossing speeds as low as 3 ft per second should be assumed. Special pedestrian phases can be used to provide greater visibility or more crossing time for pedestrians at certain intersections.

Large pedestrian crossing distances can be broken up with median refuge islands. A pedestrian pushbutton can be provided on the median to create a two-stage pedestrian crossing if the pedestrian phase is actuated. This ensures that pedestrians are not stranded on the median, and is especially applicable on large, multi-lane roadways with high vehicle volumes, where providing sufficient pedestrian crossing time for a single stage crossing may be an issue.

## Additional Considerations

Pushbuttons should be located so that someone in a wheelchair can reach the button from a level area of the sidewalk without deviating significantly from the natural line of travel into the crosswalk. Pushbuttons should be marked (for example, with arrows) so that it is clear which signal is affected.

In areas with very heavy pedestrian traffic, consider an all-pedestrian signal phase to give pedestrians free passage in the intersection when all motor vehicle traffic movements are stopped. This may provide operational benefits as turning movements are then unimpeded.



- A** Consider the use of a Leading Pedestrian Interval (LPI) to provide additional traffic-protected crossing time to pedestrians. See Pedestrian Traffic Signal Enhancements for additional detail.
- B** Accessible Pedestrian Signals (APS) provide crossing assistance to pedestrians with vision impairment at signalized intersections.
- C** Consider providing median refuge islands for long-distance crossings.

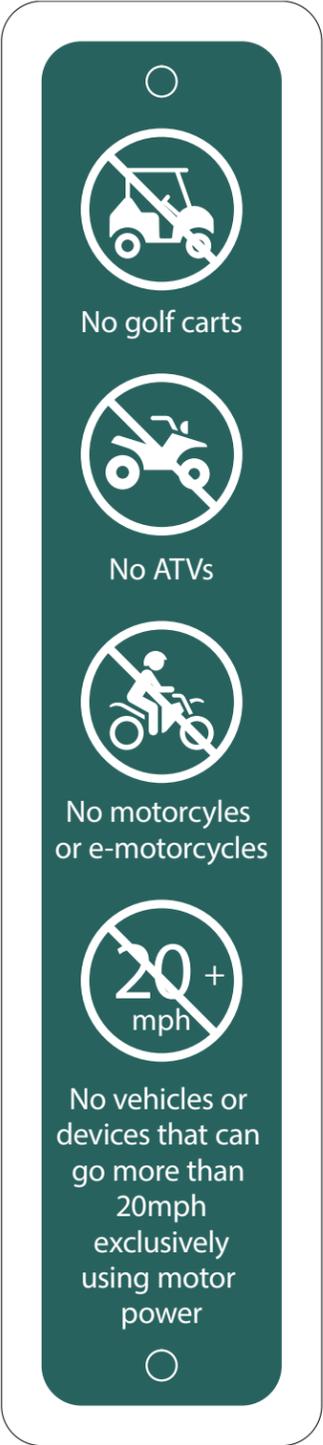
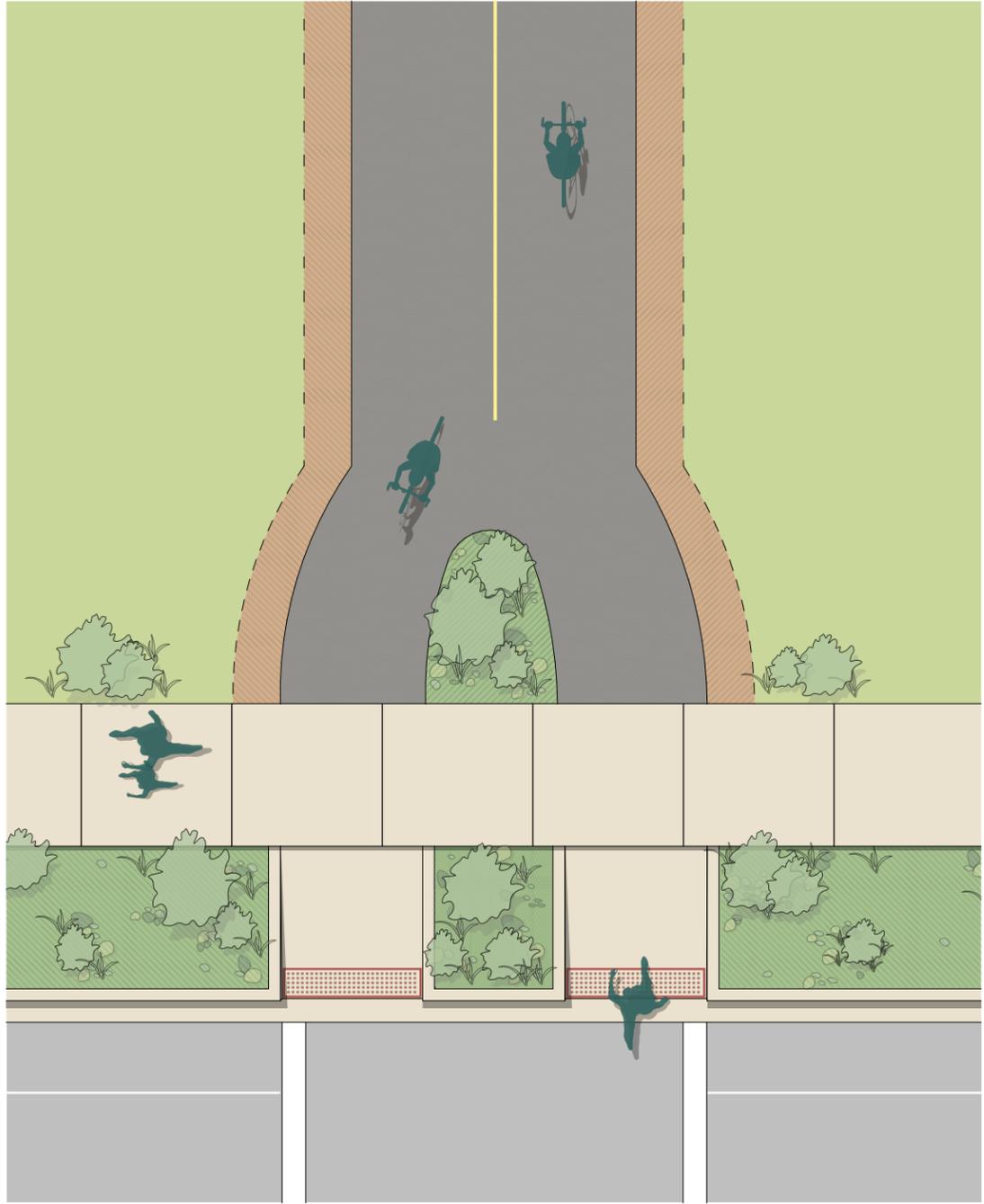


# Restriction of Motor Vehicles on Trails

With the exception of municipal service and emergency vehicles, motor vehicles are not allowed on paved trails, including passenger cars, trucks, motorcycles, ATVs, golf carts, and any vehicle that can exceed 20 mph exclusively using motor power. In some cases it may be necessary to implement measures to restrict motor vehicles. Bollards, both fixed and collapsible, present a hazard to trail users and should only be considered as a last resort. Other design elements that should be considered to help discourage motorized vehicles from entering a trail include:

- Signage communicating prohibited trail uses; for consistency, the signage concept at right should be used throughout the region
- Split-path entry lanes divided by a narrow median or landscape area; this also alerts cyclists about the intersection ahead and the need to slow down.
- Entry design with a strong sense of identity and transition.

Typical Split-Path Entry Design

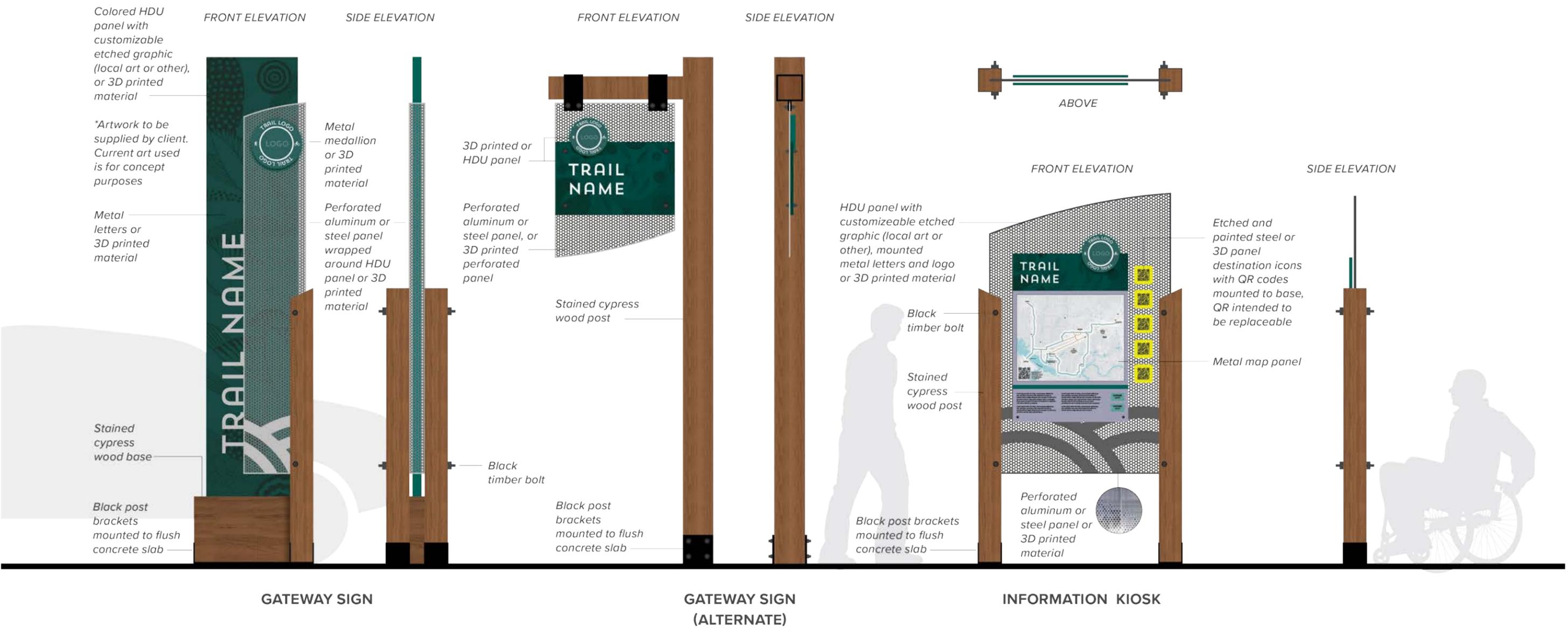


Prohibited Trail Uses Signage



# Wayfinding for Trails

All trails should incorporate a cohesive wayfinding signage system. The purpose of the wayfinding system is to increase confidence of all trail users in orienting themselves in the area and accessing destinations. The following pages showcase an example conceptual wayfinding signage system, with sign types varying from large gateway and informational kiosk signs to small trail markers. The example provided uses a mixture of wood and metal finishes, to create a modern yet natural look and feel to the signage family. When creating a wayfinding signage system, materials, fonts, colors, styles, and other design elements should be used that support or are inspired by any existing branding or structural styles associated with the Preserve. Note that wayfinding signage within VDOT right-of-way may be subject to VDOT approval.



Example wayfinding signage system. Credit: Alta Planning & Design.



Example wayfinding signage system. Credit: Alta Planning & Design.



# Funding Resources

Achieving the vision of connecting the Mendota Trail to Downtown Bristol will require significant commitment of both financial resources and community support. A variety of potential funding sources, ranging from local and regional contributions to state, federal, and private sector investments, can be leveraged to support this effort. Establishing a diverse and balanced funding strategy will be essential to ensure long-term sustainability and project success. The following section outlines potential funding mechanisms, informed by similar trails and greenway initiatives.





# Federal Funding

Federal funding is typically distributed through state agencies to local governments in the form of grants or direct appropriations, separate from state budget allocations. In Virginia, these funds are primarily administered by the Virginia Department of Transportation (VDOT) through the Commonwealth Transportation Board, as well as by regional entities like Metropolitan Planning Organizations (MPOs), such as the Bristol MPO. Several key federal programs support trail projects that reduce congestion, enhance mobility, and strengthen multimodal connectivity. The following is a list of federal funding sources:

## The Congestion Mitigation/Air Quality Improvement Program (CMAQ)

**Agency:** Federal Highway Administration, administered by VDOT

**Description and Eligibility:** The CMAQ program provides a funding source for state and local governments to fund transportation projects and programs to help meet the requirements of the Clean Air Act (CAA). CMAQ funds support state and locally selected transportation projects that reduce mobile source emissions in both current and former areas designated by the U.S. Environmental Protection Agency (EPA) to be nonattainment or maintenance of the national ambient air quality standards for ozone, carbon monoxide, and/or particulate matter.

Many types of projects are eligible under the CMAQ program including electric vehicles and charging stations, diesel engine replacements and retrofits, transit improvements, bicycle and pedestrian facilities, shared micromobility projects including shared scooter systems, and more. In addition to improving air quality and reducing congestion, CMAQ projects can improve safety, and promote the application of new and emerging technologies.

**More Information:** [https://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](https://www.fhwa.dot.gov/environment/air_quality/cmaq/)

## Transportation Alternatives Program (TAP)

**Agency:** Administered by VDOT

**Description and Eligibility:** This federal reimbursement program is intended to help local sponsors fund community-based projects that expand non-motorized travel choices and enhance the transportation experience by improving the cultural, historical, and environmental aspects of the transportation infrastructure. The program focuses on providing pedestrian and bicycle facilities and community improvements. It does not fund traditional roadway projects or maintenance. The TAP expands travel choices, strengthens local economy, improves quality of life, and protects the environment.

**Funding and Match:** Minimum 20% local match required.

**More Information:** <https://www.vdot.virginia.gov/doing-business/for-localities/local-assistance/transportation-alternatives/>

## Surface Transportation Block Grant Program Direct Attributable (STBGP-DA) and Transportation Alternative Set Aside Direct Attributable (TASA-DA) Funds

**Agency:** Federal funds distributed by MPOs

**Description and Eligibility:** STBGP-DA and TASA-DA are federal funding sources distributed by MPOs. Member jurisdictions of MPOs are eligible to apply for these funds through a competitive funding process that prioritizes locally administered projects. These projects are funded using the federal funding sources directly attributed to the region with a minimum 20% local match.

**Funding and Match:** Minimum 20% local match required.

**More Information:** <https://www.bristoltn.gov/136/Metropolitan-Planning-Organization>



### Better Utilizing Investments to Leverage Development (BUILD) Grant Program

**Agency:** U.S. Department of Transportation

**Description and Eligibility:** Formerly the RAISE grant, the BUILD grant program provides grants for surface transportation infrastructure projects with significant local or regional impact. The eligibility requirements of BUILD allow project sponsors, including state and local governments, counties, Tribal governments, transit agencies, and port authorities, to pursue multi-modal and multi-jurisdictional projects that are more difficult to fund through other grant programs. This program has funded pedestrian and bicycle projects in the past.

**Funding and Match:** Capital projects grants range from \$1 million to \$25 million. A minimum 20% local match is required.

**More Information:** <https://www.transportation.gov/BUILDgrants>

### Carbon Reduction Formula Program (CRP)

**Agency:** U.S. Department of Transportation

**Description and Eligibility:** The CRP is a federal funding program created under the Bipartisan Infrastructure Law (BIL) to help reduce transportation-related carbon emissions.

**Funding and Match:** A minimum 20% local match is required.

**More Information:** [https://www.fhwa.dot.gov/infrastructure-investment-and-jobs-act/crp\\_fact\\_sheet.cfm](https://www.fhwa.dot.gov/infrastructure-investment-and-jobs-act/crp_fact_sheet.cfm)

### Earmarks/Congressionally Directed Spending/Community Project Funding

**Agency:** Members of Congress; funds are distributed through a federal agency

**Description and Eligibility:** These are federal funds set aside at the request of individual members of congress for specific local or regional projects. These funds are included in the annual federal appropriations bills and do not go through a competitive grant process

**Funding and Match:** A selected dollar amount will be included in the earmark.

### Land and Water Conservation Fund (LWCF)

**Agency:** U.S. Department of the Interior, administered by the Virginia Department of Conservation and Recreation

**Description and Eligibility:** The LWCF was established by Congress in 1964 to fulfill a bipartisan commitment to safeguard natural areas, water resources and cultural heritage, and to provide recreation opportunities to all Americans. The fund helps strengthen communities, preserve history and protect the national endowment of land and water. The program supports the acquisition and development of public outdoor recreation areas and facilities. All funded projects must be open to the public and used for outdoor recreation in perpetuity.

**Funding and Match:** This grant requires a 50% local match.

**More Information:** <https://www.doi.gov/lwcf>

### Highway Safety Improvement Program (HSIP)

**Agency:** U.S. Department of Transportation

**Description and Eligibility:** The HSIP is a core Federal-aid program with the purpose of achieving a significant reduction in traffic fatalities and serious injuries on all public roads, including non-State-owned roads and roads on tribal land. HSIP requires a data-driven, strategic approach to improving highway safety on all public roads with a focus on performance.

**Funding and Match:** A minimum 10% local match is required.

**More Information:** <https://highways.dot.gov/safety/hsip>



# State Funding

The state of Virginia offers several dedicated funding sources that can be used to support the planning, development, and expansion of multi-use trails and active transportation. Agencies with grant programs include VDOT and the Department of Conservation and Recreation (DCR). Below is a list of state funding sources:

## Six-Year Improvement Program

**Agency:** VDOT

**Description and Eligibility:** The Six-Year Improvement Program is Virginia’s official transportation funding and programming plan, developed and maintained by VDOT and the Commonwealth Transportation Board. It outlines transportation projects and funding allocations across a six-year period, and includes bicycle and pedestrian infrastructure, including trails. The state uses a process called SMART SCALE to evaluate potential transportation projects based on key factors like how they improve safety, reduce congestion, increase accessibility, contribute to economic development, promote efficient land use, and affect the environment. The anticipated benefits are calculated, and the projects are scored and ranked. This information is used by the Commonwealth Transportation Board to help guide and inform their project selection decisions.

**More Information:** <https://www.vdot.virginia.gov/projects/roads-funded/>

## State of Good Repair Program

**Agency:** VDOT

**Description and Eligibility:** This initiative provides funding to maintain and rehabilitate critical transportation infrastructures specifically, pavement and bridges on the Primary State Highway System and bridges on locally maintained roads. This program may be relevant if any existing roadways or bridges along the planned trail need rehab or replacement.

**More Information:** <https://www.vdot.virginia.gov/doing-business/for-localities/local-assistance/state-of-good-repair/>

## Revenue Sharing

**Agency:** VDOT

**Description and Eligibility:** The Revenue Sharing program is a cash-match funding, where state funds are matched with local funds for eligible projects. It is designed to support local governments in constructing, improving, reconstructing, or maintaining local and secondary road systems. Work must occur on VDOT maintained roadways, roadways a locality is receiving maintenance payments for, or roadways meeting new road or rural addition qualification requirements. Sidewalks, bike infrastructure, trails, and shared-use paths have been funded through this program.

**Funding and Match:** \$200 million is available each funding cycle. A locality can request \$10 million maximum per funding cycle. 50% local match required.

**More Information:** <https://www.vdot.virginia.gov/doing-business/for-localities/local-assistance/revenue-sharing/>

## Virginia Recreational Trails Program (RTP)

**Agency:** Virginia DCR

**Description and Eligibility:** RTP is a reimbursement program for building and rehabilitating trails and trail-related facilities. The program is administered by the Federal Highway Administration and funded through 2026 by the Infrastructure Investment and Jobs Act. The program mandates allocations be split among non-motorized, diversified and motorized trail categories.

**Funding and Match:** A minimum 20% local match is required.

**More Information:** <https://www.dcr.virginia.gov/recreational-planning/traillfnd>

## Ready, Set, Go! Transportation Alternatives Grant Program

**Agency:** VDOT

**Description and Eligibility:** “Ready, Set, Go!” (RSG!) is a technical assistance initiative administered by VDOT to help smaller communities refine and prepare transportation-related projects, especially trails, sidewalks, and bike-ped facilities, for future Transportation

Alternatives (TA) grant applications.

**Funding and Match:** Program provides 100% of funding, no local match is required.

**More Information:** <https://www.vdot.virginia.gov/doing-business/for-localities/local-assistance/transportation-alternatives/#Ready,Set,Go!TransportationAlternativesGrantProgram1>

## Regional Surface Transportation Program (RSTP)

**Agency:** VDOT, MPOs

**Description and Eligibility:** RSTP is a federal funding source that supports a broad range of transportation projects at the regional level. It is part of the larger Surface Transportation Block Grant Program, created under the Bipartisan Infrastructure Law and administered by state departments of transportation—in Virginia, through VDOT and MPOs.

**More Information:** <https://www.fhwa.dot.gov/specialfunding/stp/>

## Virginia Land Conservation Foundation

**Agency:** Virginia DCR

**Description and Eligibility:** This grant program’s mission is to support the conservation of ecologically, culturally, and recreationally significant lands across the Commonwealth.

**Funding and Match:** 50% local match is required.

**More Information:** <https://www.dcr.virginia.gov/land-conservation/vlcf>



### Virginia Transportation Infrastructure Bank (VTIB)

**Agency:** Virginia Resources Authority

**Description and Eligibility:** The VTIB is a revolving loan fund, as part of the Transportation Trust Fund. VTIB provides loans and financial assistance to support transportation infrastructure projects across Virginia. Financial assistance from the VTIB may be provided to a locality, a private entity and/or another eligible borrower.

**Funding and Match:** Funding is provided as loans.

**More Information:** <https://www.buyvrabonds.com/programs/>

[https://www.vdot.virginia.gov/media/vdotvirginiagov/projects/how-projects-are-funded/VTIB\\_-\\_Guidelines\\_and\\_Criteria.pdf](https://www.vdot.virginia.gov/media/vdotvirginiagov/projects/how-projects-are-funded/VTIB_-_Guidelines_and_Criteria.pdf)

<https://www.vdot.virginia.gov/projects/roads-funded/>

### Transportation Partnership Opportunity Fund (TPOF)

**Agency:** VDOT

**Description and Eligibility:** The TPOF is a special financing tool administered by VDOT, under the discretion of the Governor. It supports transportation projects closely tied to economic development goals across Virginia.

**Funding and Match:** Grants can be up to \$5 million per project and Loans can be up to \$30 million per project.

**More Information:** <https://www.vedp.org/incentive/transportation-partnership-opportunity-fund-tpof>

### Virginia State Trails Office

**Agency:** VDOT

**Description and Eligibility:** The Virginia State Trails Office was created to coordinate, support, and accelerate the development of multi-use trails across the Commonwealth. This office administers the RTP program, however can also provide direct funding.

**More Information:** <https://www.vdot.virginia.gov/about/programs/state-trails-office/>

### Appalachian Regional Initiative for Stronger Economies (ARISE)

**Agency:** Appalachian Regional Commission (ARC)

**Description and Eligibility:** Appalachian Regional Initiative for Stronger Economies (ARISE) is ARC’s multi-state initiative that aims to drive large-scale, regional economic transformation through collaborative projects.

ARISE encourages initiatives that go beyond state borders and help the 13 Appalachian states advance ARC’s strategic investment priorities as one, united Appalachia. The multi-state projects supported by this initiative are

strengthening Appalachian business and industry, and growing and supporting the development of new opportunities across multiple economic sectors.

**Funding and Match:** Maximum award for implementation grants is \$10 million. Match rate depends on ARC’s economic status classification for the project area; these classifications are updated yearly, with greater support provided to more distressed counties and areas. Washington County and Bristol City are classified as “Transitional” for FY2026, meaning the match is 50%.

**More Information:** <https://www.arc.gov/grants-and-opportunities/arise/>

### Area Development Program

**Agency:** Appalachian Regional Commission (ARC)

**Description and Eligibility:** ARC’s Area Development Program relies on a flexible “bottom up” approach to economic development, empowering Appalachian communities to work with their state governments to design impactful investment opportunities supporting our mission and investment priorities.

Within the scope of ARC’s strategic plan, the Area Development Program makes investments in two general areas: critical infrastructure and business and workforce development. Critical infrastructure investments mainly include water and wastewater systems, transportation

networks, broadband, and other projects anchoring regional economic development. Business and workforce investments primarily focus on entrepreneurship, worker training and education, food systems, leadership, and other human capital development

**Funding and Match:** Match rate depends on ARC’s economic status classification for the project area; these classifications are updated yearly, with greater support provided to more distressed counties and areas. Washington County and Bristol City are classified as “Transitional” for FY2026, meaning the match is 50%.

**More Information:** <https://www.arc.gov/grants-and-opportunities/area-development-program/>



# Private Funding

Private funding sources can play a crucial role in bringing trail projects to life, as private sources can fill gaps when public funds are limited or require local match contributions. Private sources can include contributions from businesses, foundations, nonprofits, and community donors who can provide seed money, fill critical gaps, or enhance the project with features such as art, signage, landscaping, and trailhead amenities. Private investment can signal strong community support and help build momentum for public-private partnerships. Below is a list of private funding sources:

## Rails to Trails Conservancy: Various Grants

**Description and Eligibility:** Since 2008, the Rails to Trails Conservancy has provided more than \$3.38 million in grant funding to nearly 300 organizations seeking to create, connect and maintain the nation's trails, building vibrant trail networks that connect neighborhoods and regions, and make it possible for America to walk, bike and be active outside.

**More Information:** <https://www.railstotrails.org/grants/>

## American Trails: Legacy Trails Program

**Description and Eligibility:** This program is funded up to \$1.35M per year for 5 years through the Bipartisan Infrastructure Law and supports partner trail projects that further the Legacy Roads and Trails criteria on National Forest System trails throughout the nine Forest Service Regions. The goal of the program is to support projects that restore, protect, and maintain watersheds on our national forests and grasslands. American Trails is administering this grant program and soliciting applications for funding.

**Funding:** Awards of up to \$100,000 per project.

**More Information:** <https://www.americantrails.org/the-trails-capacity-program>

## People for Bikes: Bike Industry Community Grant

**Description:** People For Bikes' Bike Industry Community Grant Program supports bicycle infrastructure projects and targeted initiatives that make it easier and safer for people of all ages and abilities to bike. Project costs related for the development of permanent bike infrastructure, including trails and shared use paths are eligible to apply.

**Funding:** Grants range from \$5,000 to \$10,000.

**More Information:** <https://www.peopleforbikes.org/grant-guidelines>

## The Conservation Alliance: Various Grants

**Description:** The Conservation Alliance has awarded millions in funding for conservation projects. From California to Alaska, Montreal to Texas, our alliance of businesses investing in community-led organizations who are committed to protecting clean air, clean water, wild places, and watersheds across North America. .

**More Information:** <https://conservationalliance.com/grants/>

## Open Space Institute: Various Grants

**Description:** Open Space Institute provides grants that support the strategic use of land protection to address climate change and water quality in select geographies in the eastern US.

**More Information:** <https://www.openspaceinstitute.org/how/funding>

## Quadratic: Energize the Environment Grant Program

**Description:** Eligible projects may include trail building or restoration, litter prevention initiatives, sustainable land management activities, and community environmental education projects.

**Funding:** \$3,500 grants.

**More Information:** <https://www.quadratic.com/page/quadratic-cares-grant-program>

## America Walks: Community Change Grants

**Description:** The Community Change Grants program supports the growing network of community champions, organizations, and agencies working to advance walkability. Grants are awarded to innovative and engaging programs and projects that create change and opportunity for walking and movement at the community level.

**More Information:** <https://americawalks.org/programs/community-change-grants/>



# **Mendota Trail to Downtown Bristol Connector**

## *Feasibility Study and Pre-Engineering Plan*

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