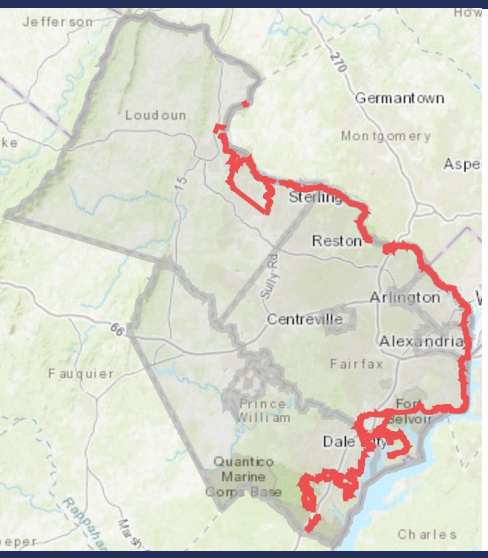
EXECUTIVE SUMMARY

NORTHERN VIRGINIA POTOMAC HERITAGE NATIONAL SCENIC TRAIL:

Health, Social Equity, and Economic Impact Study

January 2022



The Northern Virginia Regional Commission (NVRC) partners with the National Park Service through a cooperative agreement to coordinate the Potomac Heritage National Scenic Trail (PHNST) in Northern Virginia. NVRC was the grantor and manager of a study conducted by BBC Research & Consulting to analyze the health, social equity, and economic impacts of PHNST in Northern Virginia. Virginia Department of Health further supported this project with a focus group study by Equitable Cities.

The PHNST is a scenic, recreational trail currently spanning approximately 140 miles through Northern Virginia from Loudoun County to the mouth of the Potomac River in southern Prince William County, albeit with some incomplete sections.

STUDY OBJECTIVES

To assist the National Park Service, NVRC, local, state, and federal partners will use the results of this research to develop a deeper understanding about why the trail and its completion are valuable to Northern Virginia. The research assessed the public health and community-related impacts associated with the use of the trail to help justify the appropriate investment of resources in trail infrastructure and programming.

The study evaluated existing conditions, two planned or recently completed gaps, and benefits of completing trail gaps from Leesburg to southern Prince William County. The study did not include an analysis of the trail gap from Leesburg on north to the border of Loudoun County near Harpers Ferry, West Virginia. The analysis focused on the trail corridor and areas of Northern Virginia within a 1.5-mile distance of the trail. A number of resources and methodologies were utilized as outlined in the report and dashboard. Results reflect conservative numbers based upon pre-COVID-19 pandemic, 2019 trail usage. Current usage during the COVID-19 pandemic has been reported to be significantly higher.

The study addressed:

- **HEALTH IMPACTS on local residents**
- **SOCIAL EQUITY of access and usage**
- **ECONOMIC IMPACTS for the region**
- **TRANSPORTATION BENEFITS provided by the trail**

nvrc Northern Virginia Regional Commission

POTOMAC HERITAGE NATIONAL SCENIC TRAIL

NATIONAL PARK SERVICE

BBC RESEARCH & CONSULTING

ANNUAL TRAIL USE

The study found that trail users walk 13.6 million miles and bike 45 million miles each year. On average this represents 100,000 miles of walking and 300,000 miles of biking for each mile of the completed trail.

WALKING

13.6 million
miles walked on the trails annually

100,000 times a year
that each mile of trail is walked on average

70% of users
are regional residents

BIKING

45 million
miles biked on the trails annually

300,000 times a year
that each mile of trail is biked on average

67% of users
are regional residents

** Modeled using existing counter, Streetlight, and Strava data. Annual usage based on 2018 data.*

Health Benefits

REDUCED MORTALITY BENEFITS

9 million miles walked annually → **13 deaths** prevented **$139 million**

30 million miles biked annually → **19 deaths** prevented **$210 million**

$349 million
in annual reduced mortality benefits

AVOIDED HEALTH CARE COSTS

2.7 million walking trips lasting at least 30 minutes → **$23 million** avoided health care costs

3.8 million biking trips lasting at least 30 minutes → **$32.3 million** avoided health care costs

$55 million
total annual avoided health care costs

BENEFITS OF THE EXISTING TRAIL

Trails provide a wide range of recreational values, services, and protection of natural and cultural features and contribute to social and economic wellbeing. The study found that the trail's benefits total $494 million annually for the existing segments.

$404 million
in health benefits

$86 million
of direct economic impacts

$4 million
in avoided transportation costs

Economic Benefits

TRAIL-FACING BUSINESSES

Businesses within 1.5 miles of the trail, limited to restaurants and retail establishments related to outdoor activities.

$86.8 million
in total annual revenue generated by 254 trail-facing businesses

$3.8 million
generated by 16 outdoor retail establishments

$83 million
generated by 238 restaurants

Social Equity Analysis

SOCIALLY VULNERABLE COMMUNITIES ALONG PHNST

- Fewer trail access points
- More trail gaps and unplanned route segments
- Higher traffic crashes of pedestrians/cyclists
- Less access to transit

MAIN MESSAGE OF COMMUNITY FROM FEEDBACK

- Improve accessibility
- Create more welcoming environment for all users and abilities

Transportation Benefits

COMMUTING

Based on data from StreetLight, commuting on the PHNST accounts for:

1.9 million
miles of walking annually

4.6 million
miles of biking annually

45,000 miles
of commuting each year per average mile of trail

AVOIDED TRANSPORTATION COSTS

$3.7 million
personal vehicle costs avoided

$480,000
environmental costs avoided

Reductions in environmental pollutants:

27 metric tons of CO
1.2 metric tons of NOx
2,500 metric tons of CO2e

BENEFITS OF COMPLETING TRAIL GAPS IN NORTHERN VIRGINIA

Completion of trail gaps in the region are estimated to add $101 million in annual health benefits and will improve impacts across all other areas of analysis.

The study evaluated the health and commuting benefits for completing planned and unplanned segments of trail gaps in Northern Virginia south of Leesburg. The study estimates gap closure will add 2.2 million miles walked and 7.4 million miles biked annually. Completing gaps will avoid 1.6 million commuting miles annually.

Two case studies were conducted that reinforced the extensive benefits from completion.

1) The Neabsco Creek boardwalk

2) The PHNST branch loop is planned along the Broad Run and Goose Creek

Please see the dashboard for details.

By completing gaps and connecting the trail across multiple jurisdictions, the trail becomes a long-distance throughway for greater recreation use, and more of a destination of itself.

Completing all Gaps

PLANNED ROUTES

There are currently approximately 21 miles of planned routes to close gaps in the PHNST. Completing these planned trail segments might result in the following annual benefits for the northern Virginia region:

- **1.3 million** additional miles walked
- **4.5 million** additional miles biked
- **$7.9 million** in avoided health care costs
- **$52.4 million** in mortality reduction benefits *(-5 fatalities/year)*
- **960,000 miles** of avoided commuting
- **$627,000** in avoided commuting costs

UNROUTED GAPS

Some gaps in the PHNST currently do not have a planned route. BBC worked with NVRC to estimate the potential length of trail required to close those gaps (13.7 miles). Completing these unrouted gaps might result in the following additional annual benefits for the northern Virginia region:

- **900,000** additional miles walked
- **2.9 million** additional miles biked
- **$5.2 million** in avoided health care costs
- **$34.1 million** in mortality reduction benefits
- **630,000 miles** of avoided commuting
- **$410,000** in avoided commuting costs

RECOMMENDED ACTIONS IN ADDITION TO TRAIL COMPLETION

Design: Create spaces with good lighting, sight lines, and amenities.

Programming: Work with community organizations to encourage trail use by underserved populations (e.g., activities and programs).

Communication: Make the trail welcoming to all users. Provide wayfinding and signage.

Education: Help enforcement and local governments understand the unique needs of the community.

Safety: Improve pedestrian and bicycle safety along the trail and adjacent networks.

Data collection: Bolster local government efforts to collect pedestrian and bicycle trail usage.

Outreach: Ensure broad input from all stakeholders regarding future infrastructure and amenity investments.