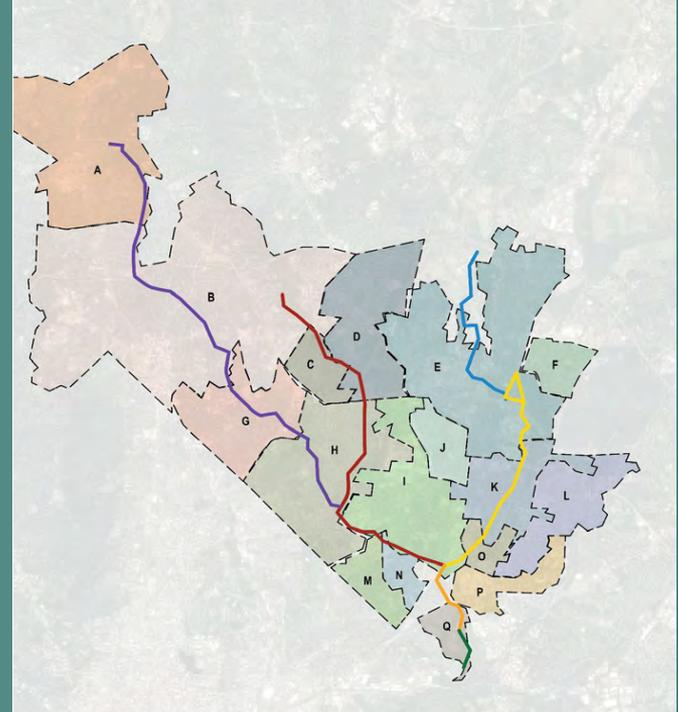


Exploring Public Access Along the Anacostia River Trail System

URSP 600 | Spring 2023



CREDITS

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Under the supervision of

Professor Alex Donahue, AIA

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PROJECT OVERVIEW

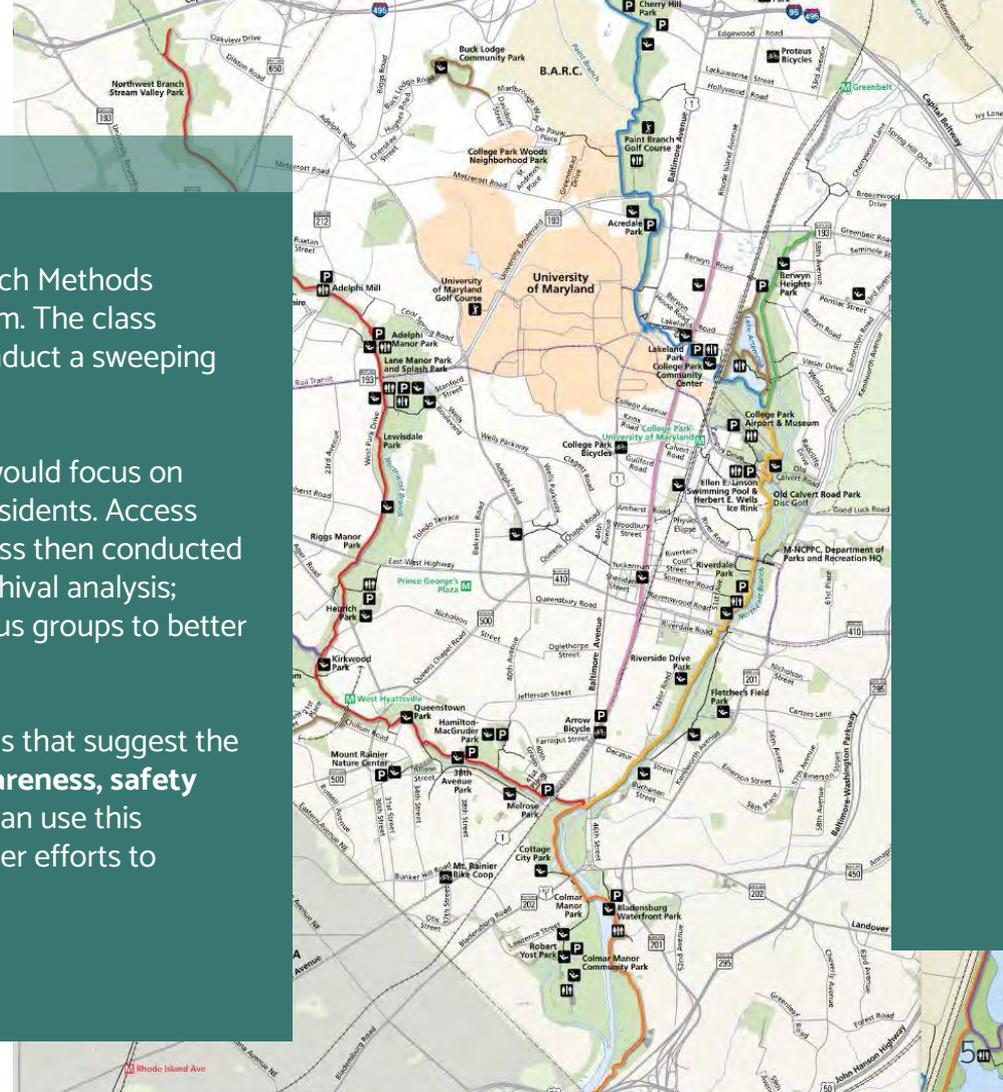
- Abstract
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This past semester, class members of URSP600: Qualitative Research Methods worked on a PALS project regarding the Anacostia River Trail System. The class partnered with Prince George's County Planning Department to conduct a sweeping study of the trail system: its physical attributes, users, and history.

Upon concluding initial research, the class agreed that their study would focus on potential barriers to trail access amongst Prince George's County residents. Access refers to general access to the trail versus ADA compliance. The class then conducted various forms of research through demographic, economic, and archival analysis; physical, aural, and participant observations; and interviews and focus groups to better understand these potential barriers.

At the end of the semester, the class produced a report with findings that suggest the **three most significant barriers to trail access may be lack of awareness, safety concerns, and difficulties with physical access.** The department can use this foundational analysis of the trail and its users as they undergo further efforts to improve the Anacostia River Trail System.



METHODS

Demographic & Economic Analysis

ANALYSIS OF EXISTING CONDITIONS IN AREAS SURROUNDING THE TRAIL

Archival Analysis

HISTORY SURROUNDING THE TRAILS AND THEIR NEIGHBORHOODS

Observation

SILENT OBSERVATION OF PEOPLE'S ACTIVITY AND THE SURROUNDING ENVIRONMENT

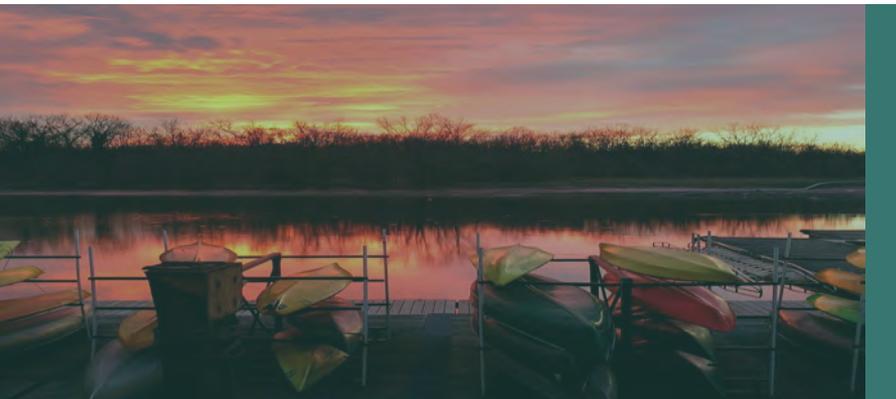
Surveys & Interviews

WHAT CURRENT TRAIL USER EXPERIENCE



Main Question

How might the Anacostia Tributary Trail System be made more accessible to the public?



Sub-questions

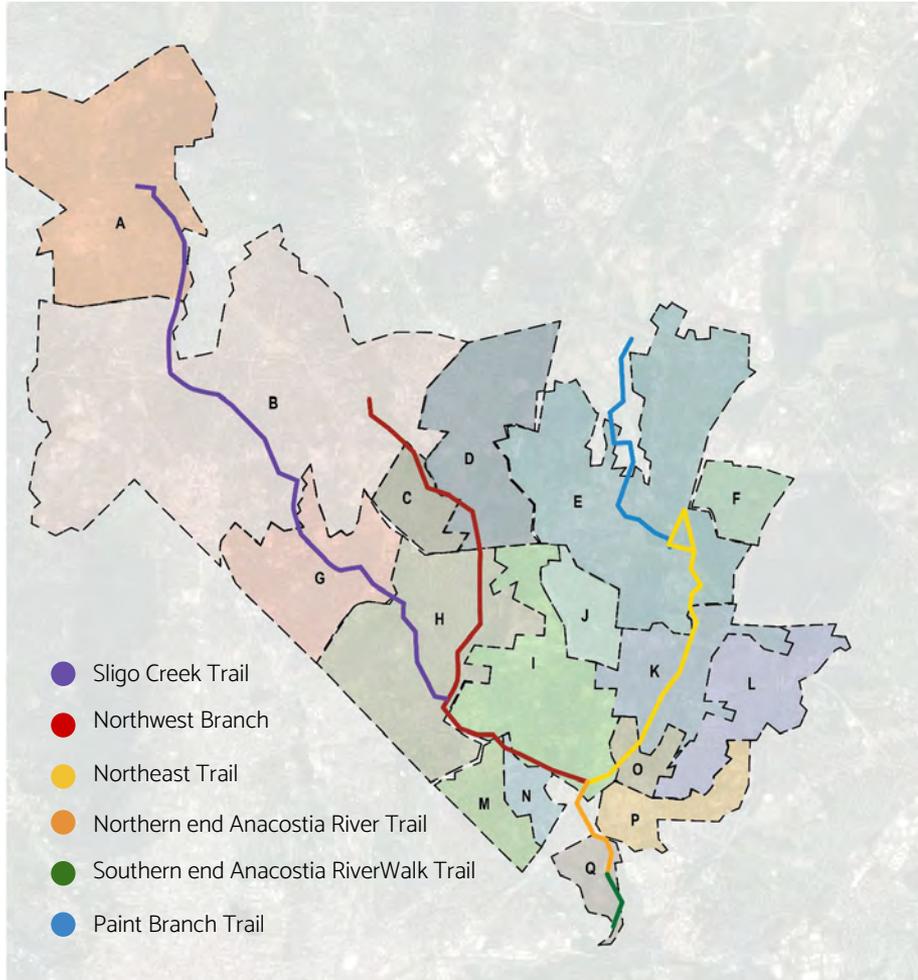
- What physical barriers might exist?
- What social/emotional barriers might exist?
- What political/regulatory barriers might exist?
- What financial barriers might exist?
- How could these barriers potentially be alleviated?

JURISDICTIONAL MAP SLIDE

JURISDICTIONS

- A. Wheaton
- B. Silver Spring
- C. Langley Park
- D. Adelphi
- E. College Park
- F. Berwyn Heights
- G. Takoma Park
- H. Chillum
- I. Hyattsville
- J. University Park
- K. Riverdale Park
- L. East Riverdale
- M. Mount Rainier
- N. Brentwood
- O. Edmonston
- P. Bladensburg
- Q. Colmar Manor

The trail system spans through various jurisdictions in both Prince George's and Montgomery County.



GROUP LIT REVIEWS



- The Impact of Third Places on Community Quality of Life
- Use of a Community Trail Among New and Habitual Exercisers: A Preliminary Assessment
- How To Study Public Life
- West Jasper Place - Community Profile



The Impact of Third Places on Community Quality of Life

Jeffres, 2009



This study focuses on identifying third places and how they can improve the quality of life in communities. Third places are social spaces that are separate from home and workplaces.

Research questions:

- “What are the characteristics of ‘third places’ the general public identifies as sites where they go to interact?”
- Does the type of third place available to community residents vary by the type of community in which they live?”

Limitations:

The study was conducted in 2005 - 2006 across U.S households and notes the growing importance of online communities yet does not consider online communities as public spaces or third places.

Key findings:

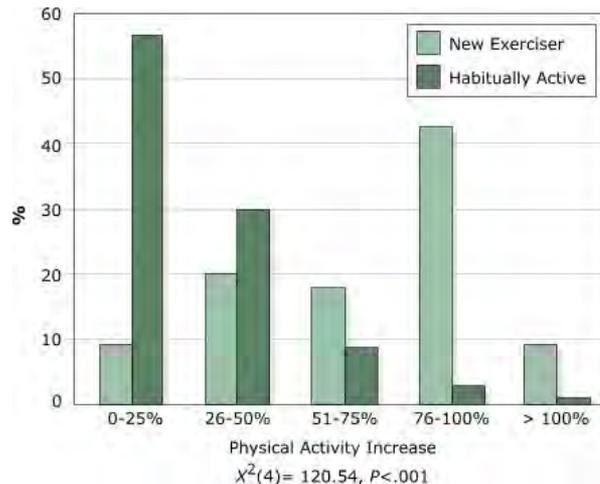
Residents who believed they had third places saw their quality of life to be better. Our study on trails is a “third place.” It is important to understand the characteristics and effectiveness of this trail’s sense of community.

Method 1: Surveys - A telephone survey allowing for open-ended questions about where public community spaces exist where residents might communicate with each other, along with demographic questions.

Method 2: Coding - Open-ended answers for third places were grouped into three categories; 1) an emphasis on eating and drinking; 2) outside public and inside private neighborhood locations for congregating; and 3) centers and organizations that would attract residents.

Use of a Community Trail Among New and Habitual Exercisers: A Preliminary Assessment

Gordon, 2004



This study focuses on patterns in trail use and physical activity in Morgantown, West Virginia.

Relevance to study:

This study is relevant because it uses onsite interviews to measure barriers and frequency of trail use. Participants ranged their responses on a Likert scale. It is important to note that this study defines barriers as physical alone and does not include sociological or cultural factors.

Research Question:

How do activity levels affect trail users' perceptions of barriers and characteristics of trails?

Key Findings:

New exercisers (people who exercise less than three times per week) traveled shorter distances to access the trails compared with habitually active exercisers. New exercisers found safety, terrain, and convenience to be more significant barriers than habitually active exercisers.

Methods:

Onsite trail interviews

Limitations:

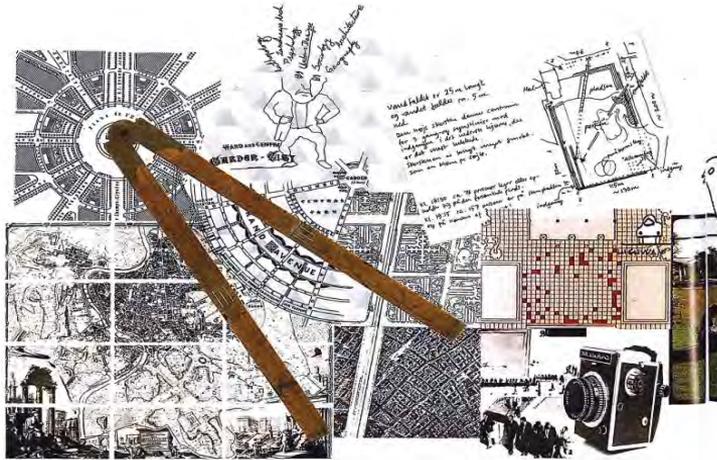
- A true survey response rate could not be calculated
- Opinions were collected from 414 adults in a community with a population of 26,809

Lit Review

Groups B + C: Kayla, Aaron, Alanna, Maura, Jona, Megan, and Mimi

How To Study Public Life

Gehl and Svarre, 2017



Relevant to Study:

This book discusses various methods used in studying public space. It showcases locations worldwide and includes methods such as counting, mapping, tracking, tracing, looking for traces, photographing, keeping a diary, and test walks.

The book is relevant to our research project because we use similar methods for physical and aural observations on the trail, including counting, photographing, and keeping a diary.

Methods:

Counting: numbers for making comparisons before and after, between different areas, or over time

Mapping: plotting activities, people, and places where they take place

Tracing: people's movements can be drawn as lines

Tracking: following people

Looking for traces: litter, dirt patches on grass, signs of activity

Photographing: taking pictures to document situations

Keeping a diary: register details and nuance about the observations so that they can later be categorized and quantified

Test walks: noticing things on a given route

Lit Review:

Group D: Sarah, Annonya,
Sururah, Bill

PILOT STUDY REVIEW



- Group A: Paint Branch Trail
- Group B: Northeast Branch Trail
- Group C: Northwest Branch Trail
- Group D: Rhode Island Avenue Trolley Trail
- Group E: Anacostia Riverwalk Trail (Maryland Section)

Photo by Maura Dwyer

Pilot Study Review

As an introduction to the trail, our class was divided into five groups, each taking a section of the trail. Our goal for the Pilot Study was to familiarize ourselves with the trail, practice observation skills, and share initial reactions with classmates. While walking our designated section of the trail, we took notes and photos to share reactions and develop a shared understanding of the trail as a whole.

Trail Sections:

1. **Paint Branch Trail**
2. **Northeast Branch Trail**
3. **Northwest Branch Trail**
4. **Rhode Island Avenue Trolley Trail**
5. **Anacostia River Trail (Maryland Section)**

Paint Branch Trail

We walked the Paint Branch Trail in the morning on Saturday, February 19. We walked Lake Artemesia and Little Indian Creek Trail on Monday, February 20, at around 4 pm. This day was also a holiday.



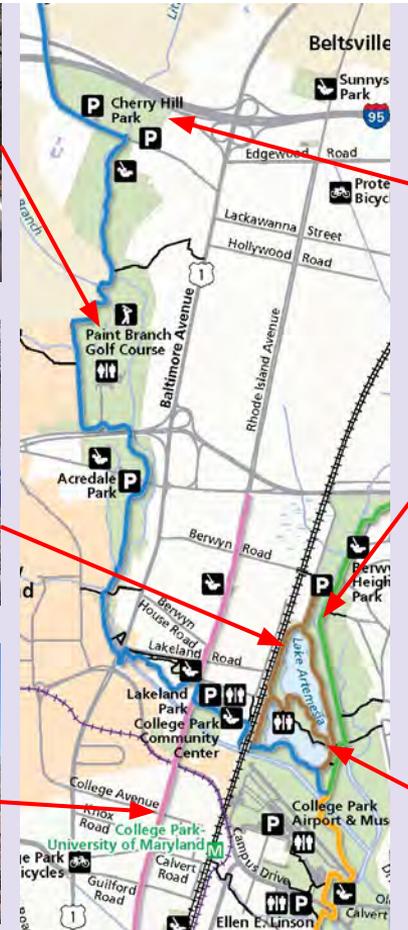
Intersection of Paint Branch Trail & College Park Woods



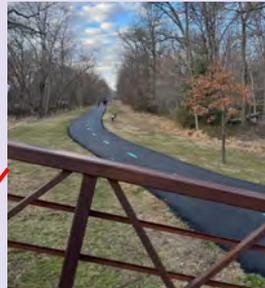
Restrooms in Lake Artemesia



Development along trail near campus



Crossing before Cherry Hill Park next to College Park Marketplace



From bridge facing Indian Creek Trail



Lake Artemesia entry signage and parking

Key Findings

1. Heavy pedestrian traffic (on a holiday at 4pm)
2. Multimodal use (walk, jog, bike, scooter, e-bike, hoverboard, skateboard)
3. Range in conditions of the trail equipment
4. Plenty of signage, but not good condition
5. UMD & Lake Artemesia acted as hubs

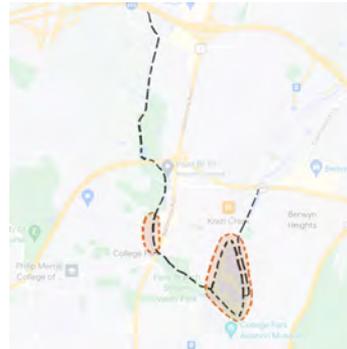
Pilot Study

Group A: Maisha, Sam, Jihee, Judy

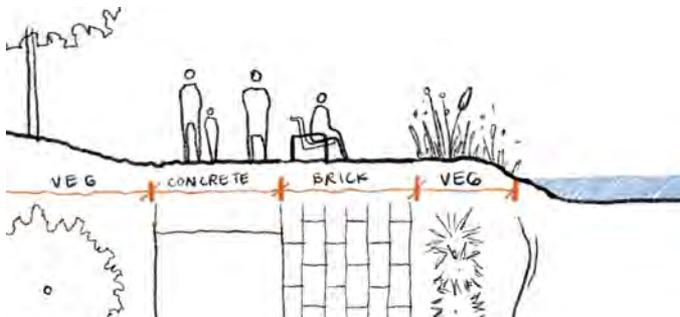
Paint Branch Trail



Path vs. Pause



Hubs as Safety



Section showing changes in ground conditions

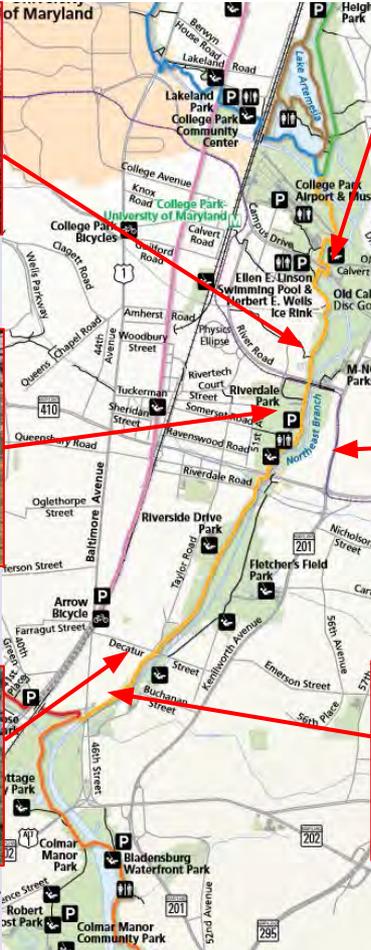
This part of the Anacostia Trail System is busiest around specific hubs and public spaces, including UMD's campus and Lake Artemesia. The trail is relatively well maintained around these areas, but the trails start to feel quiet and unsafe the farther away from these hubs. Signage gets confusing at varying degrees in different locations, and amount of people differ as well.

Closer to UMD, the Paint Branch trail is used by students more frequently, offering connectivity to other parts of Route 1 and College Park. For people farther away from campus, the trail is used more for community and recreational activities and has a more diverse set of users. Lake Artemesia and Indian Creek trail connects the neighborhoods with more recreational users but becomes quieter further away from Lake Artemesia.

Northeast Branch Trail



Northern section showing Purple Line construction detour remnants



Northern section with wayfinding and shelter



Middle section of trail that parallels parking lots of Riverdale Park Community Recreation Center



Typical narrow, blind turn under bridges



Southern section of trail showing lack of shade, but basic amenities.



Southern section of trail showing lack of shade, informal drainage solutions and minimal signage.

Our group walked the Northeast Branch on different days and at different times (mainly in the afternoon and evening) throughout the week of February 13 to capture the broadest experience. We divided the trail in fourths to ensure we captured its entirety.

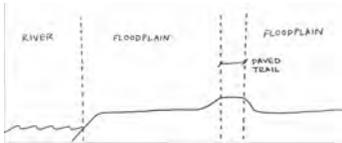
Key Findings

1. Exposed paved trail with minimal amenities (bathrooms, benches, lack of shade)
2. Existing signage is confusing and in bad shape
3. Users consist of joggers, walkers, dog walkers, and bikers, mainly solos and groups of 2-3
4. Poor connectivity to existing nearby parks/recreation areas/parking/access
5. Lack of lighting and other safety features - especially when in woods and underneath bridges

Northeast Branch Trail



Purple dots show adjacent recreational spaces along NE branch of trail



Section of raised trail, just south of Riverdale Park



Collage showing how difficult it is to see safety signs from the trail



Long portions of the trail along the floodplain without shade or amenities



Additional documentation of trail portions without shade

Long stretches of relatively smooth pavement along an exposed floodplain dominate the Northeast Branch Trail with minimal amenities (bathrooms, trash cans, benches, signs, and maps.) The amenities that do exist cluster around parking lots and existing parks, used predominantly by Spanish speakers.

While the Northeast Branch Trail runs alongside many parks, thanks to the river or irrigation ditches, there is low connectivity (with Riverdale Community Park being the exception). Numerous traces of informal activity are along the trail, with many paths leading to neighborhoods and homemade drainage solutions.

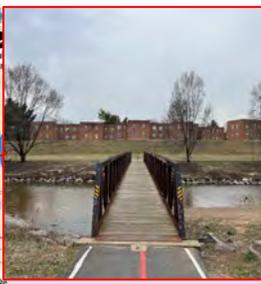
There is minimal lighting at night, which reduces trail use, but during the day, we found ourselves consistently passed by people, signaling the trail's popularity. We observed people of all ages, mainly walking their dogs, walking, and running in groups of 2 or 3.

Northwest Branch Trail

On Feb 20th around noon, our group walked this trail split into two groups so we could cover the entire trail. Each group started off on opposite ends of the trail.



5 mile Marker along the Northwest Branch Trail showcasing the limited directional signage.



Small bridge showcasing residential infrastructure located along the trail.



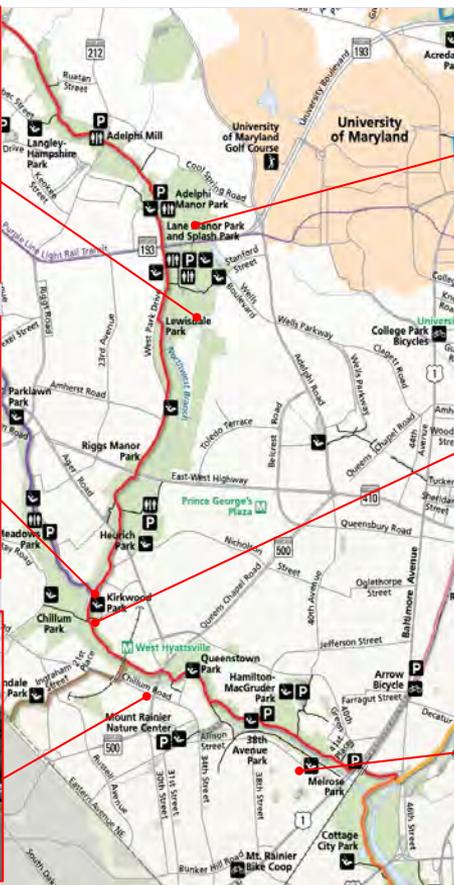
Directional markers located on the paved trail to separate bike riders.



Trail traversing an underpass.



No Motor Vehicle sign by a playground



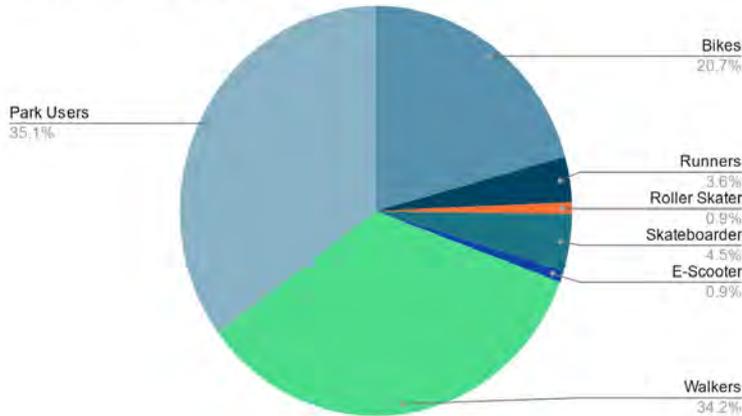
Non-Functioning crosswalk sign

Key Findings

1. Signage and trail conditions vary by park.
2. Trail tends to be paved and in decent condition.
3. Walking and playground use were the primary uses.
4. Most safety infrastructure was near metro station.
5. Land use adjacent to trail predominantly residential.

Northwest Branch Trail

Observed Trail Use

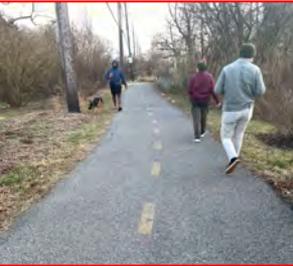


The Northwest Branch Trail is a 7.25-mile-long paved trail traversing multiple communities (primarily residential infrastructure), including several urban parks in Prince George’s County, Maryland.

The trail use is concentrated along the perimeter of the trail that traverses urban parks or play areas. Based on observations, most users walked the trail or used the park, capturing over 60% of observed use that day. Red markings along the trail identify the paved path as part of the trail system.

However, the use of GPS or other electronic navigation systems such as Apple or Google Maps fails to provide accurate directions to the trail. Instead, to get on to the trail, it is best to identify a park and then, while at the park, look for the red markings. There is limited directional signage on the trail and no benches in the northern portion of the trail extending from Lane Manor Park to Heurich Park.

Rhode Island Avenue Trolley Trail



Residential Area of the trail heavily used



Planters placed along the trail potentially maintained by residential community



Dog waste bags available in residential areas of the trail for dog walkers



Updated bridge



Residential area of trail



Connecting sidewalk infrastructure

On Feb 20th our group walked this section of the trail together in the afternoon and covered from our starting point at Lake Artemesia along Rhode Island to Hyattsville

Key Findings

1. Lack of water sources for people and pets
2. Safety concerns / lighting at night
3. Lack of directional signs
4. Positive access for outsiders and children
5. Purple line construction causes some disturbance
6. Width of trail sometimes too narrow
7. More amenities in residential areas of trail

Pilot Study

Group D: Annonya, Bill, Sarah, Surur

Rhode Island Avenue Trolley Trail

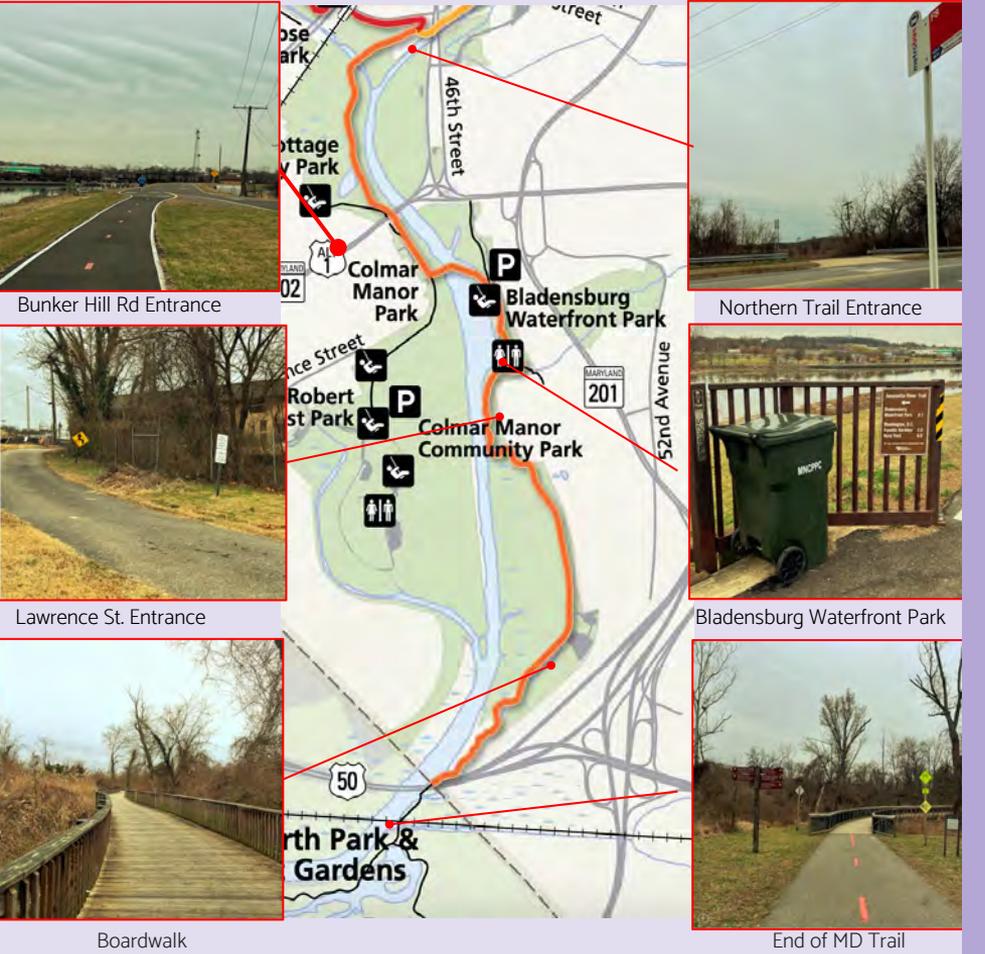


Images show areas along the Trolley Trail that have seating, scooter access, visible signage and areas to gather with maintained landscaping

This segment of the trail goes through several distinct and unique neighborhoods. The trail's northern end has residential and commercial units dispersed throughout. As we walked south, the neighborhoods became more residential and seemingly higher-income. Higher-income areas tended to have more community resources, such as a book trading library and community gardens. Towards the trail's end, the landscape became more large-scale commercial. The trail had multiple benches, trashcans, and dog-bag stations at several intervals. However, there were no water stations or public restrooms, which is concerning considering the large number of dog walkers.

In more forested areas, we became concerned that the trail would become unwelcoming and unsafe after sunset. We also discussed how the trail occasionally became too narrow for larger groups of people, particularly with a cyclist on the path.

Due to transportation and time constraints, our group of two walked the Maryland Section of the Anacostia River Trail on Monday, February 20th around 9AM. We started at the Northernmost entrance in Bladensburg and walked to the end of the train in Maryland.



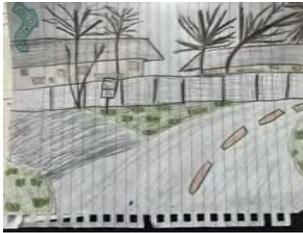
Key Findings

1. Lack of signage at various entry points and when it does exist it is worn down and hard to read
2. Not a lot of activity at the time when we were on the trail (9AM on a holiday Monday)
3. Decaying infrastructure was present (flimsy bridges, poorly paved trails, etc)
4. Lack of benches along the trail (accessibility issue?)
5. There was trash everywhere along the trail as well as in the river

Anacostia River Trail (Maryland Section)



Self-Identified Entrance
Diagram



Sketch of a Confusing Fork
in the Road



Sketch of the single bench
we saw on the trail

The Anacostia River Trail is hidden amidst the surrounding suburban and sprawl-filled area of Bladensburg. While the trail could be in better shape and is easier to navigate, it still provides access to scenic views of the river and allows the user to observe the greenery and surrounding wildlife.

While the trail is challenging to navigate, it is a great connection point to essential spaces such as the Bladensburg Waterfront Marina and the National Arboretum. An increased amount of visible signage would allow trail users to navigate the trail to reach these popular destinations properly.

METHODOLOGY

- Demographic & Economic Analysis
- Archival Analysis
- Physical & Aural Site Observations
- Participant Observations
- Survey & Interviews



Photo by Iona Elson

DEMOGRAPHIC AND ECONOMIC ANALYSIS

Caila Prendergast
Emma Walker
Carey Thorpe

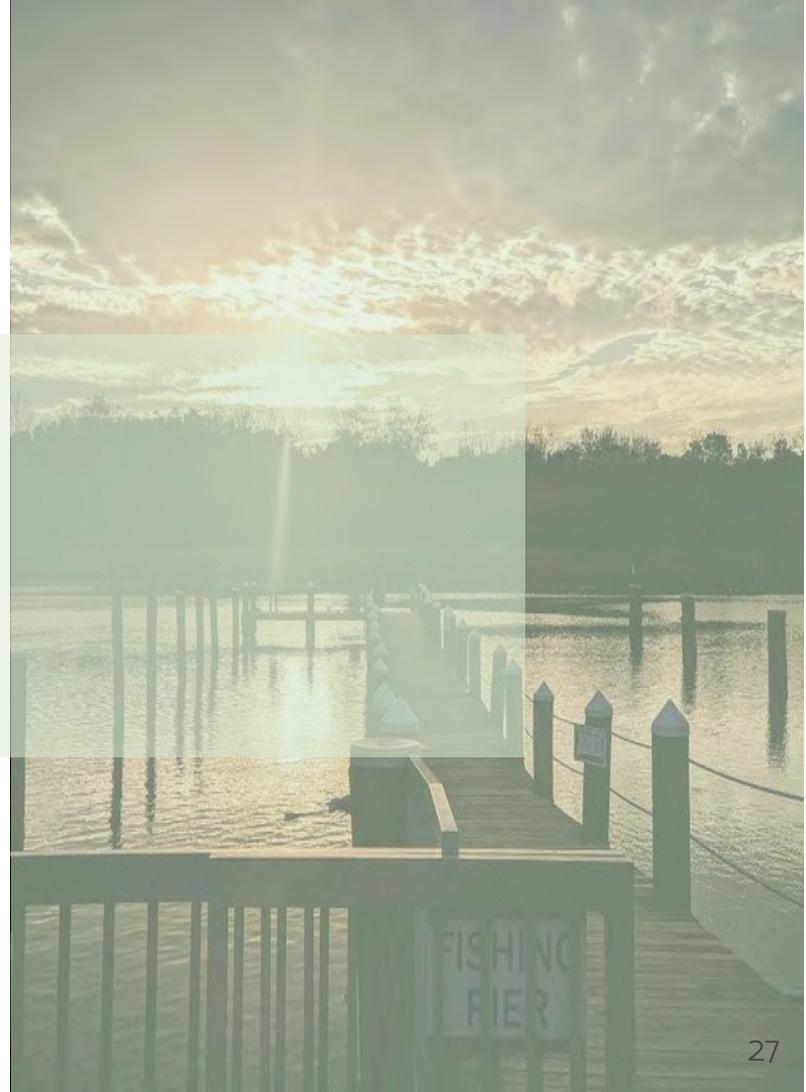




Photo source: Hyattsville Wire

IDENTIFICATION OF DEMOGRAPHICS

Upon reviewing other trail system economic and demographic analyses, we identified different categories that would be useful for our analyses, specifically as it relates to accessing the trail.

COMMUNITY SELECTION

After deciding on which demographics to focus on, we reviewed the map of the trail and determined areas to study. They were then divided into large areas, small areas, and counties.

DATA GATHERING & INTERPRETATION

The U.S. Census Bureau was the primary source of all our information, with some more specific information coming from community sources. The group split up the communities and collected data to then compile into charts and graphs.

Demographic
Analysis

SELECTED DEMOGRAPHICS



Population



Gender



Age



Median Income



Race and Ethnicity



Employment



Education



Household Characteristics



Language



**Commuting
Characteristics**

SELECTED COMMUNITIES

SMALL (<10,000)

Berwyn Heights
Bladensburg
Brentwood
Colmar Manor
Mount Rainier
Riverdale Park

LARGE (>10,000)

Adelphi
Chillum
College Park
East Riverdale
Hyattsville
Langley Park
Silver Spring
Wheaton

COUNTIES

Montgomery County
Prince George's County

RELATIONSHIP BETWEEN DEMOGRAPHICS AND TRAIL USAGE



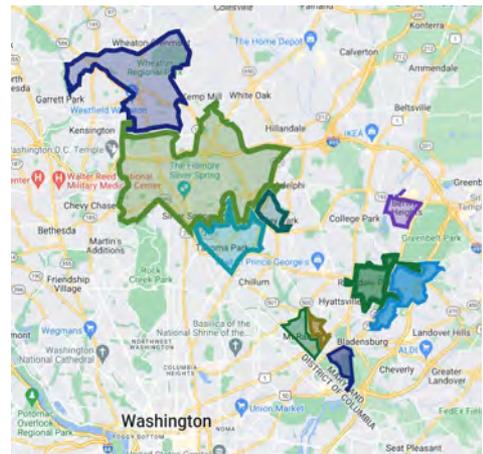
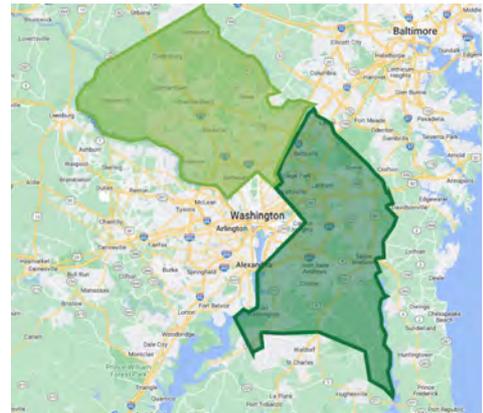
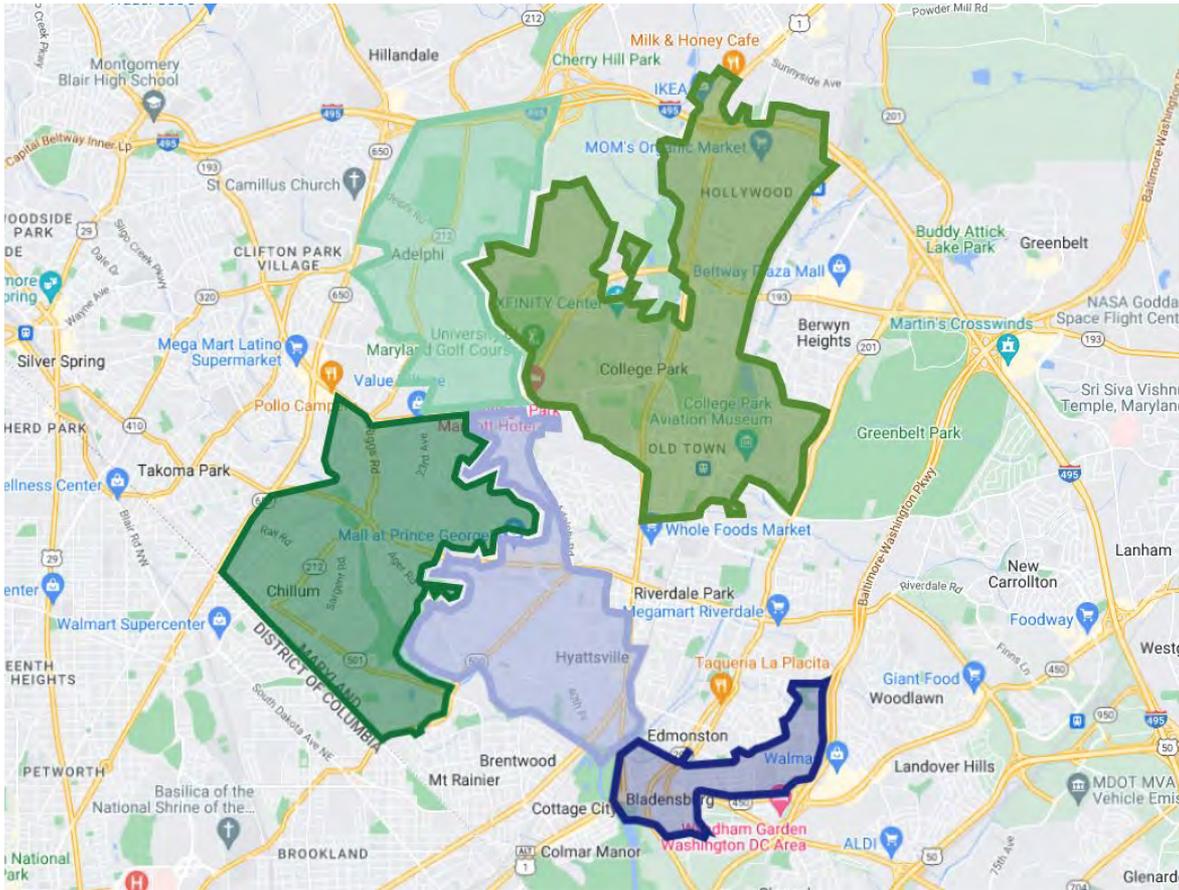
Family stopping along the Paint Branch Trail, Spring 2023

A demographic and economic analysis of existing communities along the Anacostia River Trail System is crucial to contextualizing the exploration of individual and personal experiences along the Anacostia River Trail System and the more extensive identification of access, use, and knowledge of the trail. In order to identify gaps in access and those who might need to be added to the trail system, we first need to understand who exists in the community as a whole.

The approximately 48 miles of trail connects waterfront and inland communities, crossing county and state lines from Glenmont to College Park, Hyattsville, and Bladensburg, continuing south into the District of Columbia, as far south as Navy Yard. This analysis focuses on fifteen (15) cities, towns, and designated places directly bordering the trails in Maryland. Data is also included for the larger areas of Prince George's County and Montgomery County to provide context and further understanding of those communities that do not directly border the trail but could benefit from access.

**Demographic
Analysis**

AREA MAP

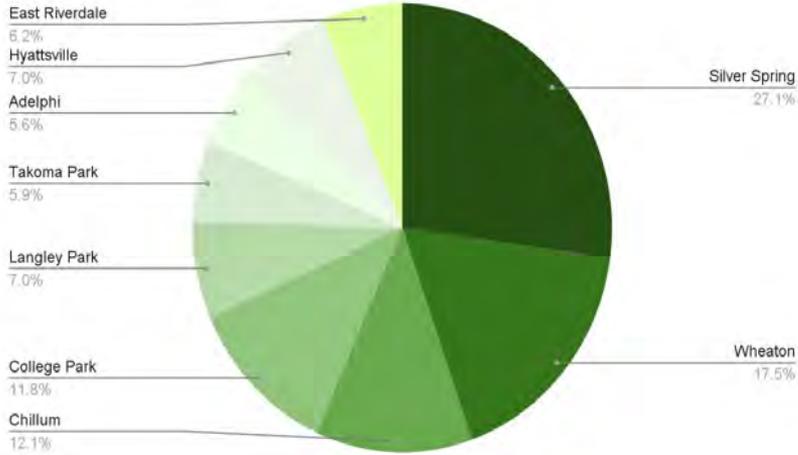


Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

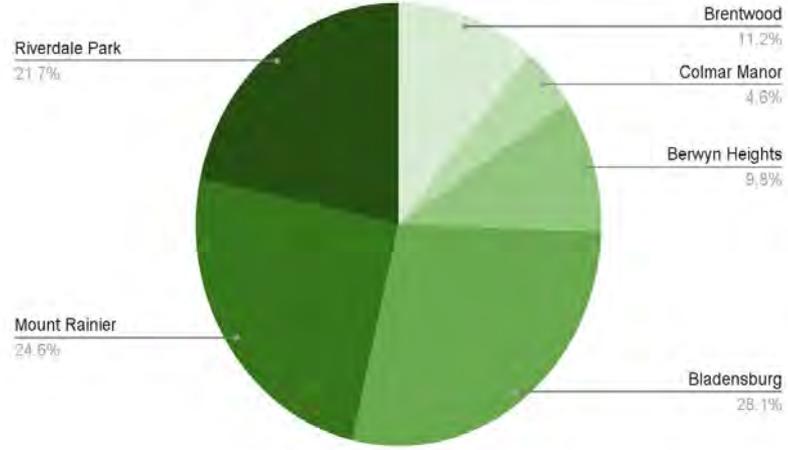
**Demographic
Analysis**

TOTAL POPULATIONS

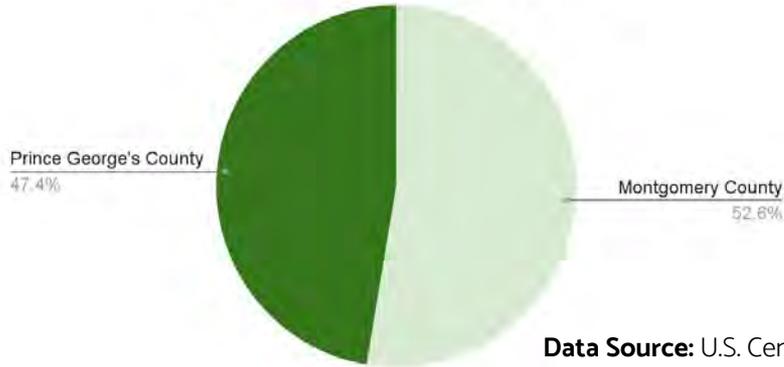
Total Population, Larger Areas, 2021



Total Population, Small Areas, 2021



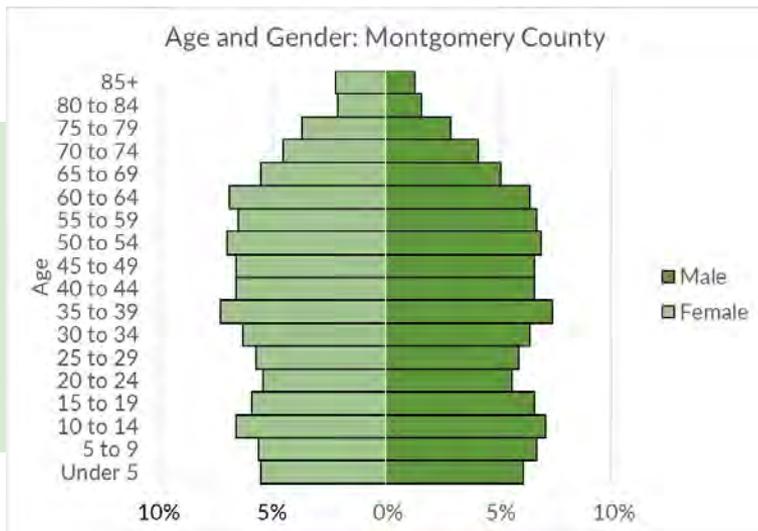
Total Population, Counties, 2021



- The populations of Silver Spring and Wheaton comprise around half of the total population of the larger areas
- For the smaller areas, Bladensburg and Mount Rainier contain approximately half of the total population
- It is also noticeable that the population of Montgomery County is around 5% larger than that of Prince George's County

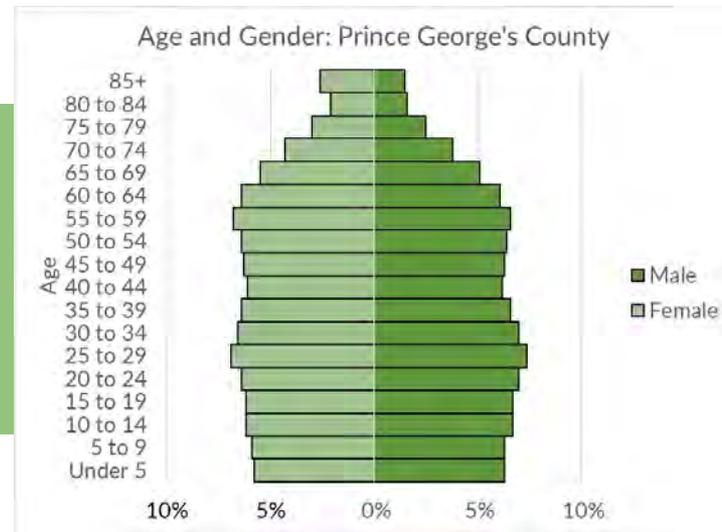
Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

AGE AND GENDER

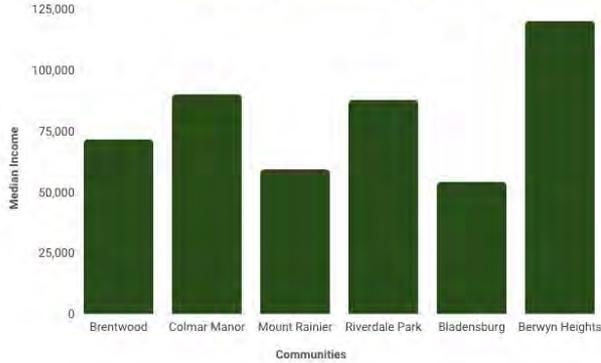


Key Takeaway

In general, across all areas analyzed, with the exception of College Park, the **most populous age groups for Males and Females was between 25 and 39.**



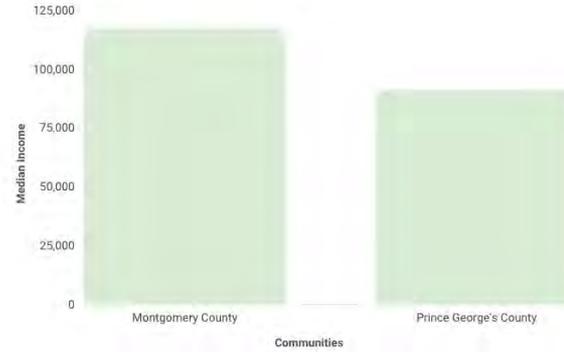
Communities with Populations fewer than 10,000



Brentwood	71,645
Colmar Manor	90,000
Mount Rainier	59,268
Riverdale Park	87,819
Bladensburg	54,208
Berwyn Heights	120,662

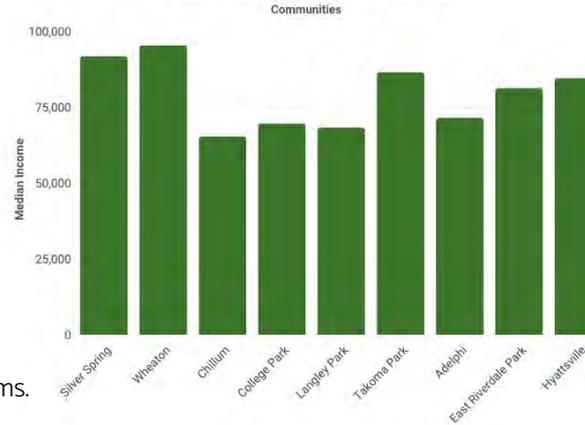
Socioeconomic differences may contribute to the accessibility of the trails, which may be attributed to the median income between the community jurisdictions surrounding the trail system as represented in the diagrams.

Counties



Montgomery County	117,345
Prince George's County	91,124

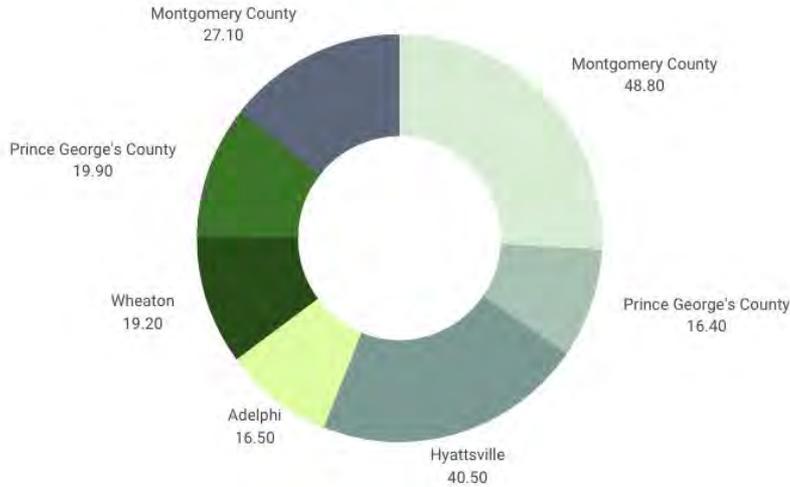
Communities with Populations Greater than 10,000



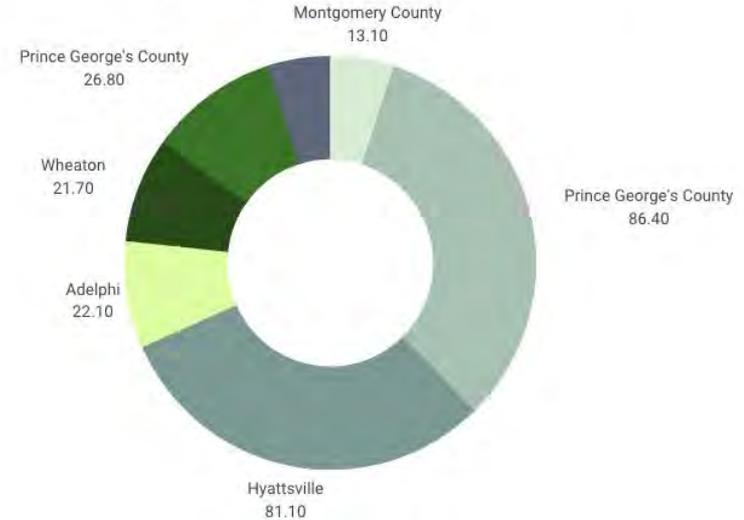
Silver Spring	91,970
Wheaton	95,625
Chillum	65,462
College Park	69,736
Langley Park	68,405
Takoma Park	86,644
Adelphi	71,622
East Riverdale Park	81,458
Hyattsville	84,763

Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

Percentage of persons age 25+ Bachelor's Degree or Higher



Percentage of persons age 25+ Graduated High School or Higher

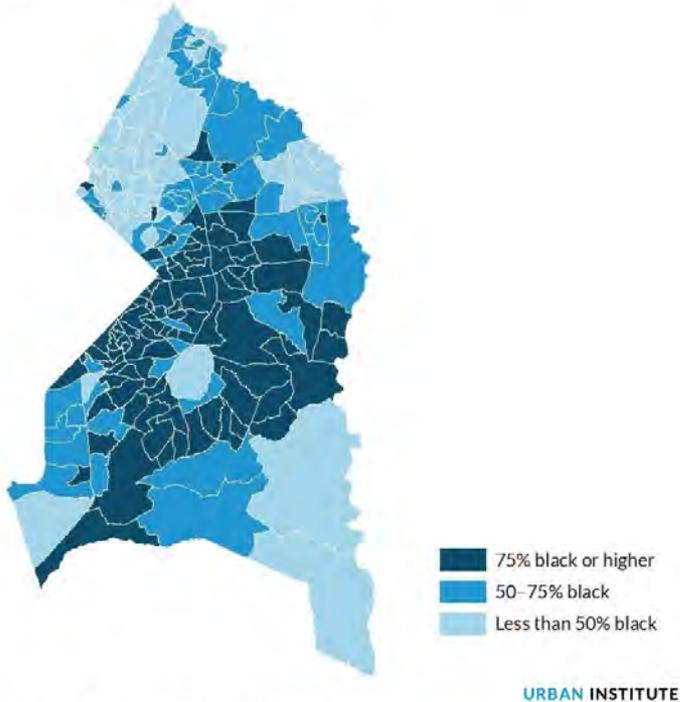


The two diagrams highlight the percentage of individuals 25 years of age and older that, on average, have completed either high school or college level education and higher between the jurisdictions surrounding the Tributary trail. This data may support our theory on financial barriers surrounding the use of the trails system.

Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

FIGURE 4

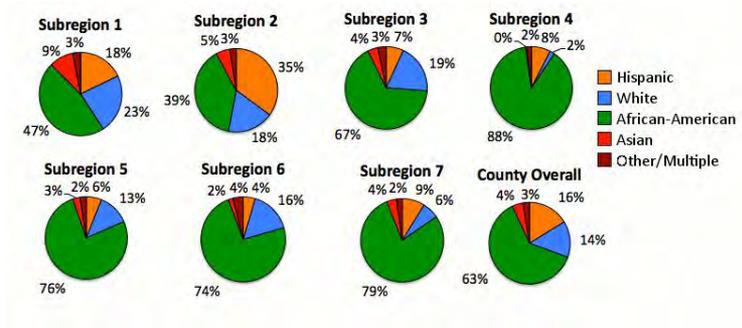
Racial Composition by Census Tract in Prince George's County 2011-15



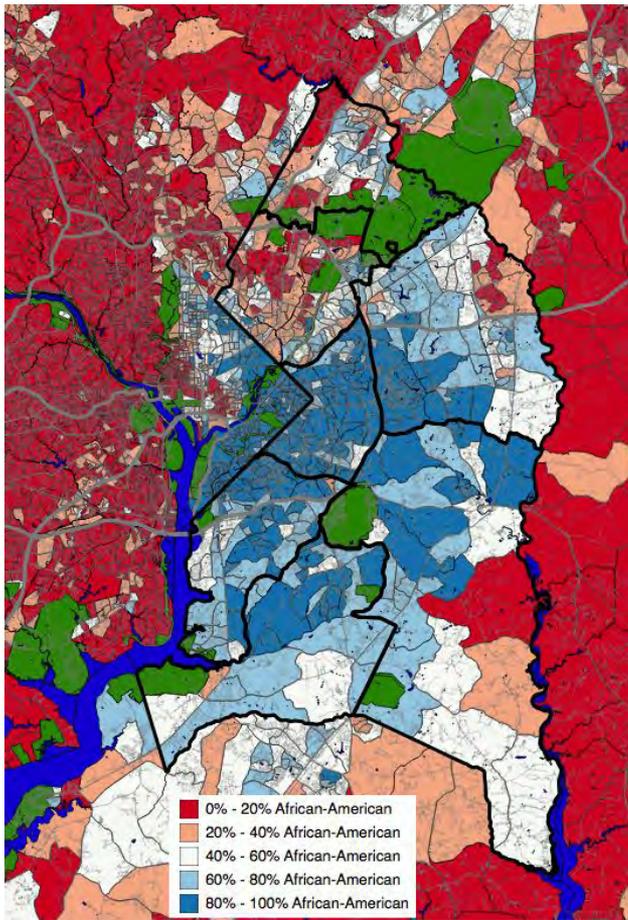
Source: American Community Survey, 2011-15.

Note: In this figure, the black population is only those who are not Hispanic.

- These maps and graphs explain that the majority of residents living in Prince George's County are african american
- In certain parts of the county there are a higher concentrations of Hispanic residents
- The White and Asian population is the minority



RACE AND ETHNICITY



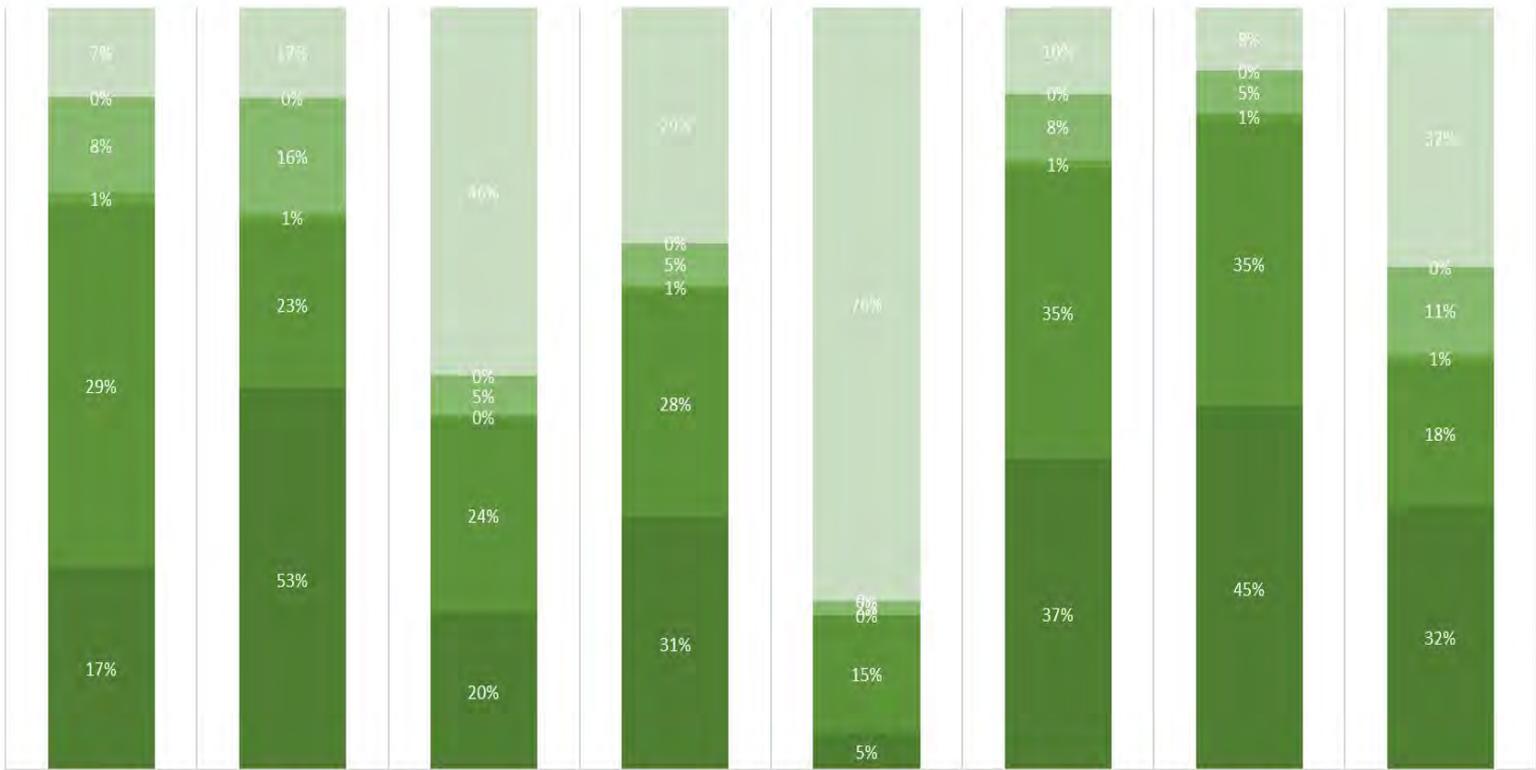
The population of African Americans is higher in the center of Prince George's County.

Data Source: Local planning groups, local (Prince George's County) data sources

RACE - LARGE AREAS

RACE IN LARGE AREAS, 2021

■ White
 ■ Black or African American
 ■ American Indian and Alaska Native
 ■ Asian
 ■ Native Hawaiian and Other Pacific Islander
 ■ Some other race

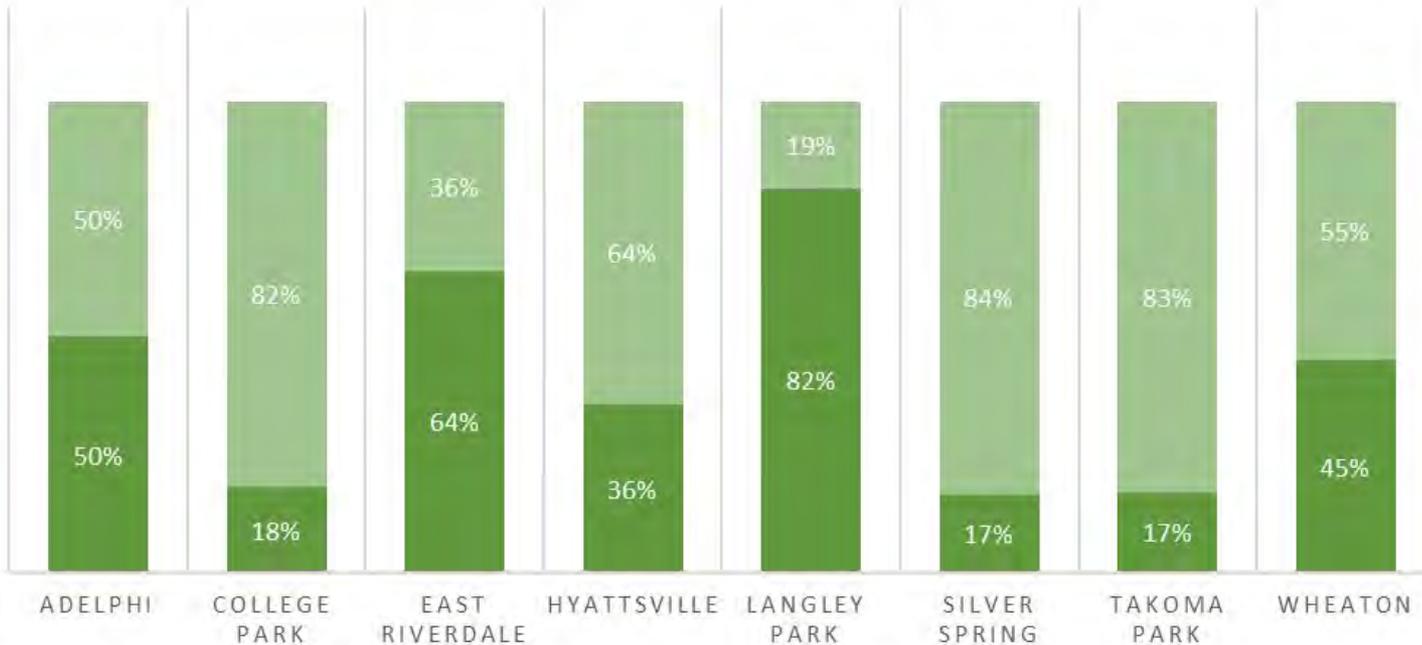


Data Source:
 U.S. Census Bureau
 American Community
 Survey
 5-Year
 Estimates,
 2021

ETHNICITY - LARGE AREAS

ETHNICITY, LARGE AREAS, 2021

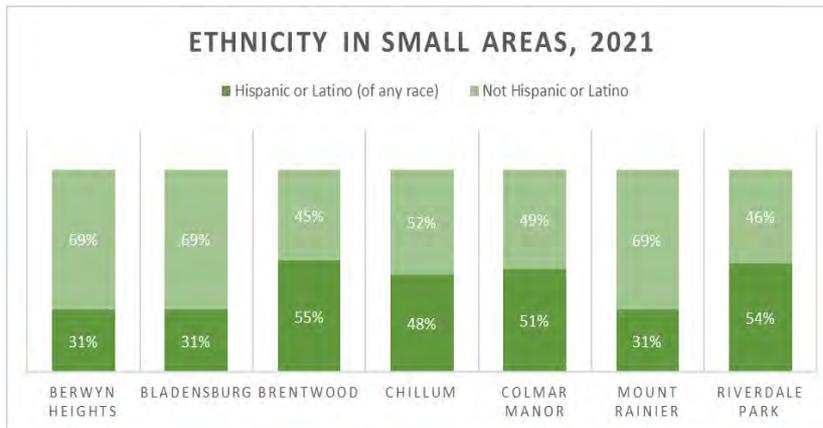
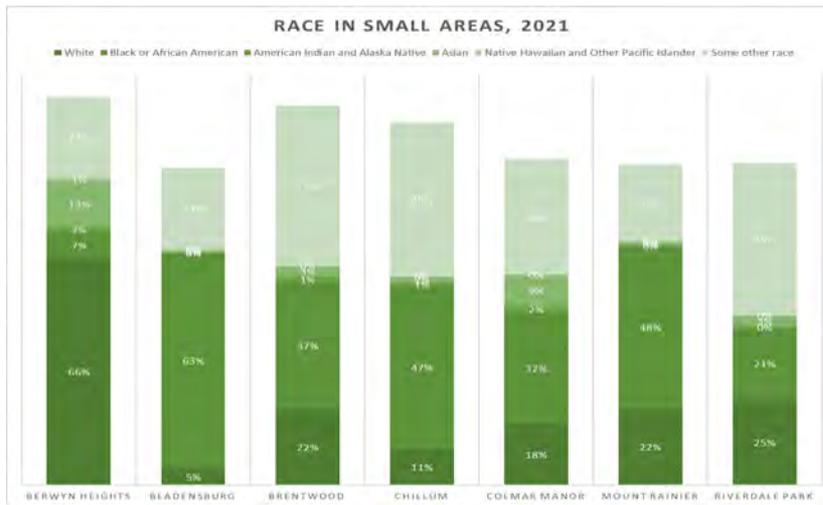
■ Hispanic or Latino (of any race) ■ Not Hispanic or Latino



Data Source:

U.S. Census Bureau
American Community
Survey
5-Year
Estimates,
2021

RACE AND ETHNICITY - SMALL AREAS

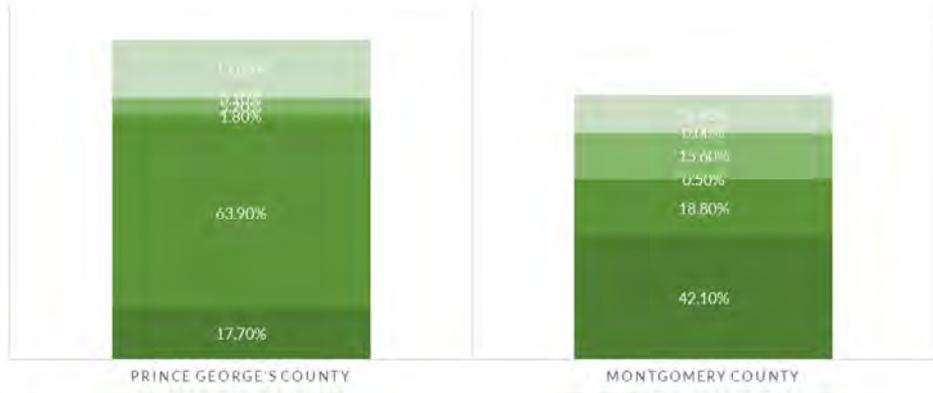


Data Source:
 U.S. Census Bureau
 American Community Survey
 5-Year Estimates, 2021

RACE AND ETHNICITY - COUNTIES

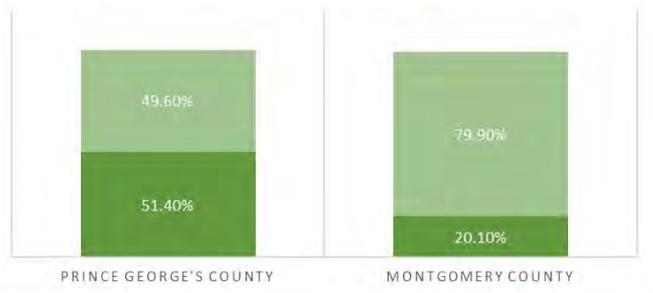
RACE, COUNTIES, 2021

- White
- American Indian and Alaska Native
- Native Hawaiian and Other Pacific Islander
- Black or African American
- Asian
- Some other race



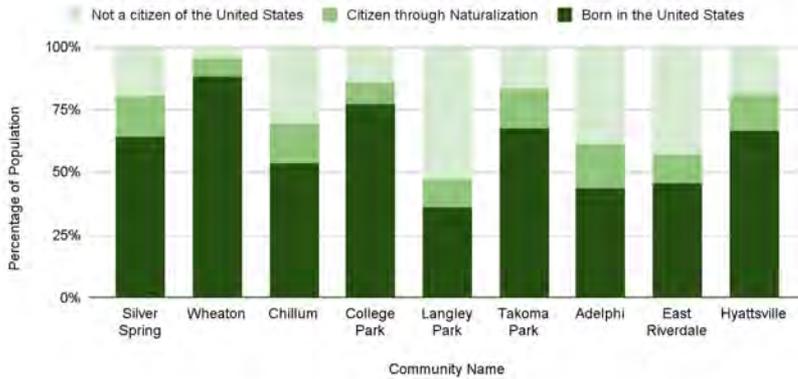
ETHNICITY, COUNTIES, 2021

- Hispanic or Latino (of any race)
- Not Hispanic or Latino

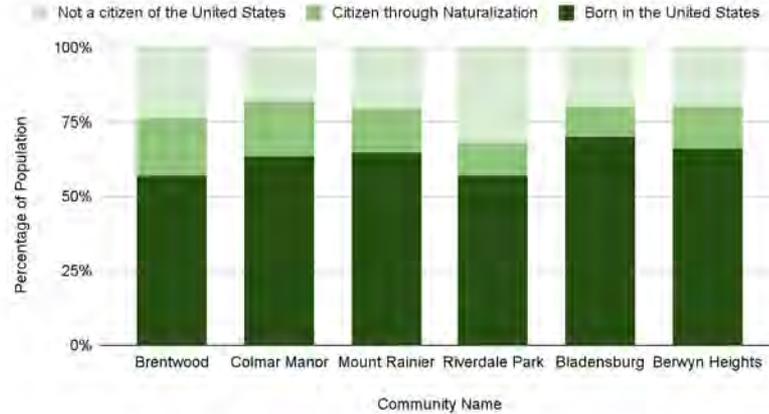


Data Source:
U.S. Census Bureau American Community Survey 5-Year Estimates, 2021

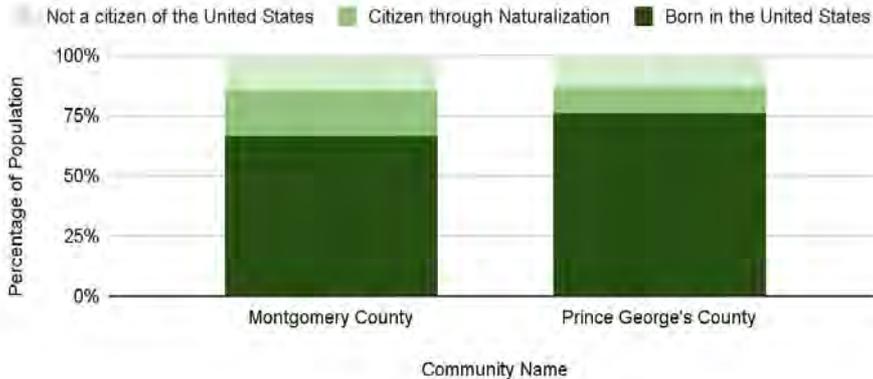
Citizenship Demographics, Larger Areas, 2021



Citizenship Demographics, Small Areas, 2021



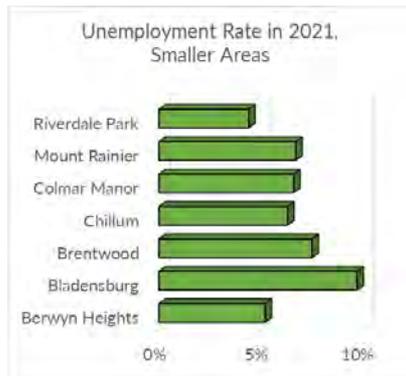
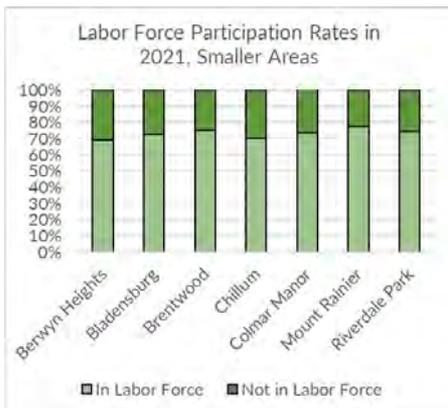
Citizenship Demographics, Counties, 2021



- There is a higher population of non - citizens larger areas, specifically Langley Park, which has an noticeably higher percentage than the other larger areas
- The highest number of naturalized citizens is found in Wheaton in the larger areas category, and Bladensburg in the smaller areas category

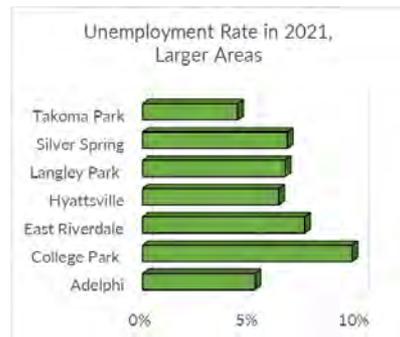
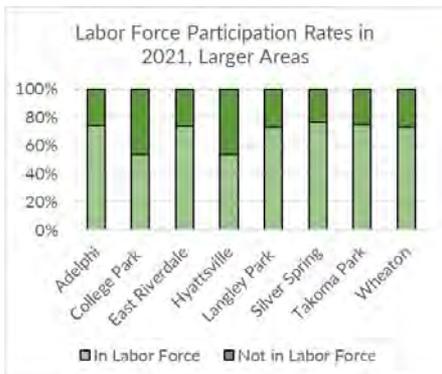
LABOR FORCE PARTICIPATION

SMALL AREAS

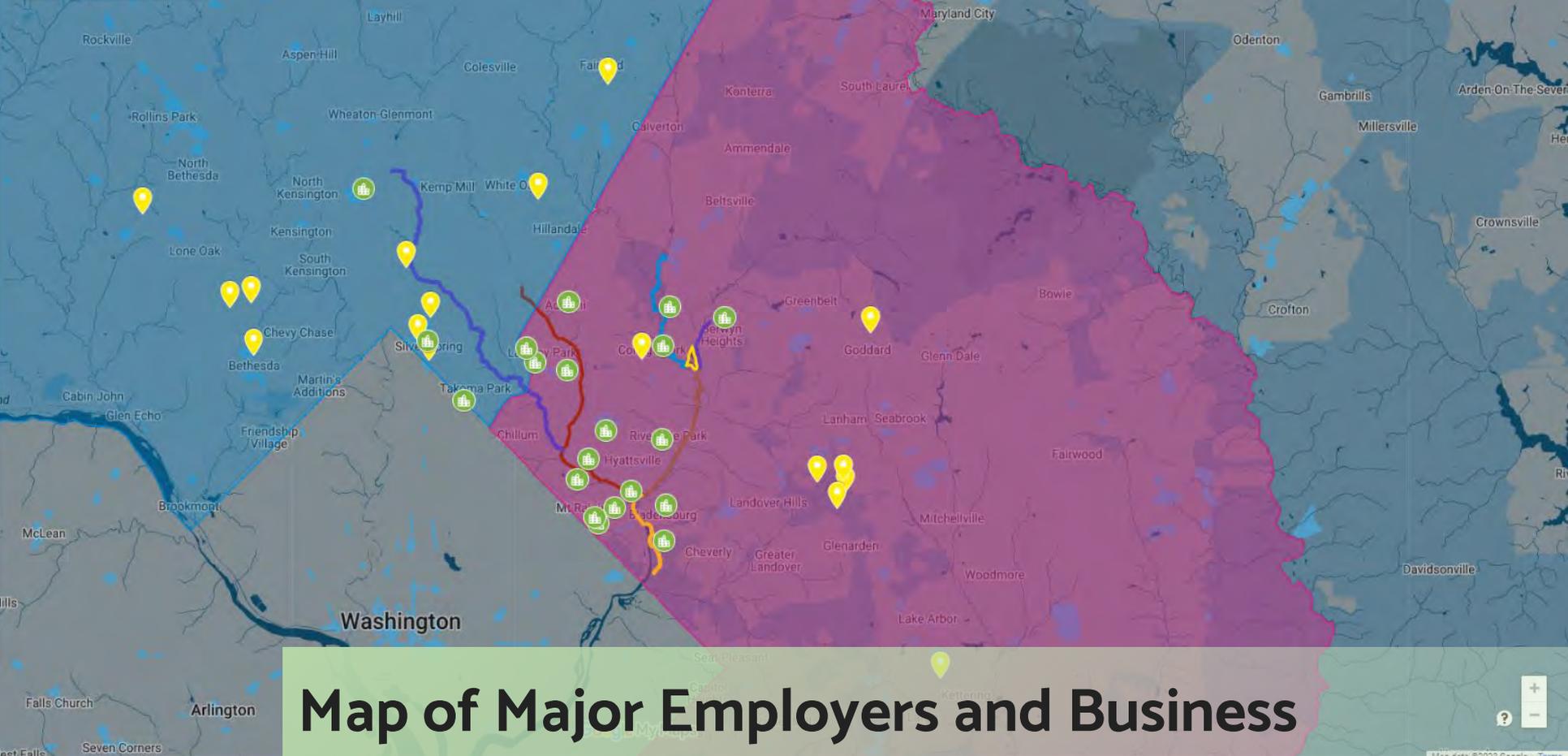


- Unemployment rates from 4% in Riverdale Park to nearly 10% in Bladensburg
- Between 70% and 80% in the labor force

LARGE AREAS



- Unemployment rates from 4% in Takoma Park to nearly 10% in College Park
- Between 50% and 75% in the labor force



Map of Major Employers and Business Districts Surrounding the Trail

<https://www.google.com/maps/d/u/1/edit?mid=15AP2UNPt01KUfeBBFdoFrV1WO9vhOFI&usp=sharing>

Data Sources: Local government websites, google maps

PRINCE GEORGE'S COUNTY

- University System of Maryland
- Joint Base Andrews Naval Air Facilities
- U.S. Internal Revenue Service
- U.S. Census Bureau
- United Parcel Service
- NASA - Goddard Space Flight Center
- Giant Food
- Prince George's Community College
- Verizon

MONTGOMERY COUNTY

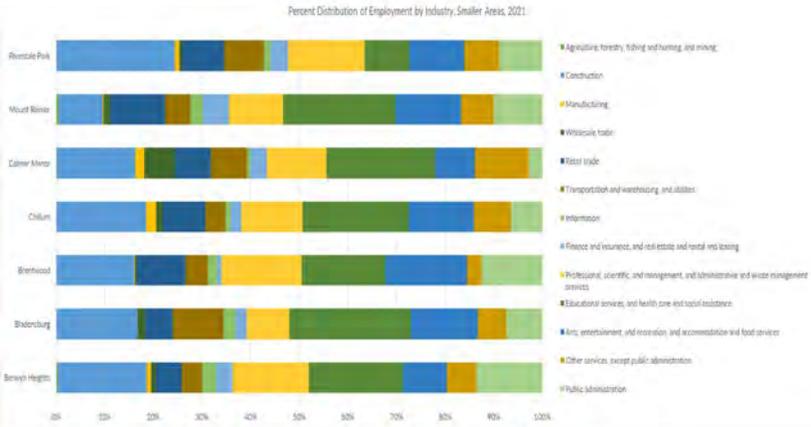
- National Institutes of Health
- U.S. Food and Drug Administration
- Naval Support Activity Bethesda
- Marriot International
- Lockheed Martin
- National Oceanic and Atmospheric Administration
- Adventist HealthCare
- Holy Cross Hospital
- Giant Food



Top: Prince George's County Downtown area
Bottom: Montgomery County Watershed

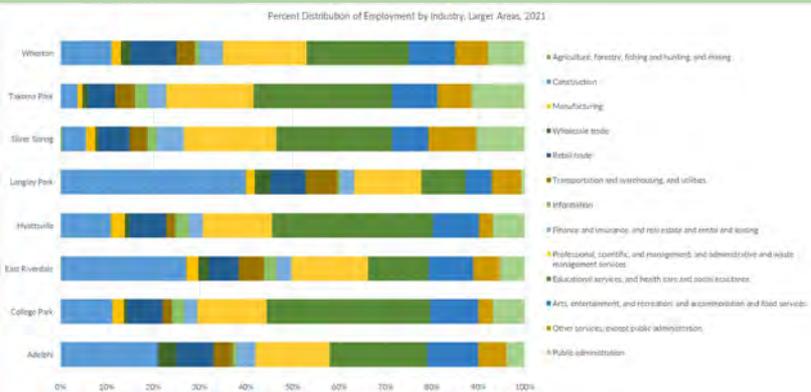
EMPLOYMENT BY INDUSTRY

SMALL AREAS



- Construction
- Educational services, and health care, and social assistance
- Professional, scientific, management, and administrative and waste management services
- Arts, entertainment, and recre, and accommodation and food services

LARGE AREAS



- Construction
- Educational services, and health care, and social assistance
- Professional, scientific, management, and administrative and waste management services

Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

KEY EMPLOYMENT PATTERNS



University of Maryland, College Park

- Main employers in both Counties that sit near the trails include:
 - University of Maryland - College Park
 - National Oceanic and Atmospheric Administration
 - Adventist HealthCare
 - Holy Cross Hospital
- The primary sectors across the smaller and larger areas studied include:
 - Construction
 - Educational services, and health care, and social assistance
 - Professional, scientific, management, and administrative and waste management services
- These larger employment patterns suggest that though residents might live throughout the different communities along the trail or even outside the close radius of the trail, they could potentially work at one of the major industries along the trail, with the exception of Construction, which occurs throughout the County.

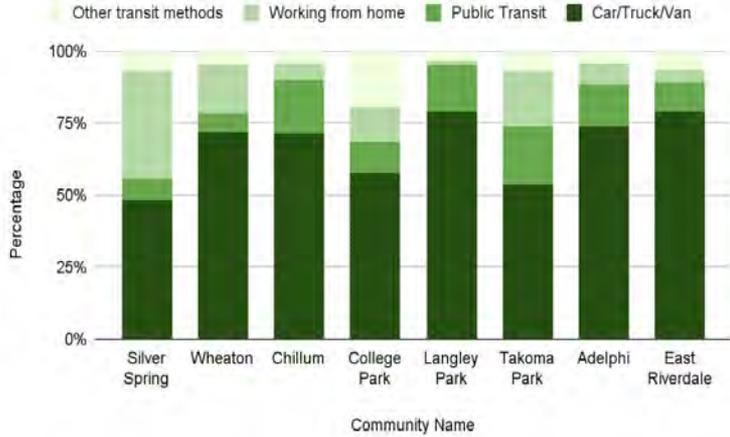
COMMUTING CHARACTERISTICS

Transportation/Commuting Patterns		
Number	Community	Mean Travel Time to work (minutes)
13	Silver Spring	31.5
15	Wheaton	33.8
5	Chillum	35.1
6	College Park	26.7
10	Langley Park	40.8
14	Takoma Park	34
1	Adelphi	35.3
8	East Riverdale	35.3
9	Hyattsville	26.7
<i>Towns</i>		
4	Brentwood	26.8
7	Colmar Manor	32
2	Berwyn Heights	35.3
3	Bladensburg	37.1
11	Mount Rainier	31.8
12	Riverdale Park	34.8
<i>Counties</i>		
17	Montgomery County	30
16	Prince George's County	33.3

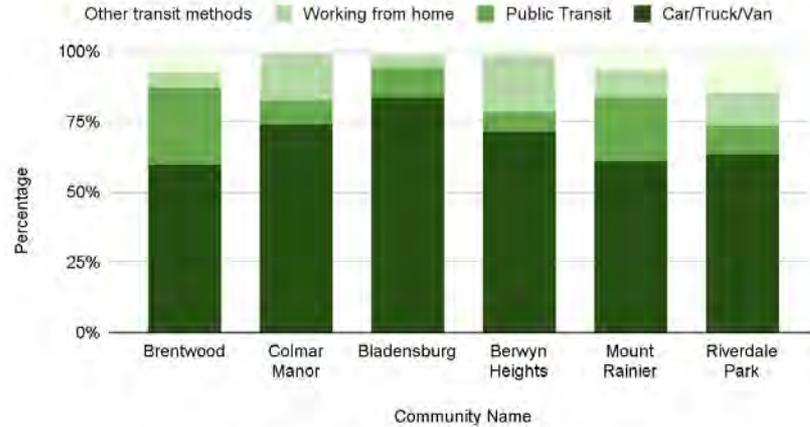
- The average commuting time for all areas is around 30-35 minutes
- Outliers include: Langley Park, Brentwood, Chillum, Bladensburg, and Hyattsville
- These commuting times can also be compared or contrasted with the data on slide 50, 'Commuting Characteristics'
 - **EX:** Langley Park residents have the longest commute out of all listed communities, which is unusual considering that they have the largest amount of people traveling by car to work, in the large area category

COMMUTING CHARACTERISTICS

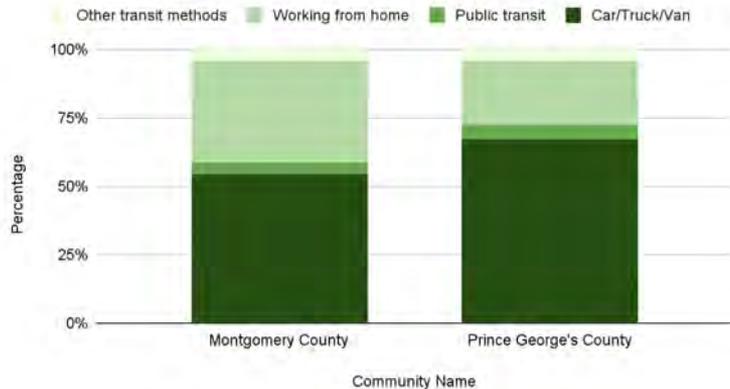
Commuting Characteristics, Large Areas, 2021



Commuting Characteristics, Small Areas, 2021



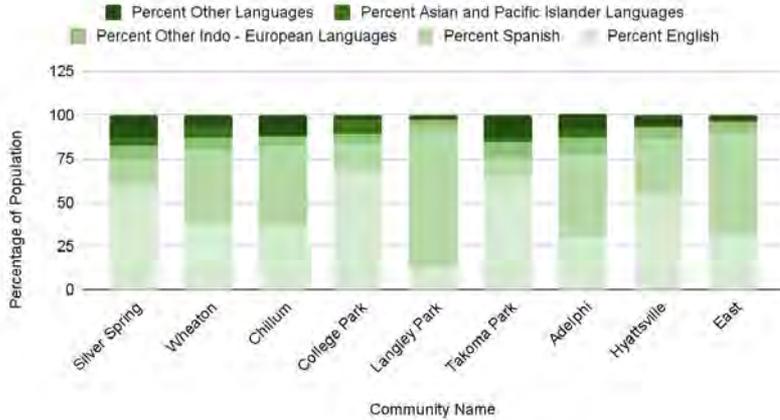
Commuting Characteristics, Counties, 2021



- Overall, the most common commuting method being used is by car, truck, or van.
- A noticeable outlier would be in Silver Spring, where a large portion of the population works from home
- The other outliers are in Takoma Park and Brentwood, where a larger population uses public transit to commute to work

LANGUAGE DEMOGRAPHICS

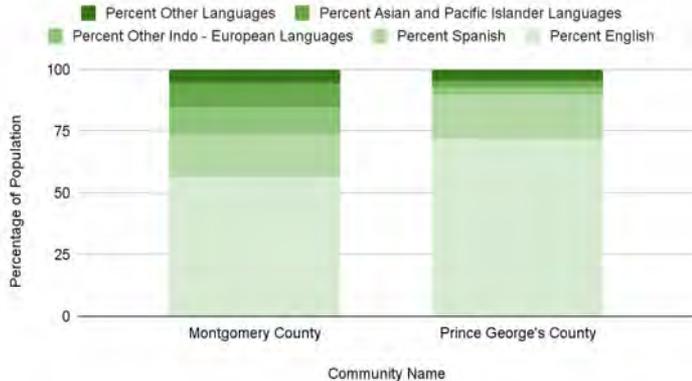
Language Demographics Large Areas, 2021



Language Demographics, Small Areas, 2021



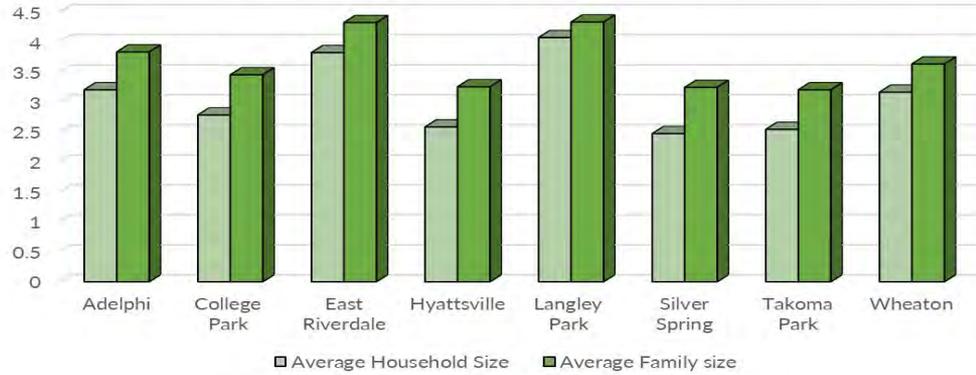
Language Demographics, Counties, 2021



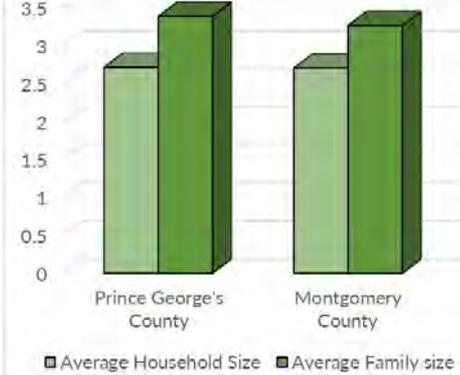
- The most common language spoken overall is English. The second most common language is Spanish.
- There is an increasingly high percentage of Spanish speakers in Langley Park
- Montgomery County has an overall higher amount of language diversity within it than Prince George's County

HOUSEHOLD CHARACTERISTICS

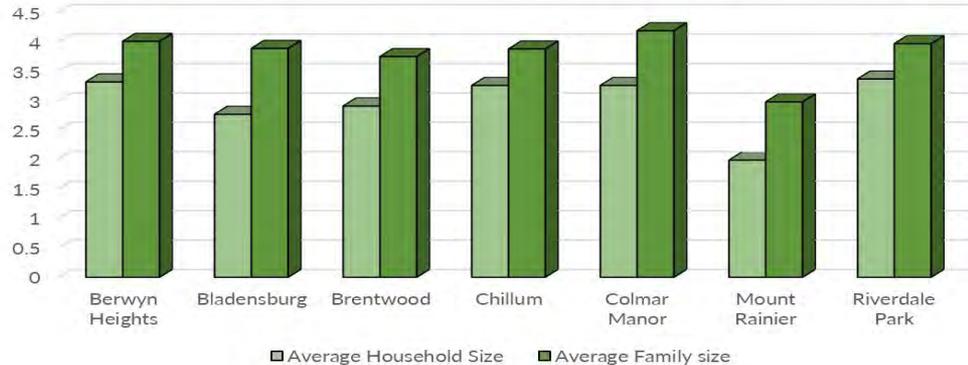
Average Household Size vs. Average Family Size , Larger Areas, 2021



Average Household Size vs. Average Family Size , Counties, 2021



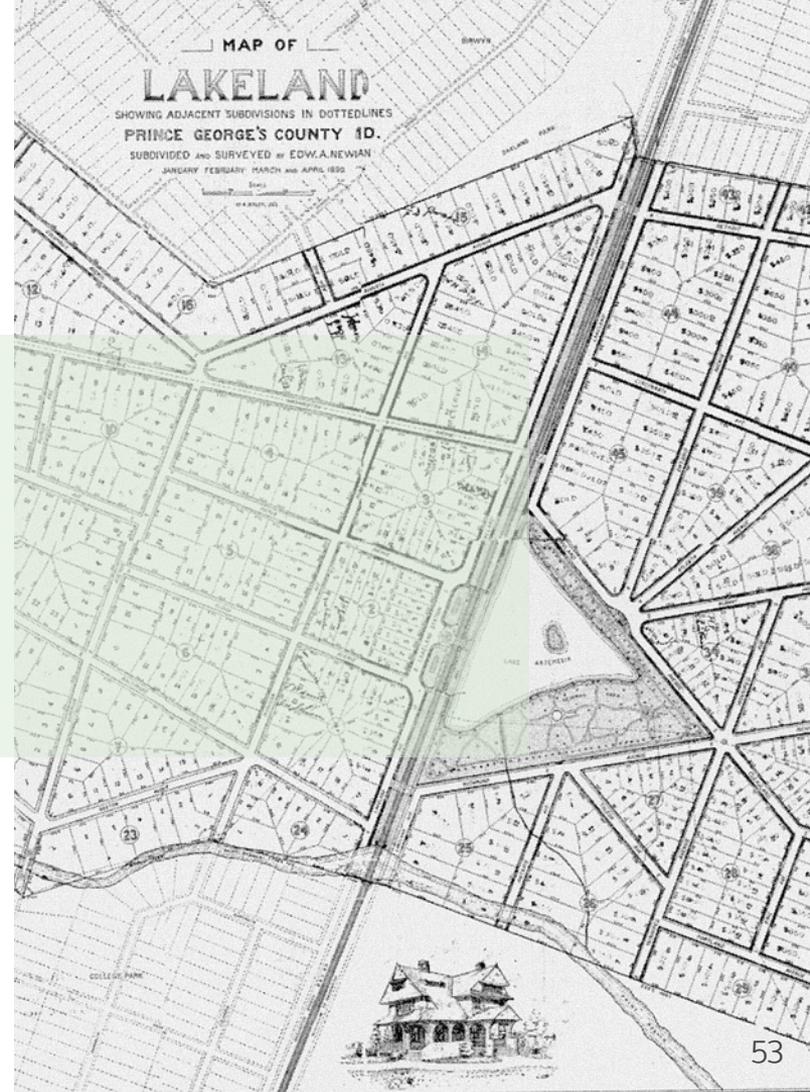
Average Household Size vs. Average Family Size , Smaller Areas, 2021



Range of household and family sizes across all areas from 2.75 to 4.5

ARCHIVAL ANALYSIS

Maisha Islam
Samantha Jamero
Jihee Lee
Judy Tram





METHODS USED

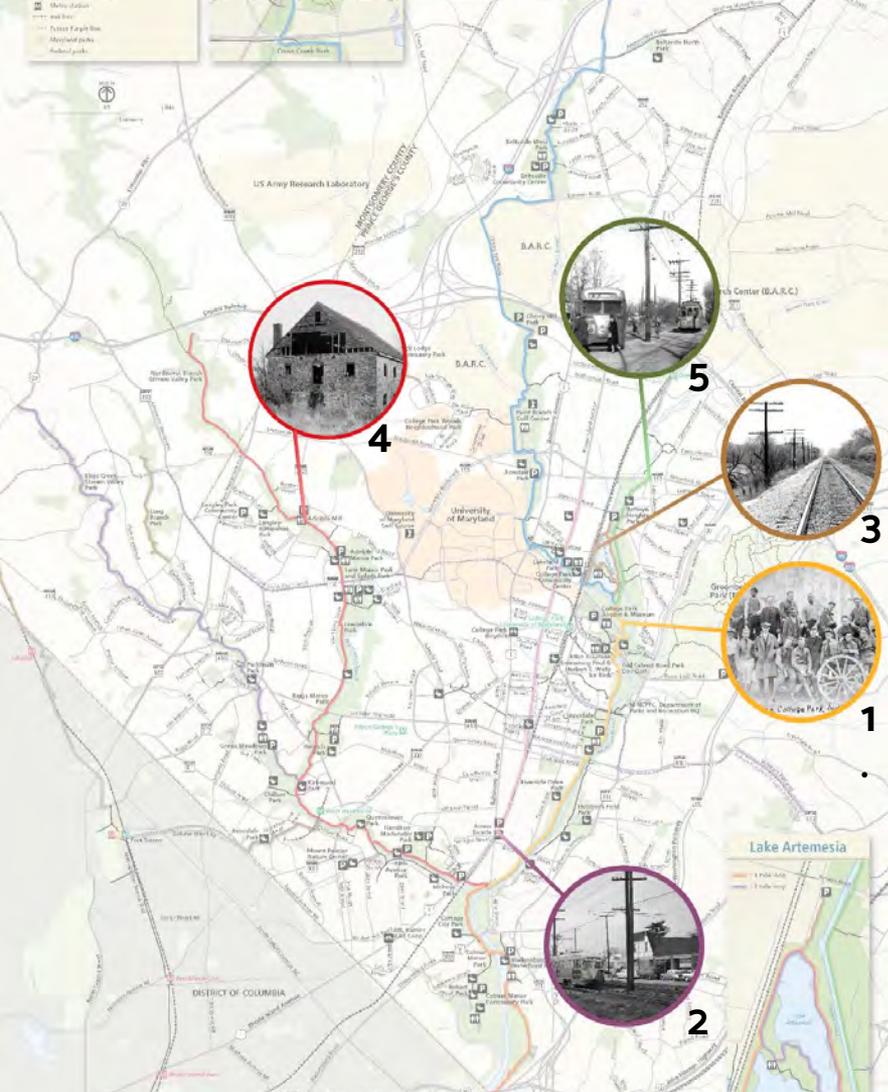
We used various archival types, including business, academic, government, and non-profit organizational archives in the form of articles, audio recordings, images, and videos to understand the history of the Anacostia Tributary Trail System holistically. The focus was to understand how and why the trail system developed individually to gain a better understanding of the trail system as a whole.

FINDINGS

The Anacostia Tributary Trail System is one of 13 designated Heritage Areas in Maryland. The trail system was created as a way to pay homage to these historic sites, as are plenty of didactic moments scattered throughout the trails. These signs and symbols educate visitors about the growing development and the changing landscape.

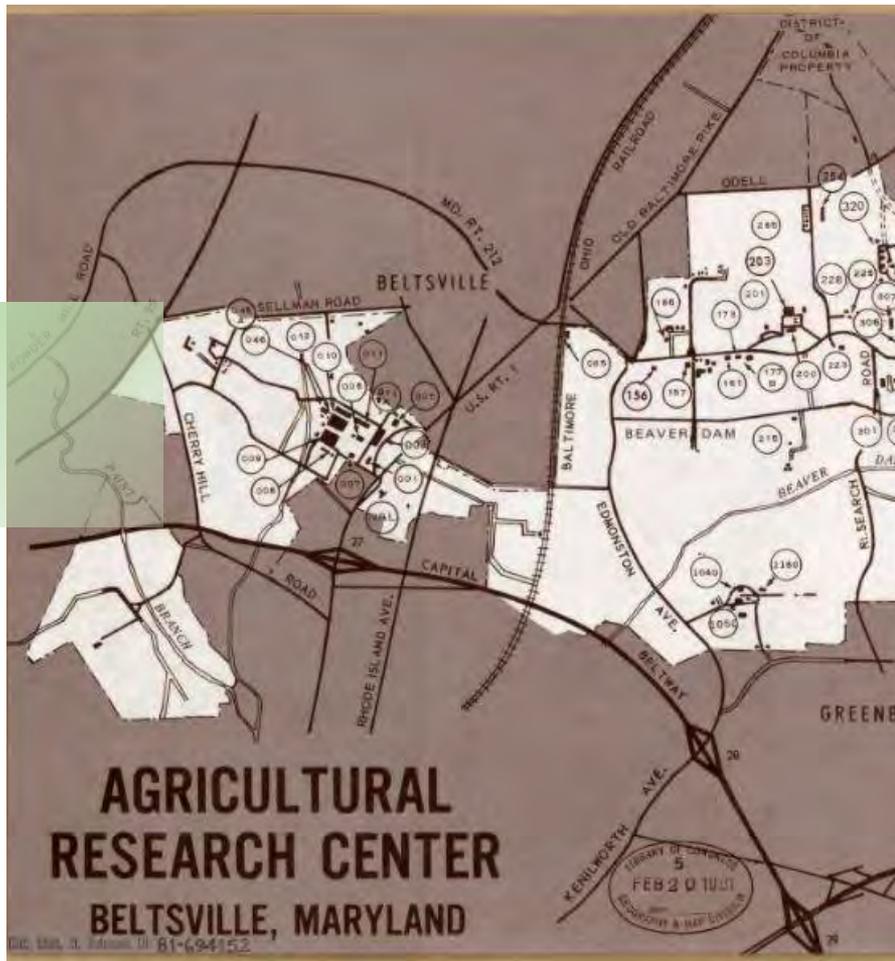
CONTRIBUTIONS

This archival research establishes the historical context to its development. Having this context will help us understand who gets to access these amenities, and who is being left out. By understanding which areas of the trails have been historically neglected, it will help us better pinpoint where to allocate the resources towards to ultimately improve how the trails foster the sense of community.



5 Key Points

1. Parks create hubs of activity throughout the trails
2. Transportation plays a key role in the development of the trail system
3. Areas along the trails are impacted by flooding and environmental conservation efforts
4. History of community displacement near the trails, like Lakeland, require acknowledgement & restorative justice
5. Trails developed independently - extended and connected to develop the trail system over time



Paint Branch Trail

The Paint Branch Trail runs north starting from the College Park, all the way to Laurel.

This and Little Paint Branch Trail runs through areas like the Beltsville Agricultural Research Center, Beltsville Community Center, and Fairland Regional Park.

BELTSVILLE, MD



The Paint Branch Trail and Little Paint Branch Trail goes through the Beltsville, census designated place north of College Park. Beltsville has a long agricultural history, going as far back as early colonial plantations. The area was made up of farmland, focusing on tobacco production. The area developed more in the 1800s with the construction of the Baltimore & Ohio Railroad.

The areas around the Paint Branch and Little Paint Branch are majority residential neighborhoods. Paint Branch Trail starts in College Park and Lake Artemesia and moves north to Cherry Hill Road. In 2019, Little Paint Branch Extension opened, connecting the northern trails and communities to College Park and the rest of Anacostia Trail System.

Historic photos of the Paint Branch Trail

Contemporary photos of the Paint Branch Trail

INTERSTATE 95

The area continues to be a part of interstate transportation with the construction of Interstate-95. Completed in 1971, the Baltimore to Beltsville corridor of I-95 continued an economic connection along the east coast. The highway also brought housing demand to Beltsville and the surrounding neighborhoods, offering a variety of housing types.

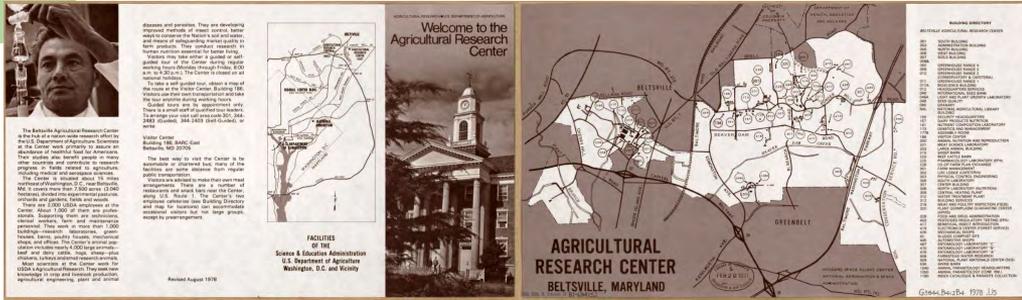
From Beltsville, the original plan for I-95 was to move south into Washington D.C. Due to general opposition, the highway was rerouted and merged with the Capital Beltway. The current College Park Interchange was built before the change and had to be rerouted.



Figure IX-5

1971 Map of I-95 Route to Northeast Freeway

1978 Brochure Map

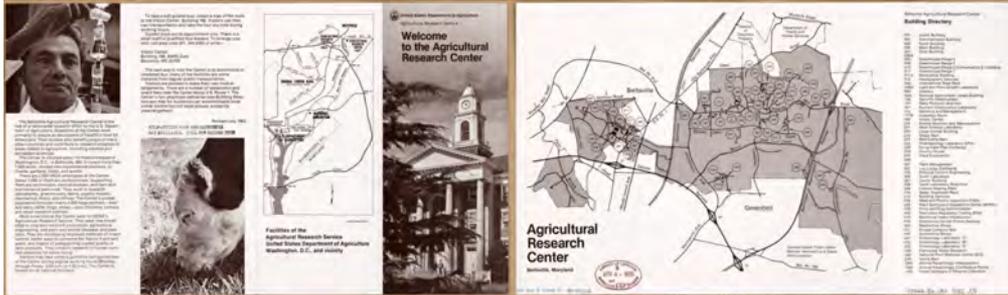


1935 research equipment



Beltsville Agricultural Research Center

1982 Brochure Map



1998 Brochure Map



1935 farm equipment

USDA bought a 475 acre farm in 1910 to conduct agricultural research. The property has since expanded to 6,600 acres, divided up into five "farms." The site conducts agricultural research ranging from plant sciences, animal sciences, and soil, water, air conservation and research. There is no public access through BARC, but Paint Branch Trail does form around BARC and public greenspaces.



Lake Artemesia & Northeast Branch Trail

The Northeast Branch Trail follows the levee along the Northeast Branch of the Anacostia River. It runs through many historic hubs, such as the College Park Airport and Riverdale Park. It also connects to the south of Lake Artemesia, a man-made lake and natural area located near College Park, MD with a rich and forgotten community history.



English settlers began encroaching on Piscataway land. The settlers broke their treaties with the Piscataways and took their land.

1860s



Lakeland area neighbored the Maryland Agricultural College that would eventually become the University of Maryland

1916

US Army Corps of Engineers built 5 miles of levees and channelized about three miles of the Northeast and Northwest Branches to protect downstream communities such as Hyattsville from flooding. Lakeland was left out of this initial round of projects



1965 Lakeland Map

1965

Second round of gravel extraction for the construction of the Green/ Yellow Line of the Washington Metro expanded Lake Artemesia on the site east of the railroad.



Lake Artemesia Expansion (1993)

late 1980s-early 1990s

county trail

1860s

Lake Artemesia was constructed as a man-made amenity. It was originally dug as a gravel extraction pit in for the construction of the adjacent railroad



View of railroad along the lake

1890s

African American families first took up residence on the eastern side of the B&O railroad tracks. By the turn of the century, a few of these families had also moved into the western portion of the neighborhood.



Developer Edwin A. Newman brought the earliest form of urban design planning to the area through a vision for a resort-style community centered around Lake Artemesia

1890 Lakeland Map

1890

Portions of the Lakeland community were flooding almost annually and the homes impacted had sustained significant damage. This kicked off conversations around urban renewal.

1960s

1970s-80s

CP Urban Renewal Plan is implemented in the Lakeland neighborhood.



Present Day Lakeland Map (2022)

City of College Park formally apologized to the Lakeland community for the detrimental effects of an urban renewal plan

The city of College Park created a Lakeland Restorative Justice Commission

2020

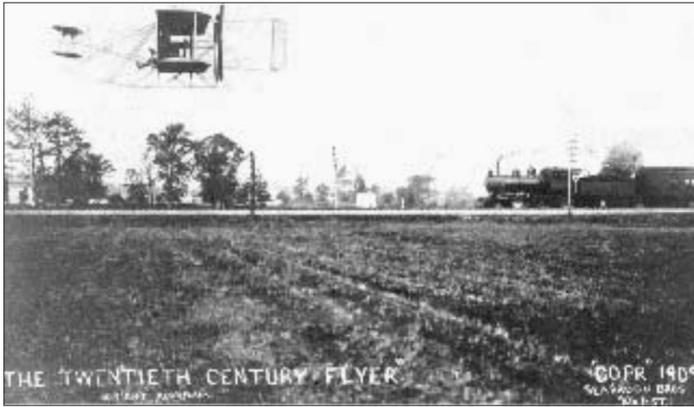
2021

CHANGE OVER TIME



Expansion of Lake Artemesia with construction of Green Line

Source: PG Atlas



Each successive century has seen the development of a different mode of transportation. This 1909 photograph shows a Wright aeroplane flying over a train on the Baltimore & Ohio Railroad tracks near College Park Airport.



Lakelanders worked in airfield

COLLEGE PARK AIRPORT

The facility is the world's oldest continually operated airport, College Park Airport, known as the "Field of Firsts," is recognized for many significant aviation firsts (MNCPPC).

October 1909: Mrs. Ralph Van Deman became the first woman passenger to fly in the United States

October 1909: Lieutenant Frederic Humphreys, student of Wright, was the first military pilot to solo in a military airplane

1911: First Army Aviation School & first testing of a bomb aiming device from an airplane

1912: First testing of a machine gun from an airplane & first mile-high flight by a military aviator

1918-21: First U.S. Postal Air Mail Service

1924: First controlled helicopter flight

1927-35: First radio navigational aids developed and tested by the Bureau of Standards



Founder Wilbur Wright

RIVERDALE PARK



Riversdale Mansion & Plantation (constructed 1803), now Riversdale House Museum



The Town of Riverdale Park derives its name from the historic Riversdale Plantation owned by the Calvert family (*MNCPPC*).



Original Victorian rail station.

Photo: Riversdale Historical Society.



The community was centered around the B&O passenger station, built on plots sold by the Calvert family. Rail transportation spurred the initial settlement of Riverdale Park and the surrounding development of communities (*MNCPPC*).

Original Riverdale MARC Station (1880s) and replica completed in 1995



Rhode Island Ave Trolley Trail and Northwest Branch Trail

The Rhode Island Ave Trolley Trail 3.8 mi trail that connects College Park, Riverdale and Hyattsville. This trail was once a streetcar line,

Route 82, and would connect “streetcar suburbs” up to Laurel, MD all the way down to downtown DC. The Northwest Branch Trail runs through both Montgomery County and Prince George’s County which connects Silver Spring to Hyattsville.

Horse-drawn cars were rapidly being replaced by the electric streetcar, creating "Streetcar Suburbs" along the East Coast



fig 1.01

1890

1899 City and Suburban Railway began constructing Route 82 which ran from Northeast DC to Beltsville MD.

1899

1945 WWII ends, housing for returning veterans create suburbs

1945

1960s Push for individual car ownership, creation of the Woodrow Wilson Birdge, and construction of Capital Beltway makes travel to and from VA and Washington DC more accessible



fig 1.03

1960s

1976 Washington Metro System was formed, creating the Metrorail and Metro Bus System

1976

county trail

1902 First streetcar reached Laurel, Maryland to connect passengers to and from Washington DC

1902

1926 The railway underwent several transfers of power throughout its time. First, it was absorbed by the Washington Railway and Electric Company

1926

1933

Became part of Capital Transit

1955 Final transfer of power - became DC Transit

1955

1958

Last streetcar to run Route 82

2002

2002 First section of the trail running from Campus Drive to Greenbelt Rd in College Park opens.



fig 1.02



fig 1.04

BEFORE & AFTER



Hyattsville 1957 & 2004

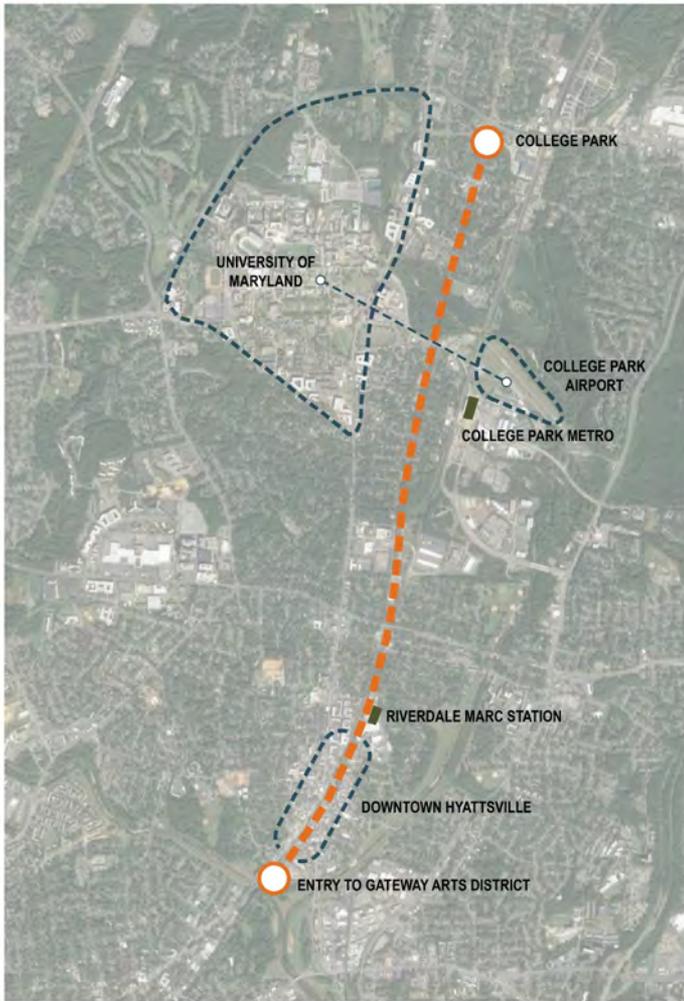


Branchville 1948 & 2004



Paint Branch Parkway 1947 & 2021

NODES

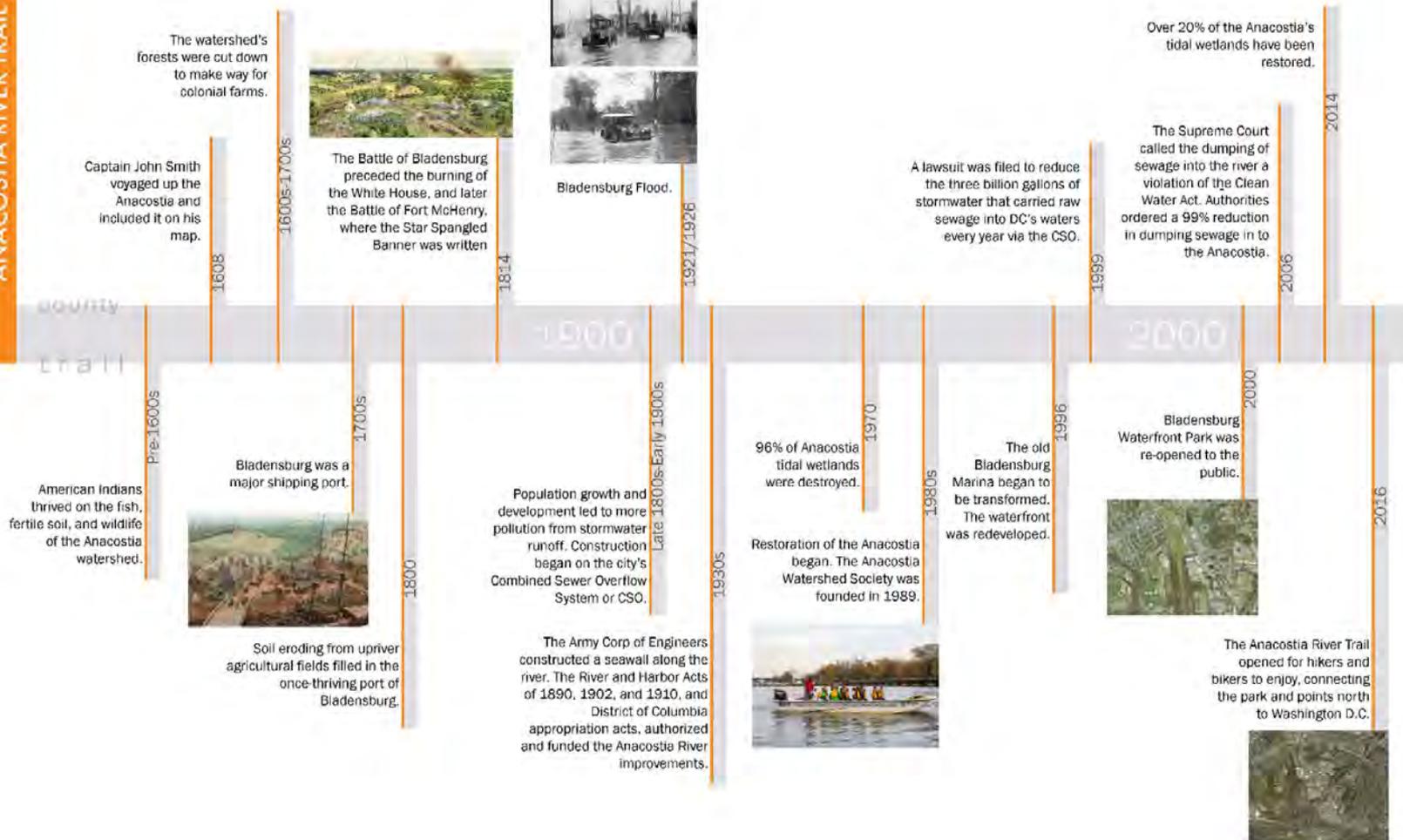


Public Transportation stations allow for access to and from the trails which then lead to community/historic hubs. This diagram explores how transportation has played a role in shaping development around the area. It also looks at how the trail crosses the 3 cities linearly, which makes it a great way to commute between them. Very recently, in the Summer of 2022, the Trolley Trail has been extended .54 a mile to connect with the Northwest Branch Trail.



Anacostia River Trail

The Anacostia River Trail meanders along the River from Bladensburg to the Navy Yard. The trail takes you through 12 miles of forest, fields, marsh and river ecosystem. The trail connects to five bridges across the Anacostia River and to other city bikes routes.



CHANGE OVER TIME



1938
96% of wetlands were destroyed by the 1970's



1965
Colmar Manor community park established in 1970s.



1993
The old Bladensburg Marina began to be transformed in 1996.



2007
Bladensburg Waterfront Park was reopened in 2000.
Bladensburg Park Pedestrian Bridge was completed in 2005.



2016
Anacostia River Trail opened in October 2016.



2022
Efforts continue to connect different sections of the trail today

Source: PG Atlas

BLADENSBURG WATERFRONT PARK



Port of Bladensburg in 1770



Trail users at Bladensburg Waterfront Park 2016



Young child using a boat 2016



Bladensburg Flood, January 1926



Bladensburg in 1861

The park, formerly known as the Bladensburg Marina, is located on the Anacostia River, east of the Peace Cross Memorial. This Waterfront Park features a paved riverside walk, picnic pavilion, public fishing pier, free boat ramp, free pontoon boat tours, community boat storage, and canoe, kayak, paddleboat, and rowboat rentals.

1700s: The success of Bladensburg as a port town

1800s: The port town began to decline due to flooding and the silting of the river

1850s: Tobacco shipping ended when the river became too shallow for seagoing vessels

1900s: Flooding remained a problem in Bladensburg

1954: Army Corps of Engineers began a flood control and navigation project

1996: The old Bladensburg Marina began to be transformed (new public boating facility, visitor center, waterfront walkway, historic interpretive panels, a picnic pavilion, playground, floating docks and parking)

2000: The park was reopened to the public

2005: A pedestrian bridge linking Bladensburg and Colmar Manor was completed

2016: The Anacostia River Trail opened for hikers and bikers, connecting the park and points north to Washington D.C.



COLMAR MANOR



Because of its proximity to the Nation’s capital, the town’s name was derived from the “Col” in Columbia and the “Mar” in Maryland.

1800s: The Baltimore and Washington Turnpike (Bladensburg Road) offered easy access from Washington to Bladensburg and beyond

1808-1868: The Dueling Grounds, as the area came to be known, was the site of over 50 duels

1814: During the War of 1812, on August 24, 1814, the area was the scene of the Battle of Bladensburg

1861: During the Civil War, the land that is now Colmar Manor belonged in part to the Shreve Estate

1912: The Maryland General Assembly passed an act to incorporate the Capitol Cemetery of Prince George’s County, Maryland. The cemetery later became known as the Fort Lincoln Cemetery

1920s: Bladensburg Road transverse the area, becoming more heavily traveled, and eventually became designated as U.S. Route 1

1927: The Maryland General Assembly approved the incorporation of the “Town of Colmar Manor.” The town elections were held in July of 1927

1966: Mayor Robert a. Yost and the town council sought and won approval from the Maryland General Assembly for the town to take advantage of urban renewal programs available at the time

1970s: The Colmar Manor community Park was established along the west bank of the Anacostia River on the site of a sanitary landfill

PHYSICAL, AURAL, & PARTICIPANT SITE OBSERVATIONS

Sarah, Annonya, Bill,
Sururah

Methodology
Activity Along the Trail

Our group created a set of observation protocols for participant observations to remain as objective and consistent in our observations as possible, including an online survey in Fieldwire. Questions focused on the number of trail users, how people used the trails, and repeated behaviors of interest (i.e., littering due to lack of trash cans). We also included a general notes section at the end for observations outside of these predetermined categories.

Observation Process Summary

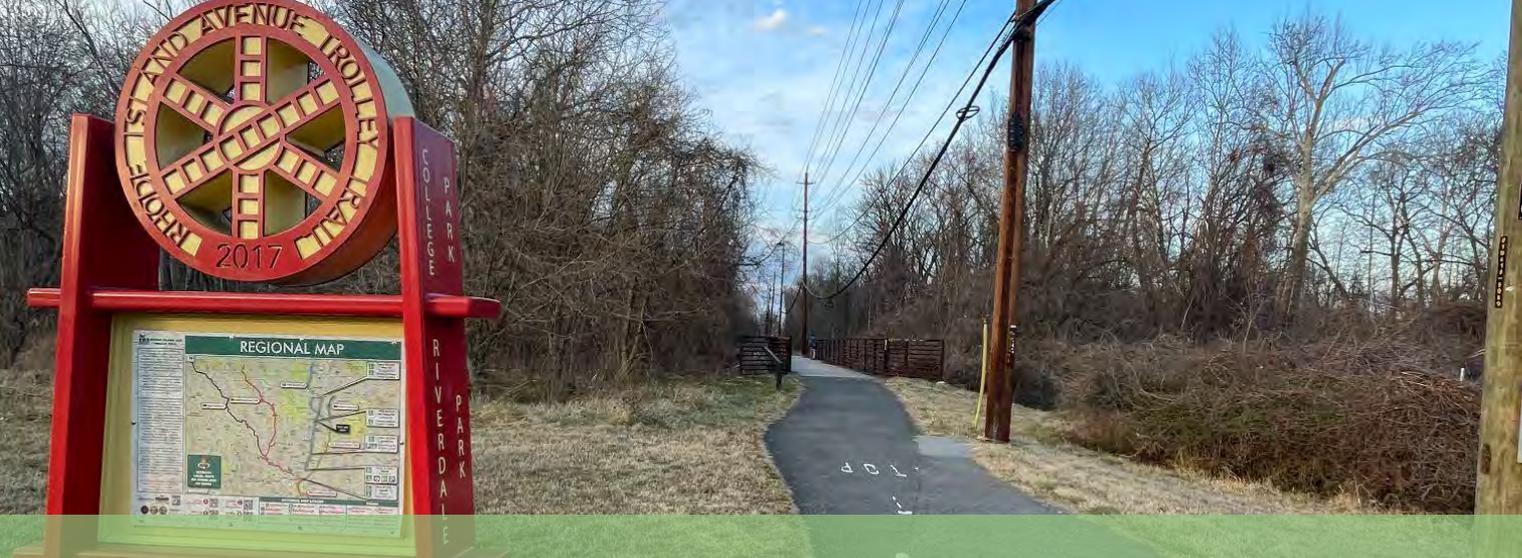


Being Systematic

We split sites between group members to go in pairs once a week for a three week data collection period

We spent 15 minute time intervals at each location recording, journaling, and taking pictures of our observations

One person per pair focuses on environmental observations, the other on human activity



Journaling

Recorded prominent typologies of activity observed, along with environmental, signage, and transportation details

Taking Pictures

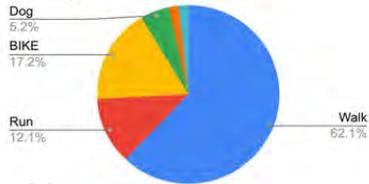
Photos documented each site, focusing on frequency, use and popular activities along the trail system.

Counting

Recorded elements were counted and compared with each site.

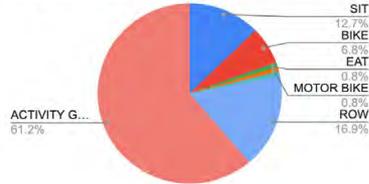
ACTIVITY ALONG THE TRAILS

1 Trolley Trail Whole foods



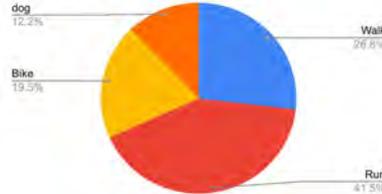
20 avg

4 anacostia waterfront park



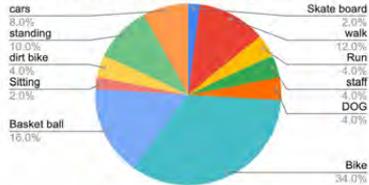
79 avg

Paint Branch Trail



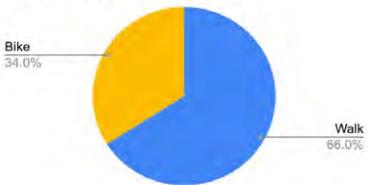
14 avg

2 Paint Branch Stream Valley Park



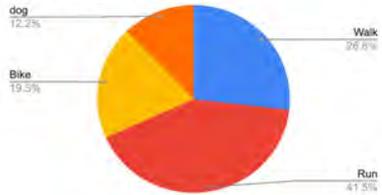
17 avg

5 Kirkwood Park



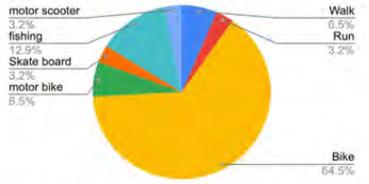
17 avg

Paint Branch Trail



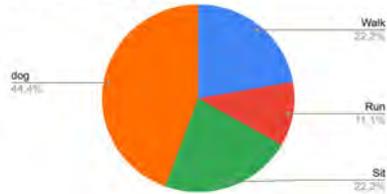
8 avg

3 Melrose Skatepark bridge



10 avg

6 Indian Creek Trail



13 avg

NOTES:

- Trail volume is heavily defined by immediate surrounding land use.
- Diversity of use is defined by surrounding.
- Conditions of site, including types of structure, influence certain activity.

ACTIVITY ALONG THE TRAIL



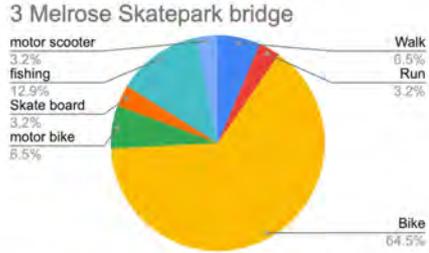
Trolley Trail Photos



ACTIVITY ALONG THE TRAIL



Images of dog walkers along more residential parts of the trail



Melrose State Park is a liminal space between residential and industrial areas. Therefore, a higher proportion of motorized and wheeled vehicles were seen on the path with less families and walkers. In contrast, in the residential areas of the trail, most trail users were walkers or dog walkers.



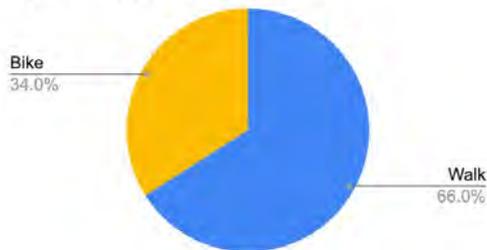
Landscape design of Melrose Skate Park by American Skate Company

Trash disposal varied along the trail, and spots with more trash can availability had less litter. Note the tied doggy-bags around the post at one sections with no trash cans.



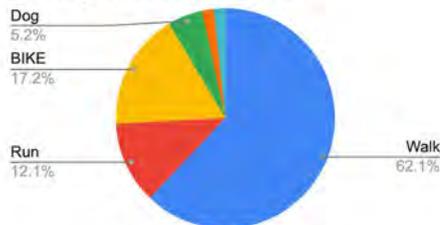


5 Kirkwood Park

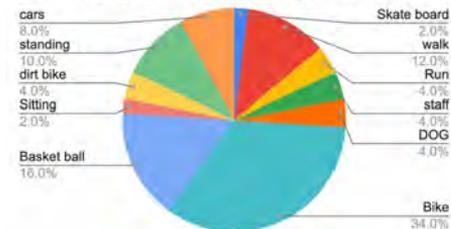


Kirkwood Park has one of the lowest rates of inner trail traffic and diversity of use types. Metro tracks and residential development border the trail.

1 Trolly Trail Whole foods



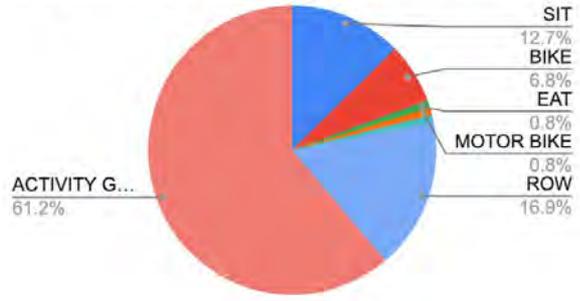
2 Paint Branch Stream Valley Park



Bladensburg Waterfront Park was a unique location from our selected study points; rather than people passing through, there were often large masses who parked and stayed in the general vicinity of the park.



4 anacostia waterfront park



SURVEYS & INTERVIEWS

Aaron, Alanna, Jona, Kayla,
Maura, Megan, and Mimi

Methodology
Survey Excerpts
Findings
Recommendations
Interview Findings



SURVEY METHODOLOGY



Our subgroup of the class conducted 30 short (5-10 minute), in-person oral surveys along various points of trail. These surveys were conducted in pairs during high-activity periods (2-4 PM on Sundays) throughout the month of April. We selected both trailheads and midpoints of each trail, often areas near parks, as our target sites.

The surveys consisted of demographic questions followed by more open-ended questions concerning how people use the trails, how they would rate the trails in terms of accessibility and safety, and what they would do to improve the trail system if given the chance. The remainder of this section of the report includes more details about this methodology such as the selected sites, survey questions, and findings.

SURVEY QUESTIONS



UMD Planning Student preparing for on-site interviews of trail users at the Bladensburg Waterfront Park in the Anacostia River section of the trail

1. Do you know you are on the Anacostia River Trail?
2. How did you learn about the trail?
3. Where do you enter the trail most often? How do you get there?
4. What do you typically use the trail for and how often?
5. What's your favorite thing about the trail? Why?
6. If you could improve your experience on the trail, what would you want to see happen?
7. On a scale of 1-5, 1 being poor and 5 being exceptional, how would you rate your level of safety on the trail (within the past 6 months)? Please explain.
8. On a scale of 1-5, 1 being poor and 5 being exceptional, how would you rate your ability to use the trail (access) in (within the past 6 months)? Please explain.

- **Question #1: Did interviewees know they were on the Anacostia River Trail System**
 - Five interviewees mentioned not knowing about the actual trail name or that it was a connected system
 - Four interviewees spoke to how challenging it was to enter at a trail head on the Trolley Trail due to lack of clear signage marking a clear entrance
 - Remaining interviewees knew the name of the section of trail close to their home, but did not realize it was part of larger trail system

- **Question #2: How did interviewees learn about the trail**
 - 7 interviewees reported learning about the trial from living very close to it (within 1/2 mile appx)
 - 2 interviewees reported learning about it through word of mouth from friends or family
 - 1 reported learning about it through his realtor when buying the house
 - 2 reported learning about it through events happening at adjacent parks
 - 2 reported learning about it from the entrance signs

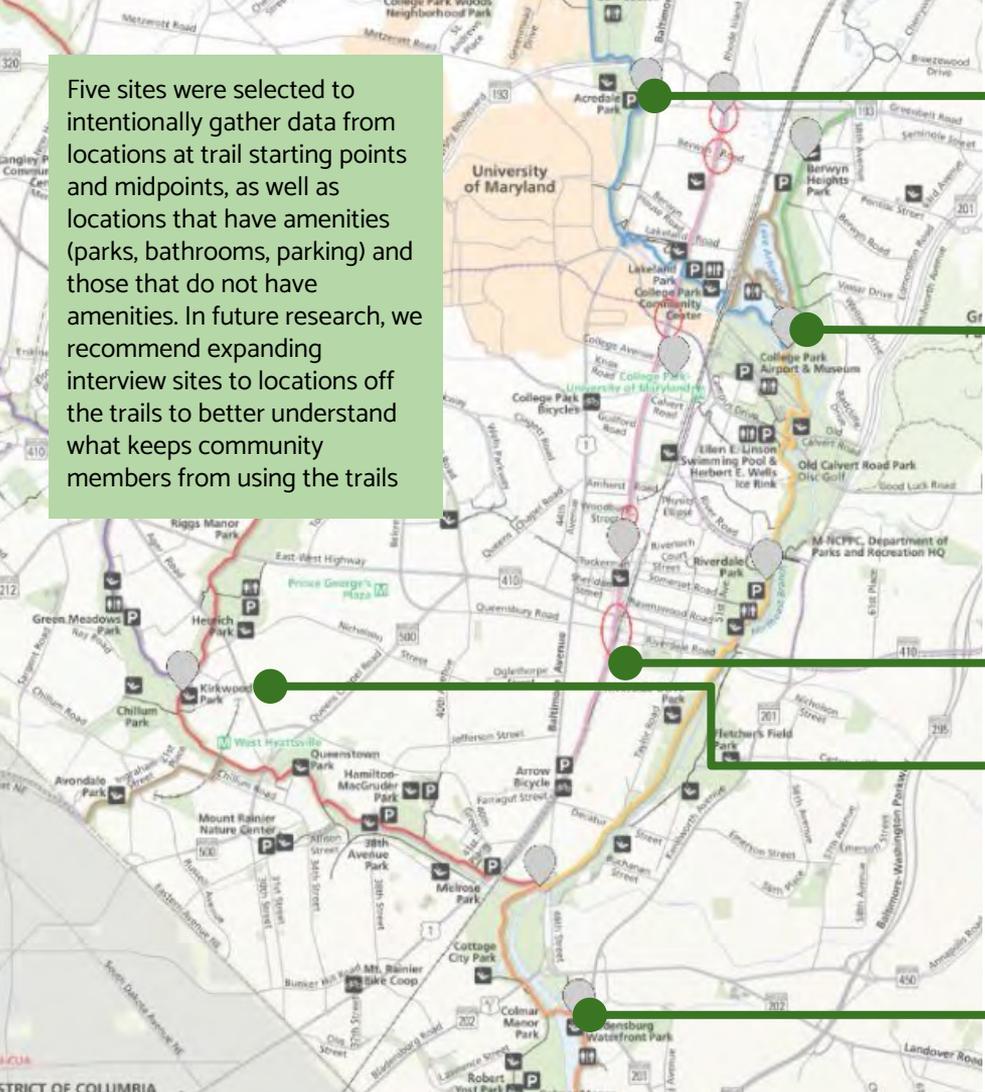
- **Question #3: How did interviewees mostly access the trail**
 - Many people mentioned walking or biking directly from home to the trail, and spoke to desiring more bike safety lanes from neighborhoods to trailheads
 - 4 interviewees reported not knowing about the actual trail name or how to enter the trail head due to lack of signage/clear entrance
 - 2 interviewees mentioned the trail being inaccessible due to flooding
 - 1 interviewee mentioned needing access to the internet to use google maps for navigation

- **Question #4: How did interviewees use the trail**
 - Overwhelmingly walkers (75%) with a few joggers (5.9%) and bikers (17% analog and 2.9% electric)
 - Almost half of the participants had children, and three of the interviewees had young children in strollers on the trail
 - While we mostly interviewed individuals, each interview team spoke with a set of couples using the trail for social reasons
 - Two interviewees on the Trolley Trail named using the trail for practical reasons to get to retail shops and cafes

- **Question #5: What were interviewees favorite thing about the trail**
 - 12 out of 30 interviewees stated nature-related description, including bird sightings, greenery, ponds, and other wildlife
 - Community, events, seeing people they know, walking with friends and neighbors
 - Having a pedestrian-only path free of cars
 - One interviewee mentioned their favorite part was that the path is well-maintained
- **Question #6: Suggested Improvements**
 - Connections: Four interviewees stated adding stronger connections between trails, along roads and intersections that could be more dangerous, through parking lots at access points, and via pedestrian bridges over train tracks and busy roads
 - Amenities: Many also included adding amenities like a restroom, water station, bike-repair station, more even lighting, seating, and internet access
 - Physical improvements: widening the path in certain narrow areas or adding “kick-outs”, ensuring smooth paving where asphalt is damaged, and adding better signage showing the connections and overall trail system
- **Question #7: Level of perceived safety**
 - 10 interviewees reported uneven lighting makes it feel less safe at night
 - 2 interviewees reported dangerous road crossings make it unsafe for bicyclists, interviewees mentioned Route 1 specifically
 - 9 interviewees reported narrow trail width in some places which makes it dangerous for multi-modal transit (ie. cyclists or scooters too close to pedestrians)
 - The average safety rating was 4.66 and the low was 2 (at night).
- **Question #8: Level of perceived access**
 - A majority of people mentioned walking or biking directly from home to the trail, and spoke to desiring more bike safety lanes from neighborhoods to trailheads
 - The average accessibility rating was 4.52, with a high of 5 and a low of 2.5.

SURVEY LOCATIONS

Five sites were selected to intentionally gather data from locations at trail starting points and midpoints, as well as locations that have amenities (parks, bathrooms, parking) and those that do not have amenities. In future research, we recommend expanding interview sites to locations off the trails to better understand what keeps community members from using the trails



Acredale Park
Paint Branch Trail
April 16

College Park Airport/ Lake Artemesia
NE Branch/Paint Branch Trail/Indian
Creek Trail
April 16

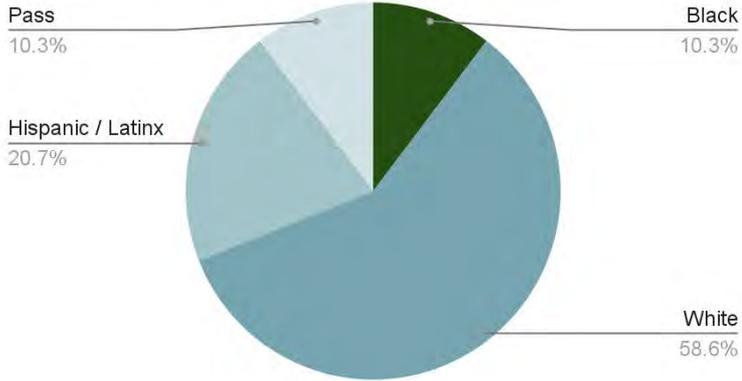
Riverdale
Trolley Trail
April 16

Kirkwood Park
NW Branch Trail
April 23

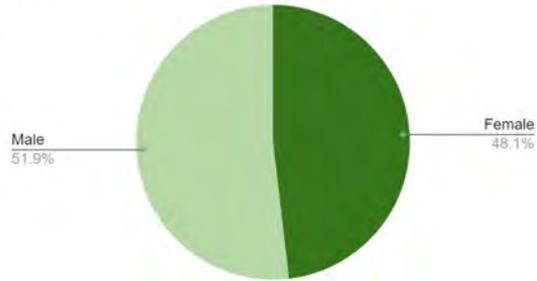
Bladensburg Waterfront Park
Anacostia River Trail
April 23

DEMOGRAPHIC DATA

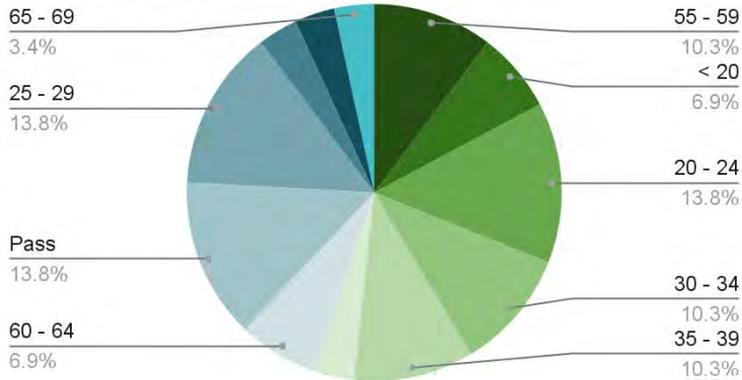
Race



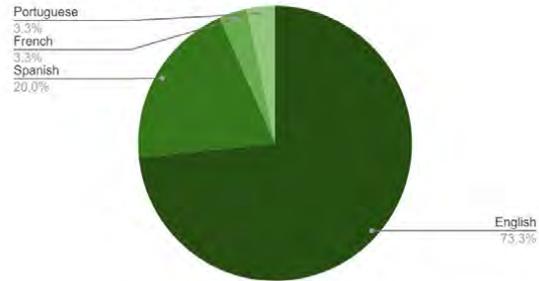
Gender



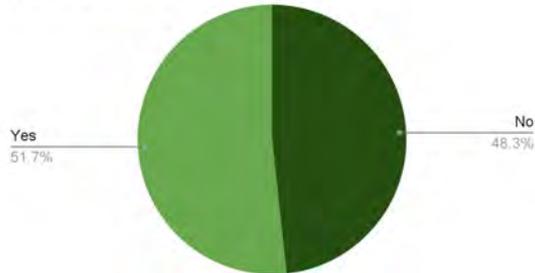
Age Range



Primary Language



Have Children



DEMOGRAPHIC SUMMARY

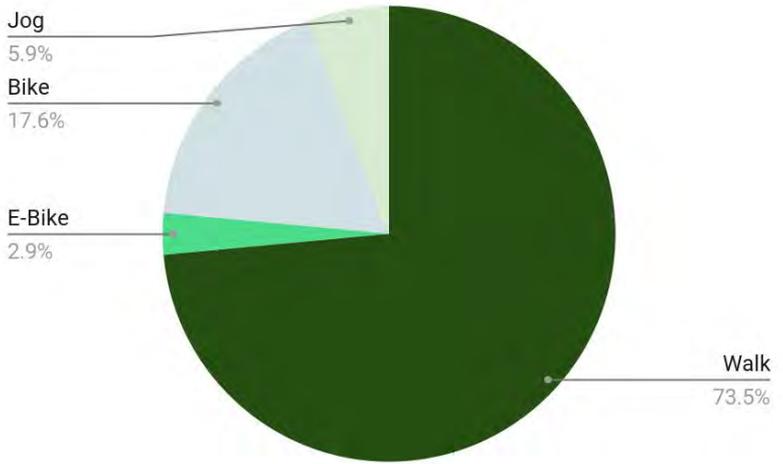
Almost two thirds of participants (58%) identified as white, with 20% identifying as Hispanic and 10% self-identifying as Black. 10% of participants did not want to answer this question and passed.

There was a wide range of ages, from 19 to 69, and no one group dominated.

Gender and having children was a fairly even split, with slightly more men (51%) than women (48%) and slightly fewer participants with children (51%) versus those without (48%).

73% of participants listed English as the primary language spoken at home. Portuguese, French, and Spanish were also mentioned as languages spoken at home.

USE OF TRAIL



Trail Use

Trail users were overwhelmingly walkers (75%) with a few joggers (5.9%) and bikers (17% analog and 2.9% electric).

Access

The average accessibility rating was 4.52, with a high of 5 and a low of 2.5.

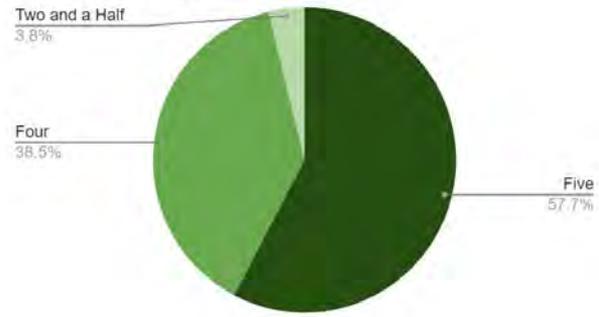
Race and Use:

All bikers identified as white. All respondents identifying as Black or Latino were walkers and joggers.

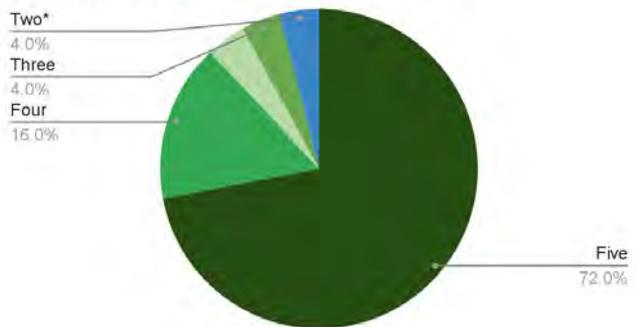
Safety:

The average safety rating was 4.66 and the low was 2 (at night). Women's average safety rating was only 4.46 with a low of 2 (again, at night) whereas men's safety average was 4.86 with a low of 4.

Access Ratings



Safety Ratings





ACCESS TO NATURE

12 out of 30 interviewees stated nature appreciation as their favorite thing about using the trail, including bird sightings, greenery, ponds, and other wildlife



SOCIALIZING

Other things mentioned include trail community, trail-based events, seeing people they know or walking with friends and neighbors



PEDESTRIAN FRIENDLY

One interviewee mentioned their favorite part was the well-maintained parts and one commented that it's most valuable because it's free of cars

FOCUS GROUP: PROTEUS BIKES

RELATIONSHIP WITH TRAIL

- Many use it daily to commute to work or shops along with recreational riding
- The heavy use from walkers makes it harder to go on long, uninterrupted rides on a bike
- Isolated parts of the trail feel less safe for women in addition to under-lit areas when it gets dark

ROLE

- Involved in the bike advocacy community - WABA is a main organizer
- Leading rides and guiding new users to help navigate where the trail runs
- Hosting bike club



- More lighting on commute paths for when it gets darker earlier
- Clear and consistent etiquette expectation for walkers, cyclists (including e-bikes), and scooters
- Safer connections at major intersections to force cars to stop
- Protected pathways to get to the trail system (example: greenbelt)
- Path widening and vegetation clearing at narrow sections, especially around blind corners on the Anacostia

SUGGESTED IMPROVEMENTS

- Jurisdictional boundaries: infrastructure and maintenance improvements for city and state-owned sections (ie: salting for ice) cited 195 and Ager Rd. in Hyattsville (still dangerous even after a retrofit)
- Intersections create disconnections in many areas, although the Anacostia River Trail has more calm “at-grade” crossings
- The race track in DC is called the “glass pass” because there’s an “80% chance of getting a flat tire” due to the level of glass and debris (one member of the focus group mentioned it wasn’t as bad lately)

BARRIERS

KEY TAKEAWAYS



- Main Themes
- Barriers to Access
- Demographic Analysis
- Recommendations
- Trail Comparisons
- Conclusions



Awareness

How people found out about the trail(s)

- Living near the trail
- Word of mouth
- Recreational events
- Street-level and access points Signage near existing amenities



Safety

Pedestrian, road, and personal safety

- Uneven lighting at night (discouraging commuting)
- Dangerous road crossings leading up to entrances and between connections
- Narrow trail width for multi-model options



Accessibility

Ease of access

- Lack of bike lanes in neighborhoods
- Lack of clear signage near trailheads
- Flooding and slow drainage
- Weak cellular and wifi connectivity
- Confusing mapping



PHYSICAL BARRIERS

Attributes: Narrow pathways, lack of pedestrian bridges, lack of tree coverage, drainage issues

Interview Excerpts:

"This section is nice and wide. There are some places where it's pretty narrow. And if you've got people bicycling in both directions, there are people who don't want to slow down. It'd be nice if it was always this wide."

"I would love it if they could have more pedestrian bridges over the train tracks or over the roads so people could get more access to it more easily."

"The exposed part of the trail [needs] more tree coverage. The stretch is brutal from Riverdale to College Park."

"The offshoot to lake Artemisa is hard, gets flooded, people with a stroller can't get through"

SOCIAL BARRIERS



Attributes: 'share the road' reminders, gender based safety concerns

Interview Excerpts

"It is really accessible, but also just knowing about it... as someone who seeks out nature, I mean, that's pretty accessible for me....It did actually take me a long time to figure out the trails and where they were... it does take some research."

"It's pretty great. But sometimes "share the road" reminders would be nice."

"There have been a couple of times that I elect to not take the trail. I'm going to trade off interpersonal safety as a woman on the trail during the day when almost no one is there."



POLITICAL/ REGULATORY BARRIERS

Attributes: Jurisdictional rule disparity,
unsafe digital directions

Interview Excerpts::

“I recently got a bike, an electric bike, which I think we can use on the trail? I’ve looked it up - I know in DC you can, but then like the Maryland laws you can, but it’s like, a different [jurisdiction], so... It’s kind of weird, because we have so many-like DC, Virginia, Maryland, all close.”

“Working with Google or Apple to actually put the bike trails and ways that you can get around and navigate a little bit better... when you go on a bike route, they often take you on the roads, even though the bike paths are really close, and a lot more safe.”

FINANCIAL BARRIERS



Attributes: Maintenance quality disparities

Interview Excerpts:

Some of the trolley interviews mentioned differences in the maintenance and quality of trails (Specifically between Riverdale and W Hyattsville).

Interview excerpts like “it [the trail] just gets a little more love over there,” points to disparities in maintenance based on income differences between the two areas.

“The Riverdale section of the trolley tail has rain gardens, trees, lighting, and wide pathways. In comparison, the West Hyattsville section is narrow and bumpy without landscaping features.”

DEMOGRAPHIC ANALYSIS

RACE/ETHNICITY

- 58.6% of survey respondents were White, 10.% Black, and 20.7% Latinx
- Survey-takers were not representative of the predominantly Black and Latinx residents in the counties directly adjacent to the trail system.

LANGUAGE

Slightly higher percentages of English, Spanish, and Indo-European language speakers on the trail compared to the counties at large. English was the most common language spoken, followed by Spanish



AGE AND GENDER

The demographics of those surveyed and the larger County demographics are mostly in alignment here, though from a population perspective, the counties do have more females than males, but the survey results had a slight majority of male respondents



DEMOGRAPHIC ANALYSIS

INCOME

- Chillum, College Park, Langley park, Adelphi have the lowest median incomes while Colmar, Riverdale, and Berwyn Heights have the highest
- Lower income communities along the trail are correlated with trail sections with lower maintenance levels, per interviews and physical observations

EMPLOYMENT

Lower unemployment rates in Riverdale Park areas (Trolley Trail) and Silver Spring/Takoma Park. This could impact how people are using the trails in different areas. Silver Spring was also noted as the highest Work From Home community, meaning no need to commute





A. Northeast Branch



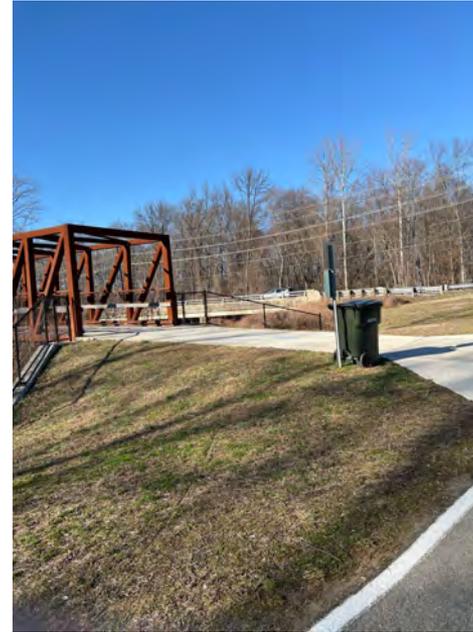
B. Trolley Trail



C. Anacostia River Trail



D. Northwest Trail



E. Paint Branch Trail: This trail starts at Lake Artemisia and goes southwest, with more visible maintenance and public amenities



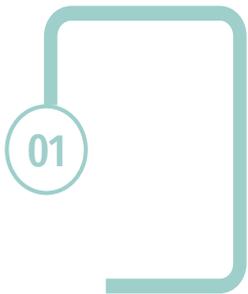
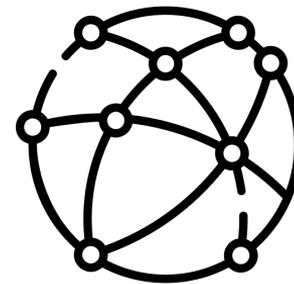
TRAIL COMPARISONS

- A: Image shows Northeast has narrow paths, blind corners, and mud and flooding from floodplain nearby
- B: Image showing the Trolley Trail has more amenities and better maintenance in general near main hubs, less so away from hubs
- C: Image shows new trail signage showing connections, new pedestrian bridge, still has areas requiring maintenance
- D: Image showing a well maintained Northwest Trail, but in general areas had less connectivity
- E: Image shows a trash can, sign, new pavement, and a decorative pedestrian bridge, and recent maintenance



Connections

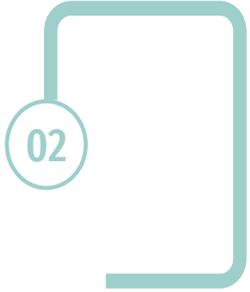
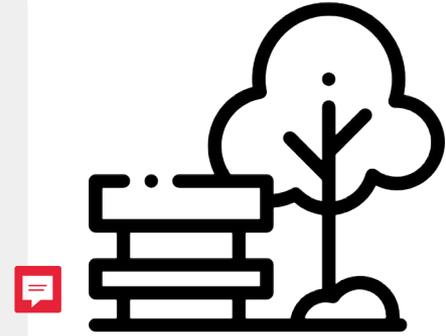
Archival analysis shows that trails developed separately and were gradually connected. Interviewees identified connectivity as a barrier to use, and advocated for stronger connections between trails along dangerous roads and intersections, through parking lots at access points, and via pedestrian bridges over train tracks and busy roads.



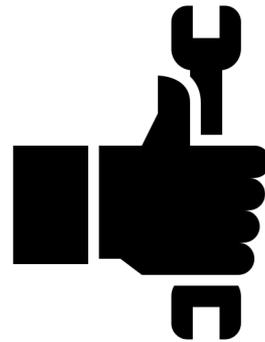
Images depict areas along the Northeast and Northwest trail that have low connectivity

Amenities

The location of trail infrastructure and amenities influenced the activities happening on the trails. For example, locations with trash cans had less litter than locations without them. During the interviews, many also expressed a need for trash cans, restrooms, water stations, bike-repair stations, seating, maps, and internet access.

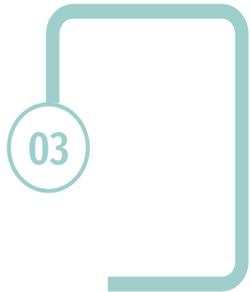


Images depict areas along the Northeast and Northwest trail that have trash cans or dog-waste receptacles



Physical Improvements

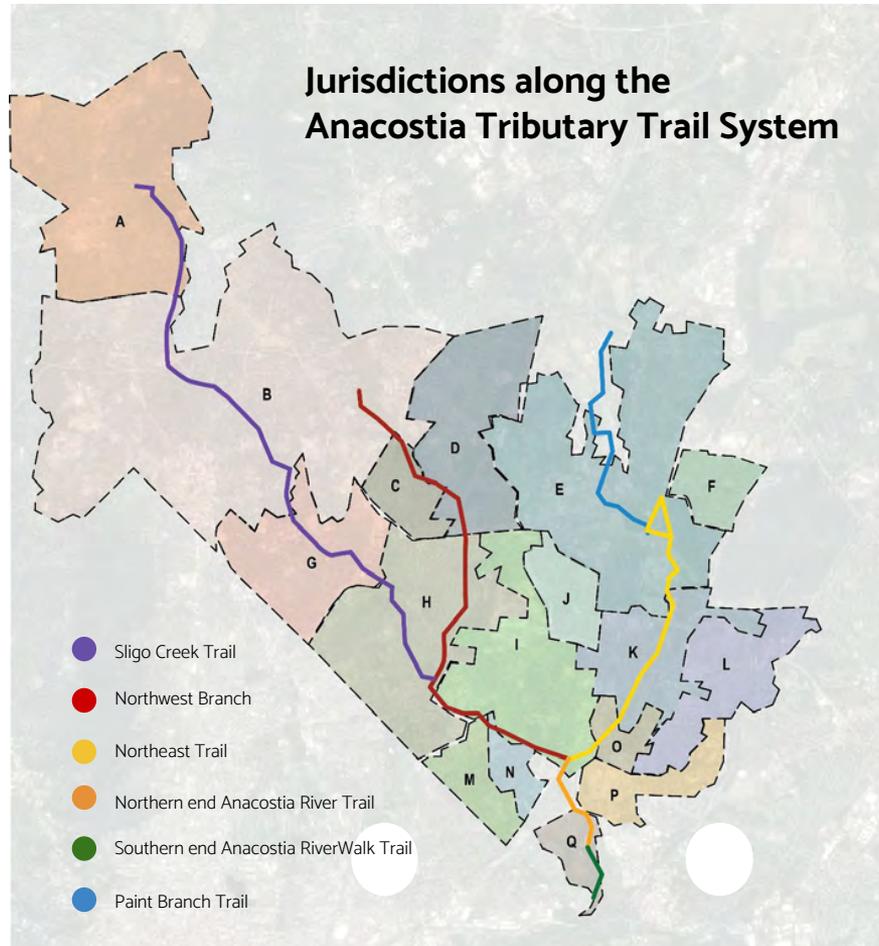
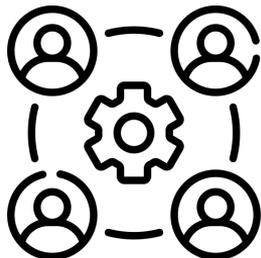
Widening the path in narrow regions, adding “kick-outs,” to pull aside, creating separate lanes for pedestrians and cyclists, ensuring smooth paving where asphalt is damaged, and adding better signage that shows connections and trail etiquette may encourage a greater diversity of activities on the trail.



Images depict areas along the Northeast Trail section that show debris, flooding, disruption in the pavement, and narrow passages

Interjurisdictional Coordination

Demographic analysis showed a clear income divide between communities along the trails, with higher-income communities bordering the Northwest Branch Trail that were notably well-maintained in comparison. Enhanced inter-jurisdictional trail coordination for maintenance, among other concerns, would make the trail feel more cohesive. When certain sections of the trail are less maintained, the disconnected nature of the trails is evident.

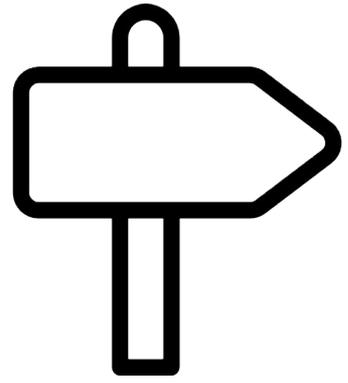


JURISDICTIONS

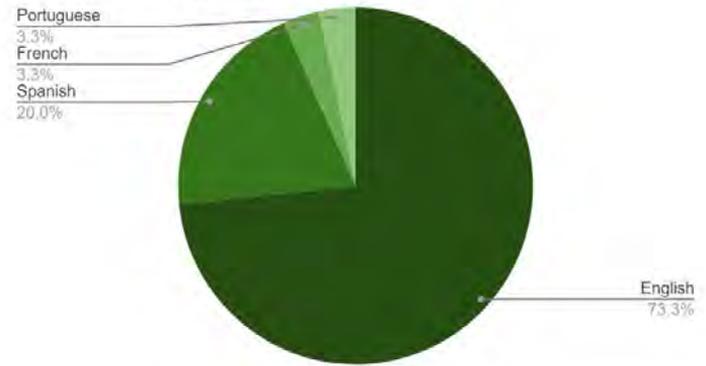
- A. Wheaton
- B. Silver Spring
- C. Langley Park
- D. Adelphi
- E. College Park
- F. Berwyn Heights
- G. Takoma Park
- H. Chillum
- I. Hyattsville
- J. University Park
- K. Riverdale Park
- L. East Riverdale
- M. Mount Rainier
- N. Brentwood
- O. Edmonston
- P. Bladensburg
- Q. Colmar Manor

Bilingual Signage

Seven out of eight interviewees located along the northern end of the Indian Creek Trail to the east of Langley Park identified Spanish as their primary language. While some signs had Spanish translation, more well-designed, integrated, and frequent signage and mapping with Spanish language translation would benefit trail users in this section.



Primary Language



Recreational use

Trail users near counties with larger reported family sizes and lower incomes, like Brentwood and Adelphi, were observed as using the trails more near their parks, playspaces, and for recreation or rest. Including more amenities like restrooms or seating areas might support these trail users more.

Locations:

- A. Park areas along the trail in Adelphi
- B. Park areas along the trail in Brentwood

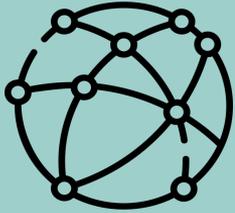


A. Adelphi park along the Indian creek trail has baseball fields but and no other amenities like a watering source, restroom facilities or additional seating along the trail to the fields



B. Melrose park in NW Branch trail has a skate park, basketball courts, trash cans, and benches but no bathrooms and no other amenities like a watering source along the trail

We recommend a follow-up study on jurisdictional coordination and resource management along the trail system. Our foundational study points to potential areas of improvement, from physical improvements that widen the path to allow space for cyclists and walkers, to wayfinding improvement, including GPS integration. Holistic coordination between jurisdictions and stakeholders could provide a more equitable experience along the trail, particularly in the following areas:



Strengthen connections
between trail sections



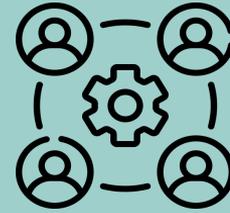
Equitably distribute
amenities along trail



Provide consistent
maintenance and repair



Coordinate more
Bilingual wayfinding signs



Strengthen partnerships
across jurisdictions



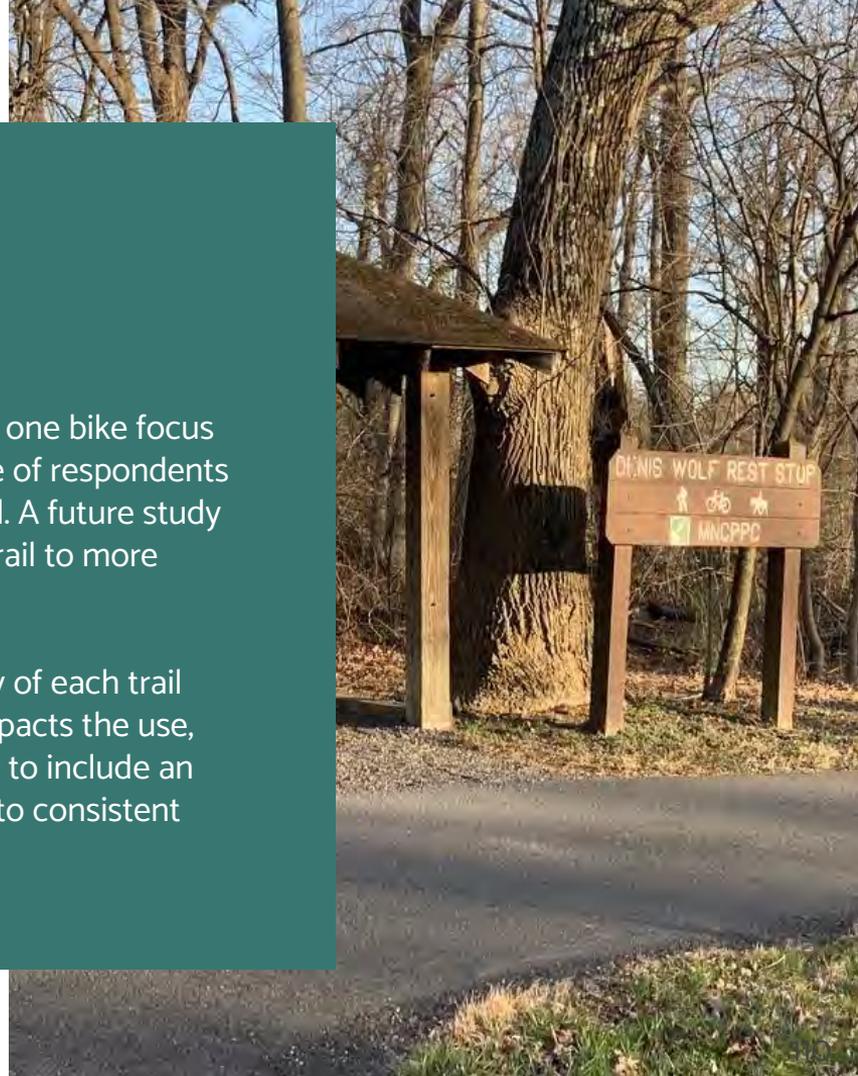
Local neighborhoods and areas along the trail have specific needs, For example, some locations have more families but a lack of amenities. Further research should identify local needs along each section of the trail system specific to that section's local culture.



FUTURE RESEARCH

This study included 30 interviews at five sections of the trail and one bike focus group. We recommend a future study to capture a larger sample of respondents at targeted trail locations and areas directly surrounding the trail. A future study could include sampling locations away from or adjacent to the trail to more accurately reflect community awareness.

Future research could focus on connections between the history of each trail section and current conditions to better understand how this impacts the use, maintenance, access, and safety of the trail now. It is crucial also to include an analysis examining how multiple jurisdictions create challenges to consistent maintenance and amenities. 



APPENDIX

