Exploring Public Access Along the Anacostia River Trail System

URSP 600 | Spring 2023





Partnership for Action Learning in Sustainability



live more, play more

Report authored by:

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Under the supervision of Professor Alex Donahue, AIA

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PROJECT OVERVIEW

- Executive Summary
- Research Question

LITERATURE REVIEW

- Community & Trails
- Public Health & Trails
- Access, Inclusion/Exclusion & Trails
- Transportation Design & Trails
- Environment, Sustainability, Resilience, & Trails

PILOT STUDY OVERVIEW

- Group A: Paint Branch Trail
- Group B: Northeast Branch Trail
- Group C: Northwest Branch Trail
- Group D: Lake Artemesia
- Group E: Anacostia Riverwalk Trail (MD Section)

METHODOLOGY

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

KEY FINDINGS

• Analysis of Data and Final Recommendations

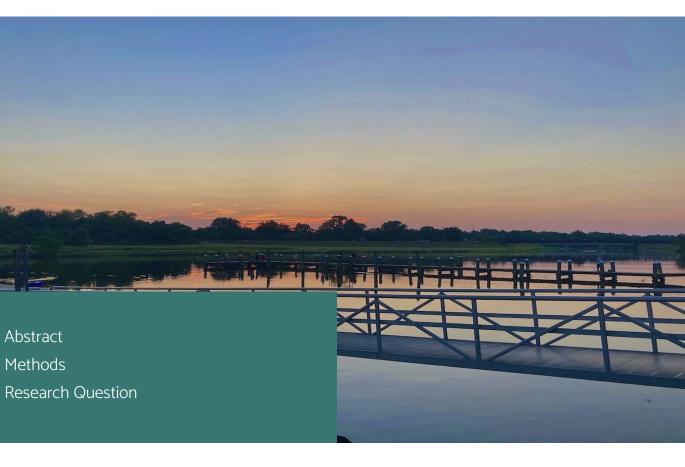
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OVERVIEW PROJEC

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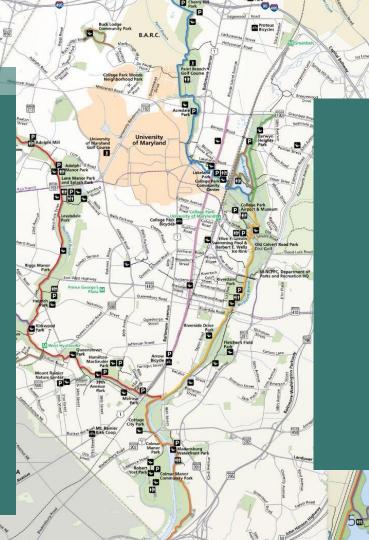
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This past semester, class members of URSP600: Qualitative Research Methods worked on a PALS project regarding the Anacostia River Trail System. The class partnered with Prince George's County Planning Department to conduct a sweeping study of the trail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



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

METHODS





Main Question

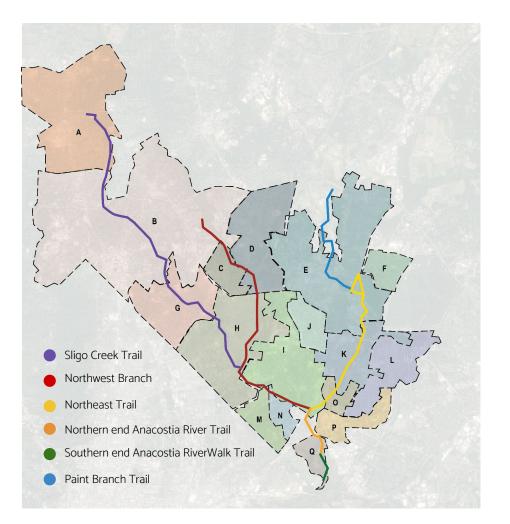
How might the Anacostia Tributary Trail System be made more accessible to the public?

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?

Seq

estions



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.



- 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.

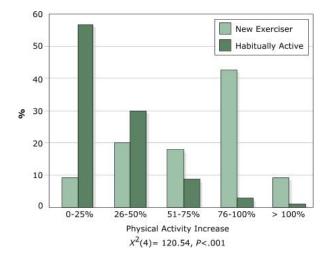
Key findings:

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:

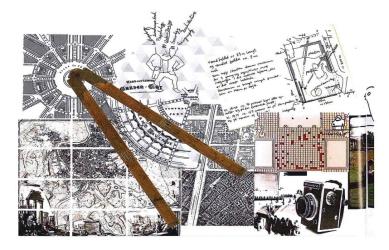
- A true survey response rate could not be calculated
- Opinions were collected from 414 adults in a community with a population of 26,809

Lit Review

Groups B + C: Kayla, Aaron, Alanna, Maura, Jona, Megan, and Mimi¹¹

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.

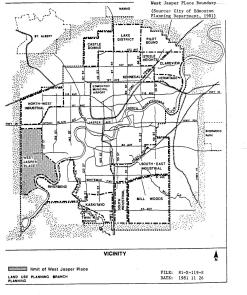
Methods:

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

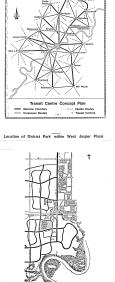
> **Lit Review:** Group D: Sarah, Annonya, Sururah, Bill

West Jasper Place -Community Profile





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This article is an older copy (from 1981) of a standard community overview of Jasper Place - a neighborhood within the larger city of Edmonton - the capital of Alberta, Canada. It is relevant to our group's research because it can serve as a template for our creation of the Anacostia River Trail community profile

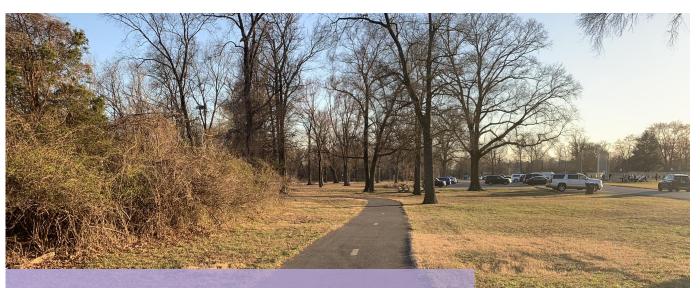
By utilizing a similar format to what the planners used to analyze West Jasper Place, we can also generate a detailed overview of the Anacostia River Trail surrounding community.

Main research question: How can the built environment of the Jasper Place neighborhood be improved, while incorporating the current makeup of the surrounding community?

Methods Used:

- More quantitative data collection than qualitative
- Mapping of different sections of the neighborhood, including parks, specific streets, etc
- Investigation into specific community characteristics like health, crime, life skills, child welfare, and loitering
- Evaluating the progress of residential housing development within the neighborhood
- Resident transportation usage

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- 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)

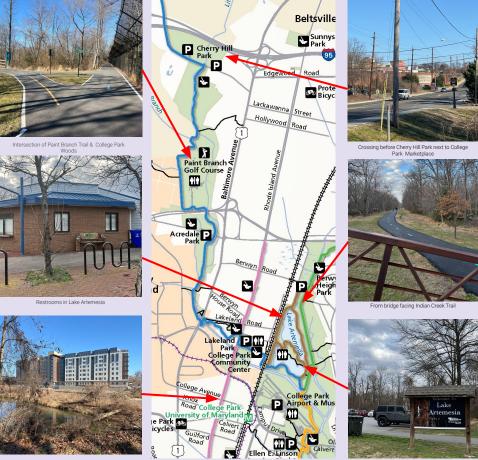
Photo by Maura Dwy

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)



Development along trail near campus

Lake Artemesia entry signage and parking

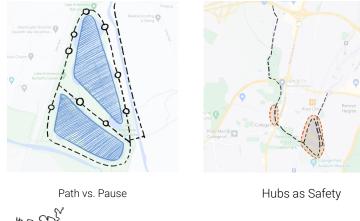
We walked the Paint Branch Trail in the morning on Saturday, February 19. We walked Lake Artemesia and Little Indian Creek Trail on Monday, February 20, at around 4 pm. This day was also a holiday.

aint Branch rail

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

Paint Branch Trail

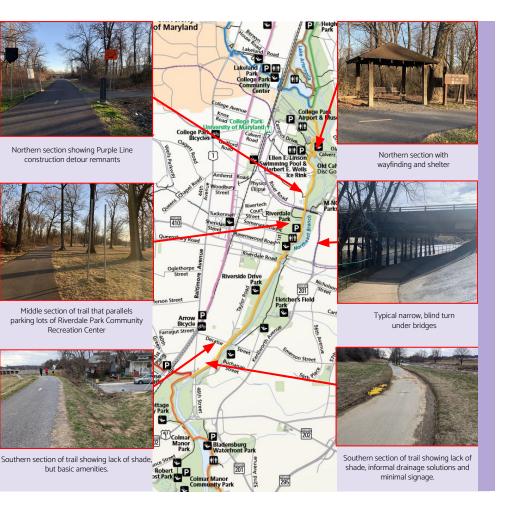


VE 6 CONCRETE BRICK VEG Section showing changes in ground conditions

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.

> **Pilot Study** Group A: Maisha, Sam, Jihee, Judy 17



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

- 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
- Lack of lighting and other safety features

 especially when in woods and
 underneath bridges

Northeast Branch Trail

Pilot Study Group B: Jona, Maura, Megan, & Mimi₁₈

Northeast Branch Trail



Purple dots show adjacent recreational spaces along NE branch of trail





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



RIVER



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

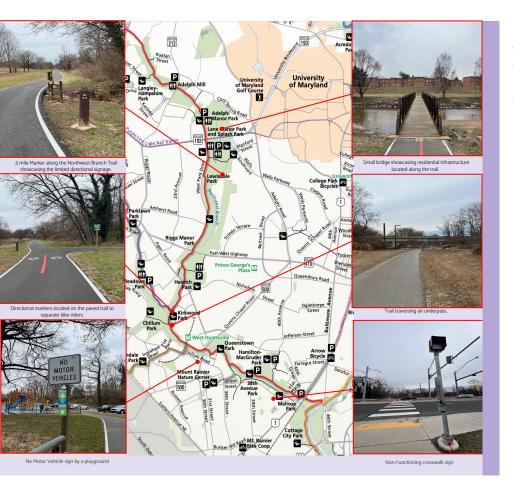
Additional documentation of trail portions without shade

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.

> **Pilot Study** Group B: Jona, Maura, Megan, & Mimi₁9



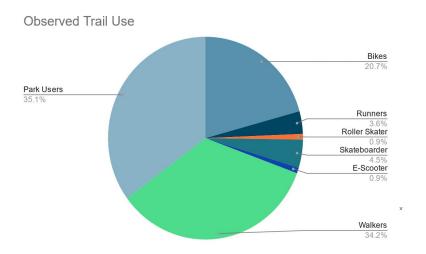
On Feb 20th around noon, our group walked this trail split into two groups so we could cover the entire trail. Each group started off on opposite ends of the trail.

Northwest Branch Trail

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



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.



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

Rhode Island Avenue Trolley Trail

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<u>ab</u>

Rhode Island Avenue Trolley Trail



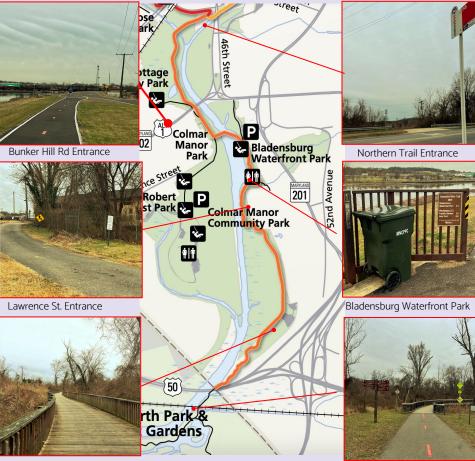


Images show areas along the Trolley Trail that have seating, scooter access, visible signage and areas to gather with maintained landscaping

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.

> Pilot Study Group D: Annonya, Bill, Sarah, Surur<u>2</u>3



End of MD Trail

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

Boardwalk

Anacostia River Trail (Maryland Section)

in the Road



Self-Identified Entrance Diagram



Sketch of the single bench we saw on the trai

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.



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

Photo by Jona Elso

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.







Gender



Age



Median Income



Language

Employment

Education



Race and Ethnicity



Commuting Characteristics

Household Characteristics

Demographic Analysis

П APHICS



2

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

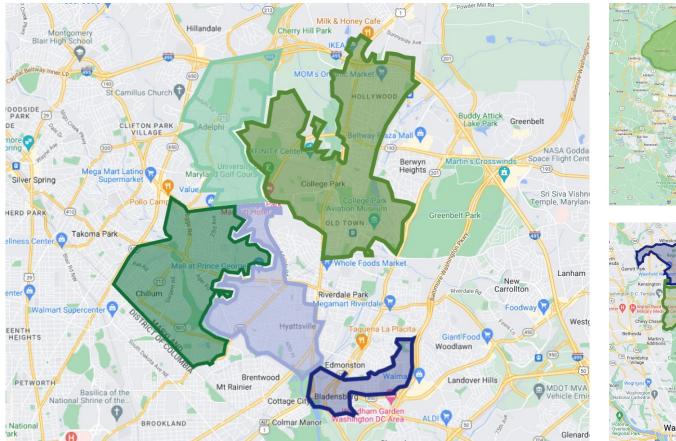
RELATIONSHIP BETWEEN DEMOGRAPHICS AND TRAIL USAGE



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.



AREA MAP

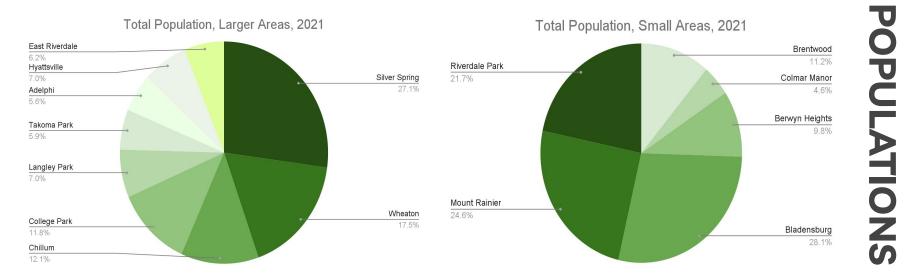
Baltimore

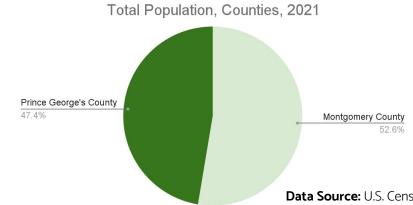
 Image: construction of the co

Washington

Arlington

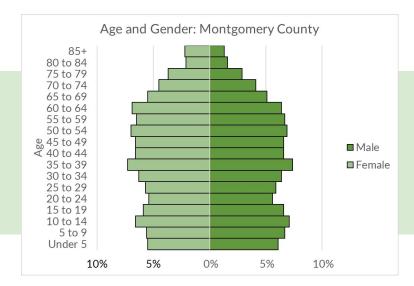
Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021





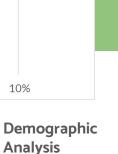
- The populations of Silver Spring and Wheaton comprise around half of the total population of the larger areas
- For the smaller areas, Bladensburg and Mount Rainier contain approximately half of the total population
- It is also noticeable that the population of Montgomery County is around 5% larger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

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

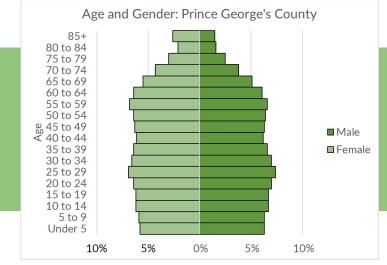


Key Takeaway

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.







EDIAN 117,345 91,124 INCOME

Counties

125.000

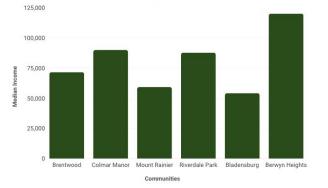
100,000

75,000

50,000 5

25,000

Communities	e with	Populations	fower	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.

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

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

Demographic Analysis

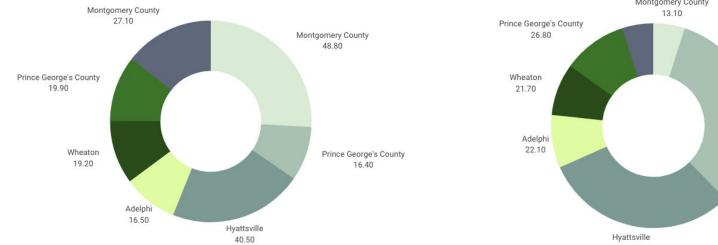


Chillen college Part ander Part avona Part

Silver Spring	91,97
Wheaton	95,62
Chillum	

Montgomery County

Prince George's County



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

Percentage of persons age 25+ Graduated High School or Higher

Montgomery County Prince George's County 86.40 81.10

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.

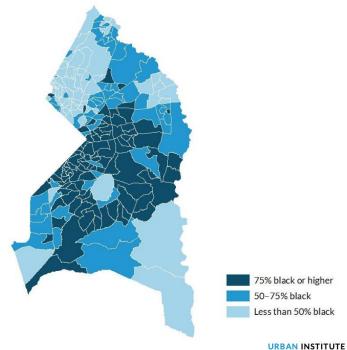
Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021

Demographic Analysis

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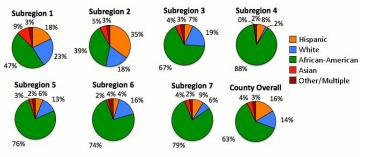
FIGURE 4

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

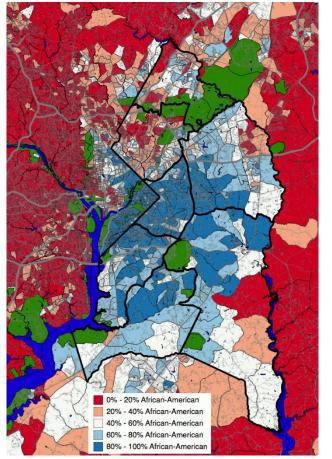


Source: American Community Survey, 2011–15. **Note:** In this figure, the black population is only those who are not Hispanic.

- 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



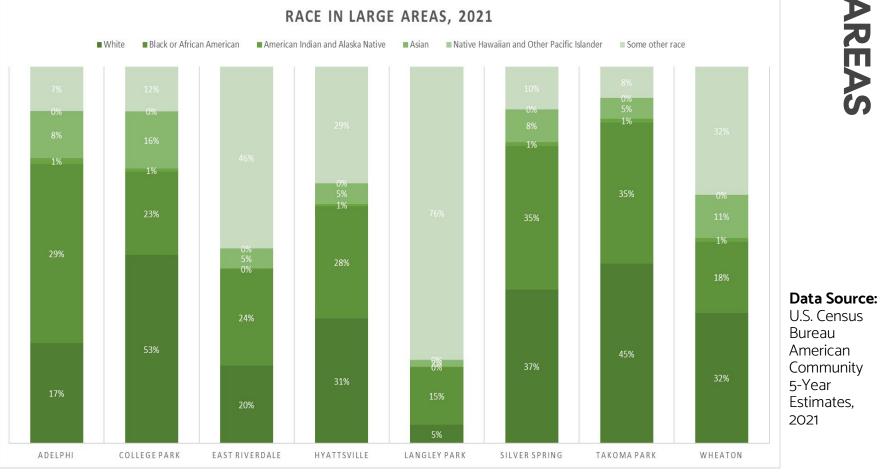
Demographic Analysis



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

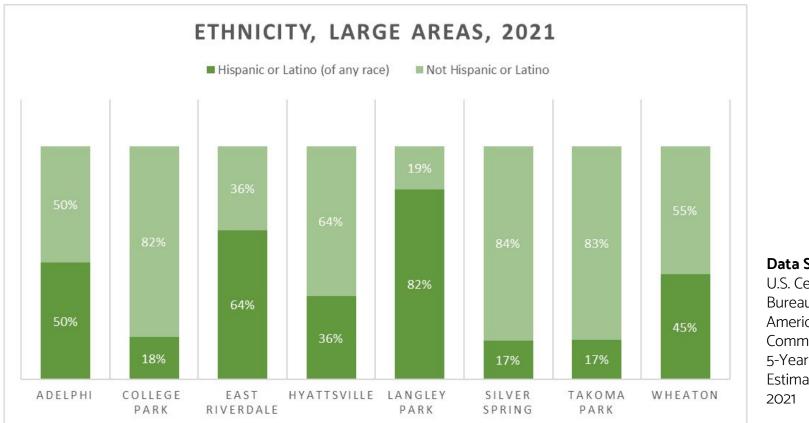
Demographic Analysis



American Community Estimates,

Demographic Analysis

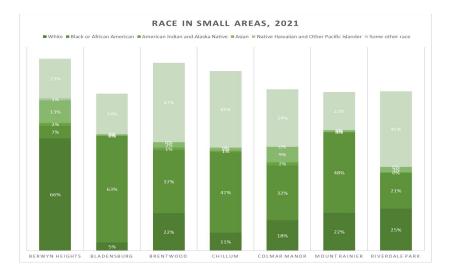
ARGE



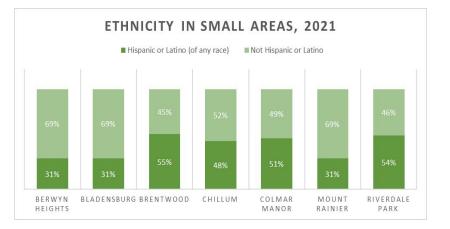
ETHNICITY -

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

Demographic Analysis

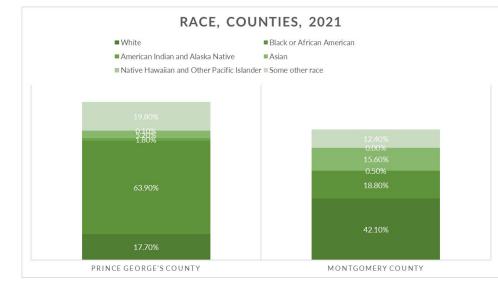


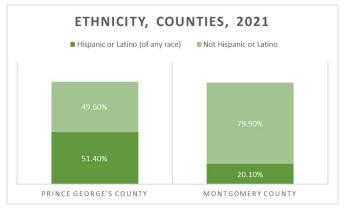




Data Source: U.S. Census Bureau American Communit y 5-Year Estimates, 2021

Demographic Analysis

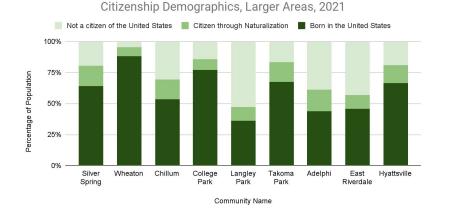




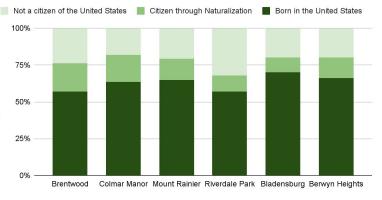


RACE AND ETHNICITY -COUNTIES

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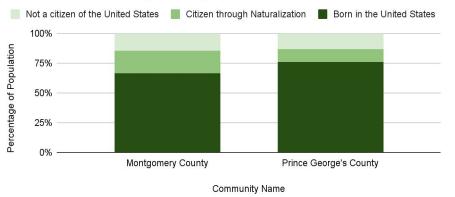
Citizenship Demographics, Small Areas, 2021



Percentage of Population

CITIZENSHIP

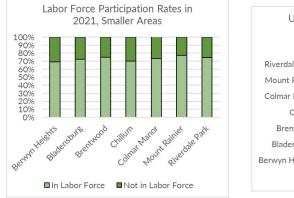
Citizenship Demographics, Counties, 2021

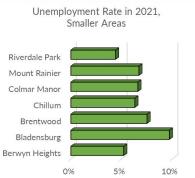


- There is a higher population of non citizens larger areas, specifically Langley Park, which has an noticeably higher percentage than the other larger areas
- The highest number of naturalized citizens is found in Wheaton in the larger areas category, and Bladensburg in the smaller areas category

Community Name

SMALL AREAS

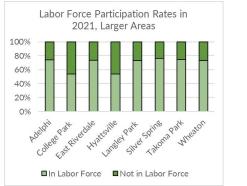


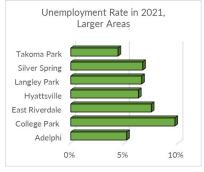


- Unemployment rates from 4% in Riverdale Park to nearly 10% in Bladensburg
- Between 70% and 80% in the labor force

U Z

LARGE AREAS



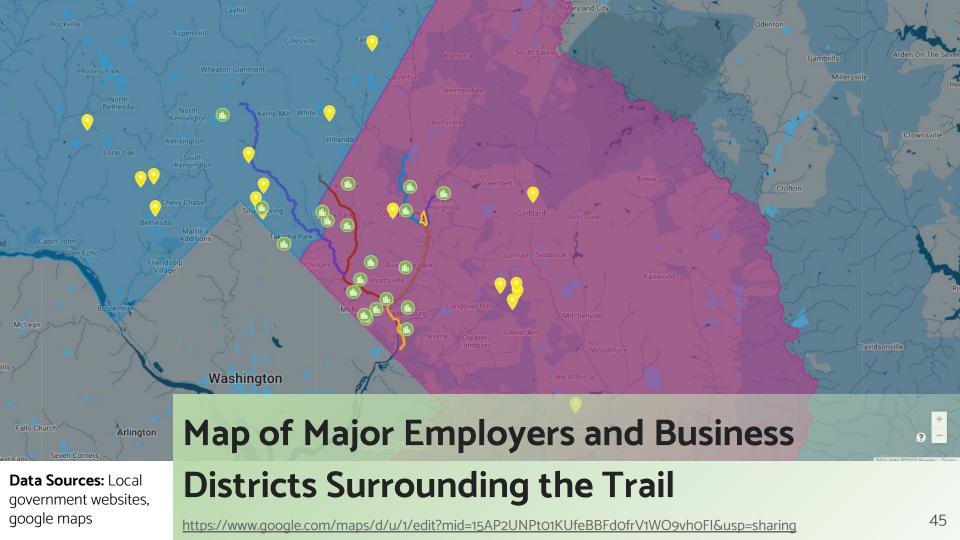


- Unemployment rates from 4% in Takoma Park to nearly 10% in College Park
- Between 50% and 75% in the labor force

Demographic Analysis

44

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







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

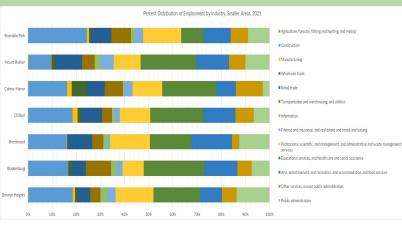
PRINCE GEORGE'S COUNTY

- 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

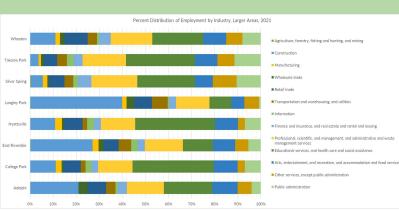
- National Institutes of Health
- U.S. Food and Drug Administration
- Naval Support Activity Bethesda
- Marriot International
- Lockheed Martin
- National Oceanic and Atmospheric Administration
- Adventist HealthCare
- Holy Cross Hospital
- Giant Food

Demographic Analysis



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

Demographic Analysis

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

KEY EMPLOYMENT PATTERNS



- 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.

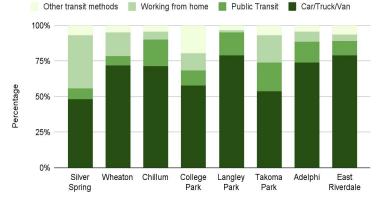
Demographic Analysis

University of Maryland, College Park

Transportation/Commuting Patterns		
Number	Community	Mean Travel Time to work (minutes)
13	Silver Spring	31.
15	Wheaton	33.
5	Chillum	35.
6	College Park	26.
10	Langley Park	40.
14	Takoma Park	3
1	Adelphi	35.
8	East Riverdale	35.
9	Hyattsville	26.
	Towns	
4	Brentwood	26.
7	Colmar Manor	3
2	Berwyn Heights	35.
3	Bladensburg	37.
11	Mount Rainier	31.
12	Riverdale Park	34.
	Counties	
17	Montgomery County	3
16	Prince George's County	33.

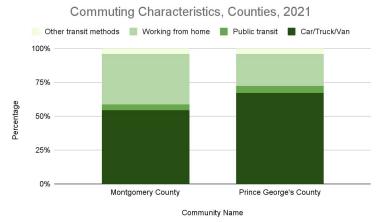
- The average commuting time for all areas is around 30-35 minutes
- <u>Outliers include:</u> Langley Park, Brentwood, Chillum, Bladensburg, and Hyattsville
- These commuting times can also be compared or contrasted with the data on slide 50, 'Commuting Characteristics'
 - **EX:** Langley Park residents 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

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Commuting Characteristics, Large Areas, 2021

Community Name



Commuting Characteristics, Small Areas, 2021 Other transit methods 📃 Working from home 📕 Public Transit 📕 Car/Truck/Van 100% 75% 50% 25% 0% Brentwood Colmar Bladensburg Berwyn Mount Riverdale Manor Heights Rainier Park

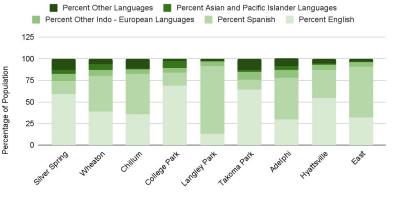
Percentage

Community Name

- 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

Demographic Analysis

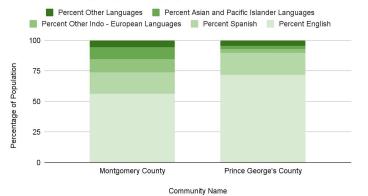
Data Source: U.S. Census Bureau American Community 5-Year Estimates, 2021



Language Demographics Large Areas, 2021

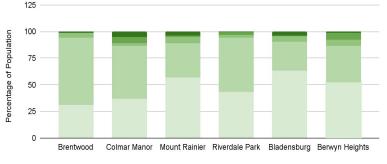
Community Name

Language Demographics, Counties, 2021



Language Demographics, Small Areas, 2021



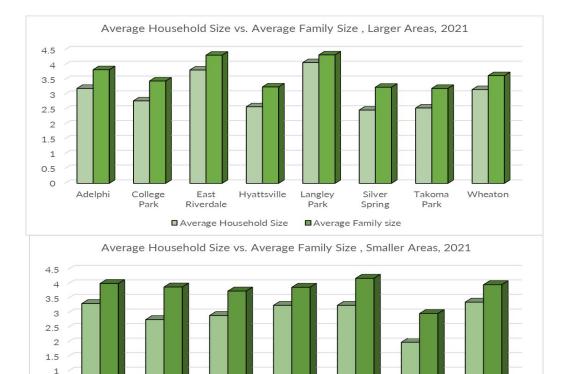


Community Name

- 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

Demographic Analysis

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



Chillum

Colmar

Manor

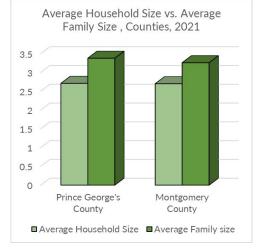
Average Family size

Mount

Rainier

Riverdale

Park



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

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

Brentwood

Average Household Size

Bladensburg

0.5

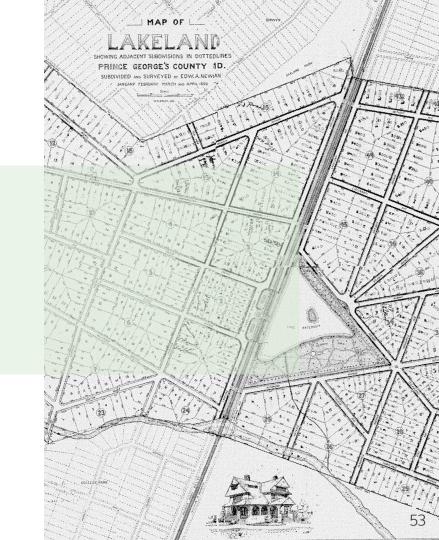
0

Berwyn

Heights



Maisha Islam Samantha Jamero Jihee Lee Judy Tram





METHODS USED

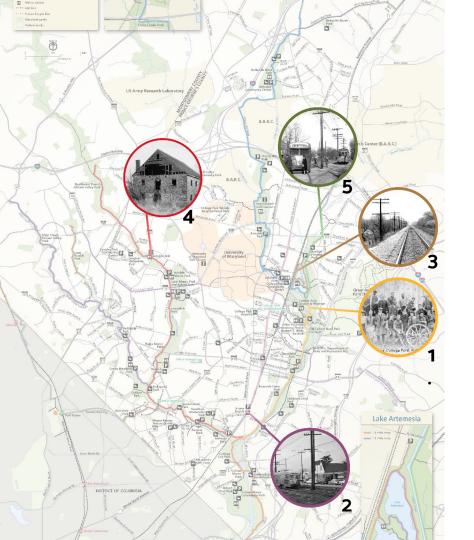
We used various archival types, including business, academic, government, and non-profit organizational archives in the form of articles, audio recordings, images, and videos to understand the history of the Anacostia Tributary Trail System holistically. The focus was to understand how and why the trail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

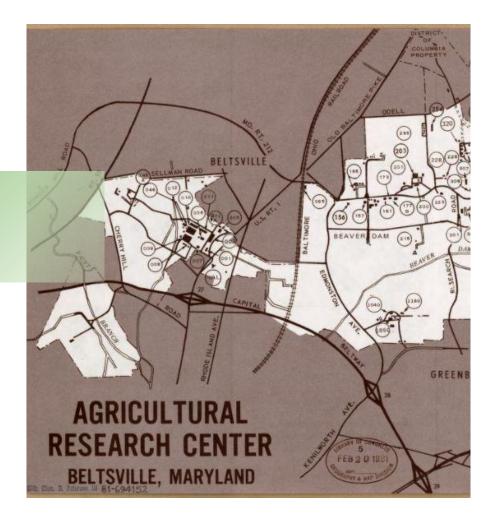
CONTRIBUTIONS

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

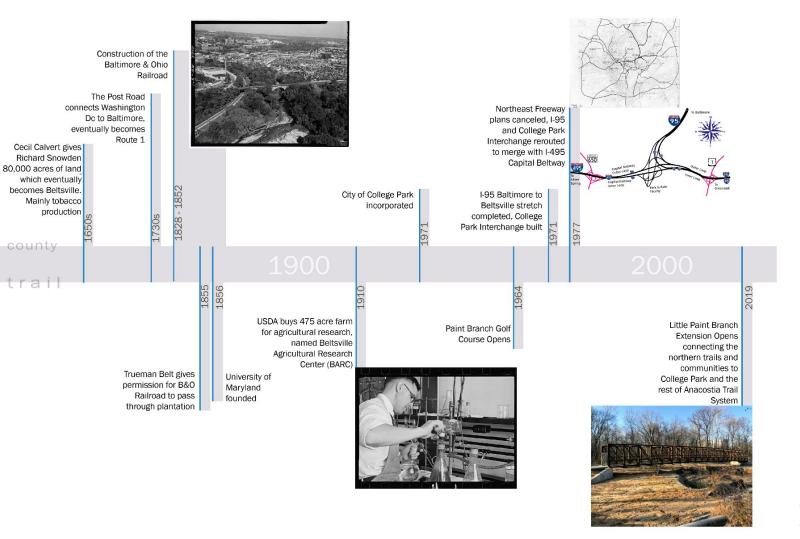
- 1. Parks create hubs of activity throughout the trails
- 2. Transportation plays a key role in the development of the trail system
- 3. Areas along the trails are impacted by flooding and environmental conservation efforts
- 4. History of community displacement near the trails, like Lakeland, require 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.





PAINT BRANCH TRAIL









Historic photos of the Paint Branch Trail Contempo

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.

BELTSVILLE, MD



1971 Map of I-95 Route to Northeast Freeway

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.

1978 Brochure Map



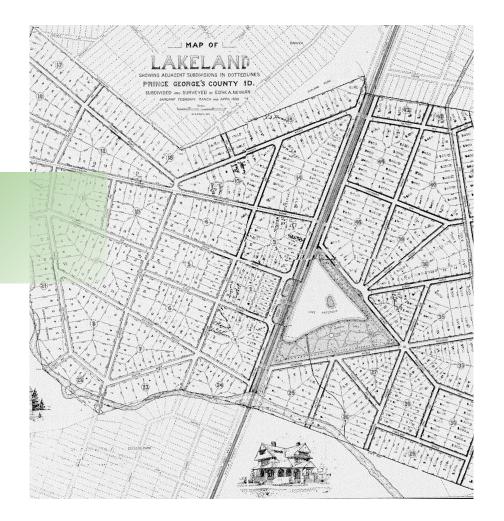
1998 Brochure Map



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.

1935 research equipment

Beltsville esearch D 0 D 7 te Cul tura

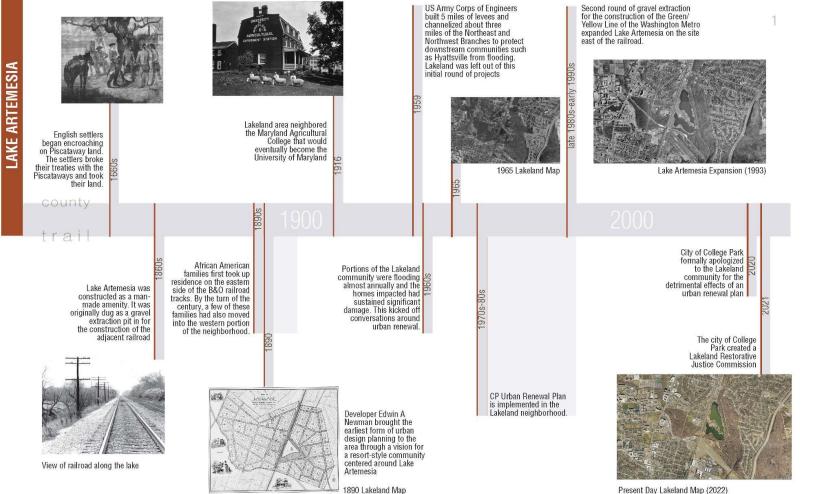


Lake Artemesia & Northeast Branch Trail

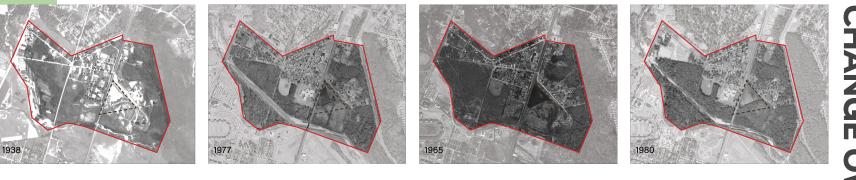
The Northeast Branch Trail follows the levee along the Northeast Branch of the Anacostia River. It runs through many historic hubs, such as the College Park Airport and Riverdale Park. It also connects to the south of Lake Artemesia, a man-made lake and natural area located near College Park, MD with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

> Archival Analysis

61



MELINE











CHANGE OVER TIME

Expansion of Lake Artemesia with construction of Green Line

Source: PG Atlas

Archival Analysis ⁶³



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.



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

Archival Analysis 64





Lakelanders worked in airfield

Founder Wilbur Wright



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



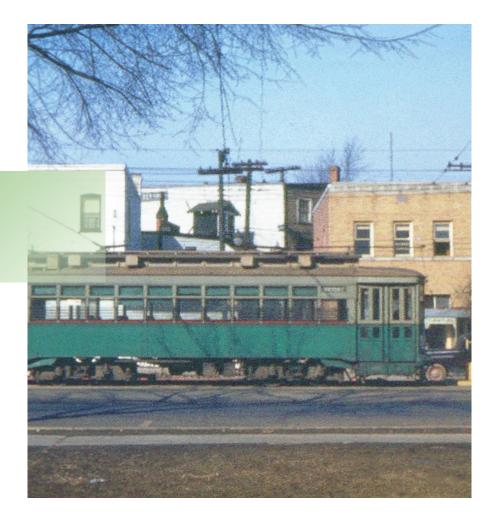
Original Victorian rail station.

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

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

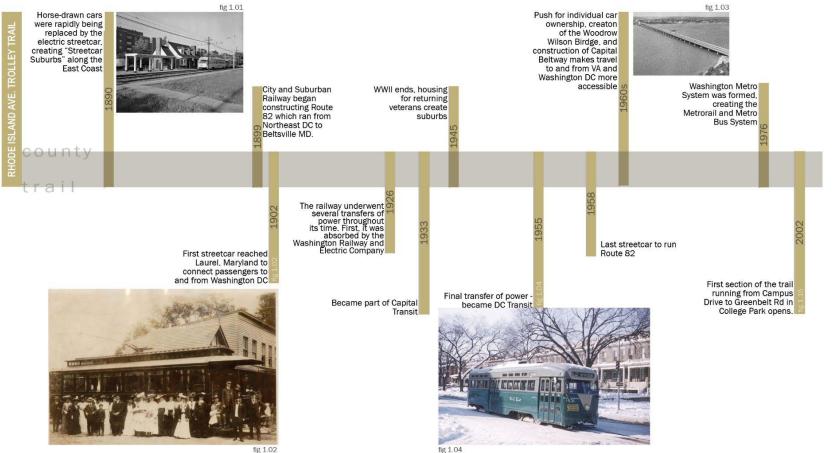
RIVERDALE PARK

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).



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.



MELINE





Hyattsville 1957 & 2004





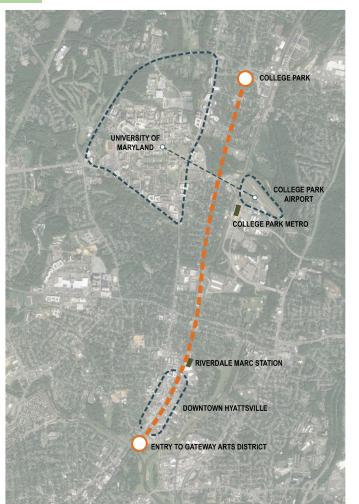
Branchville 1948 & 2004





Paint Branch Parkway 1947 & 2021

BEFORE & AFTER



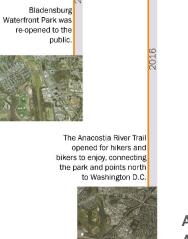
Public Transportation stations allow for access to and from the trails which then lead to community/historic hubs. This diagram explores how transportation has played a role in shaping development around the area. It also looks at how the trail crosses the 3 cities linearly, which makes it a great way 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.





Over 20% of the Anacostia's

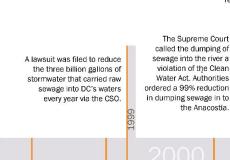
the Anacostia.

tidal wetlands have been

restored.

2006

201





The old Bladensburg Marina began to be transformed. The waterfront was redeveloped

Restoration of the Anacostia began. The Anacostia Watershed Society was founded in 1989.

96% of Anacostia

tidal wetlands

were destroyed.



The Army Corp of Engineers constructed a seawall along the river. The River and Harbor Acts of 1890, 1902, and 1910, and **District of Columbia** appropriation acts, authorized and funded the Anacostia River improvements.

Population growth and development led to more

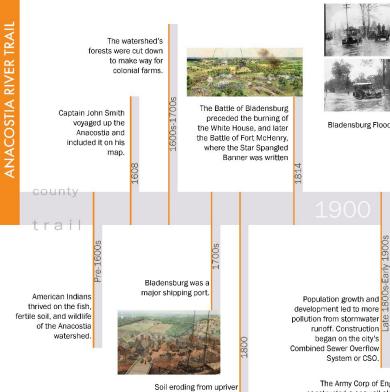
began on the city's

System or CSO.

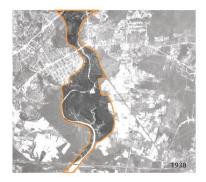
Bladensburg Flood

Early 1900s

930s



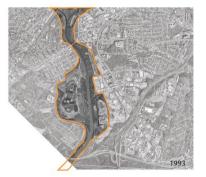
agricultural fields filled in the once-thriving port of Bladensburg.



96% of wetlands were destroyed by the 1970's



Colmar Manor community park established in 1970s.



The old Bladensburg Marina began to be transformed in 1996.



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



Anacostia River Trail opened in October 2016.



Efforts continue to connect different sections of the trail today



Port of Bladensburg in 1770



Bladensburg Food, January 1926



Bladensburg in 1861



Trail users at Bladensburg Waterfront Park 2016



Young child using a boat 2016

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.

Archival Analysis 73



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

METHODOLOGY



Journaling

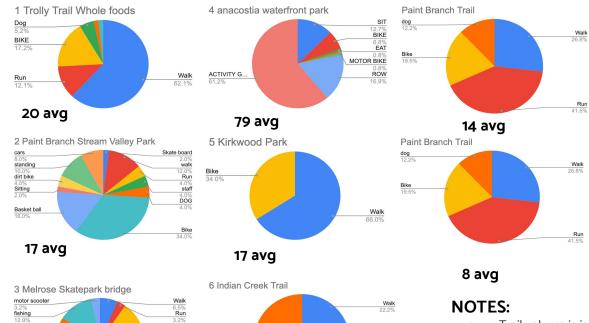
Recorded prominent typologies of activity observed, along with environmental, signage, and transportation details

Taking Pictures

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

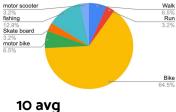
Counting

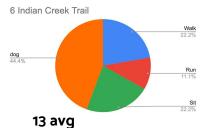
Recorded elements were counted and compared with each site.



- Trail volume is 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.

79











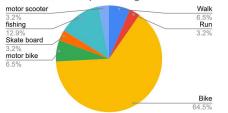
ACTIVITY ALONG

Observations 80





3 Melrose Skatepark bridge





Images of dog walkers along more residential parts of the trail



Landscape design of Melrose Skate Park by American Skate Company



ΗË C ALONG

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.



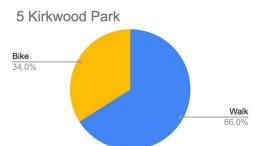
Trash disposal varied along the trail, and spots with more trash can availability had less litter. Note the tied doggy-bags around the post at one sections with no trash cans.



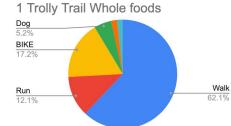




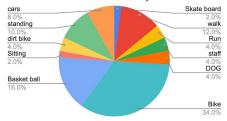




Kirkwood Park has one of the lowest rates of inner trail traffic and diversity of use types. Metro tracks and residential development border the trail.

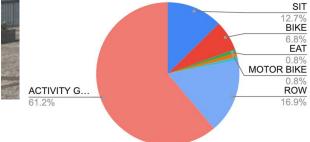


2 Paint Branch Stream Valley Park



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



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.



- 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?
- 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

Surveys and Interviews 88

• 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

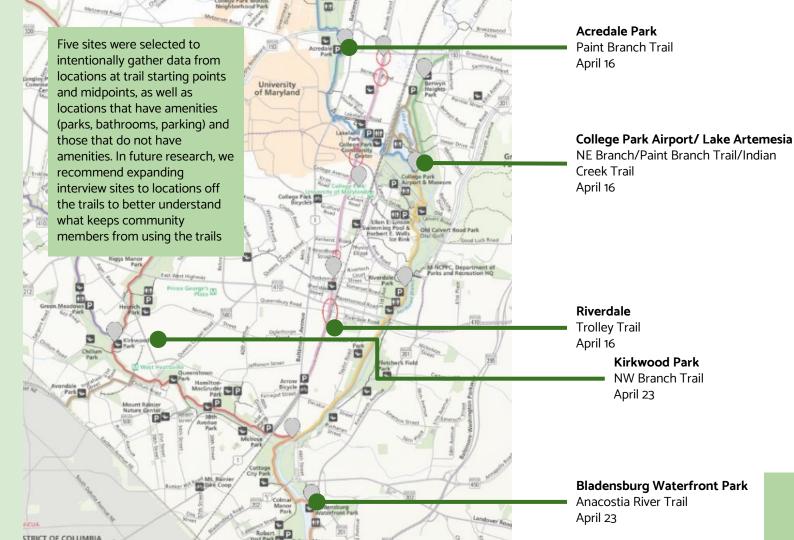
- Connections: Four interviewees stated adding stronger connections between trails, along roads and intersections that could be more dangerous, through parking lots at access points, and via pedestrian bridges over train tracks and busy roads
- Amenities: Many also included adding amenities like a restroom, 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).

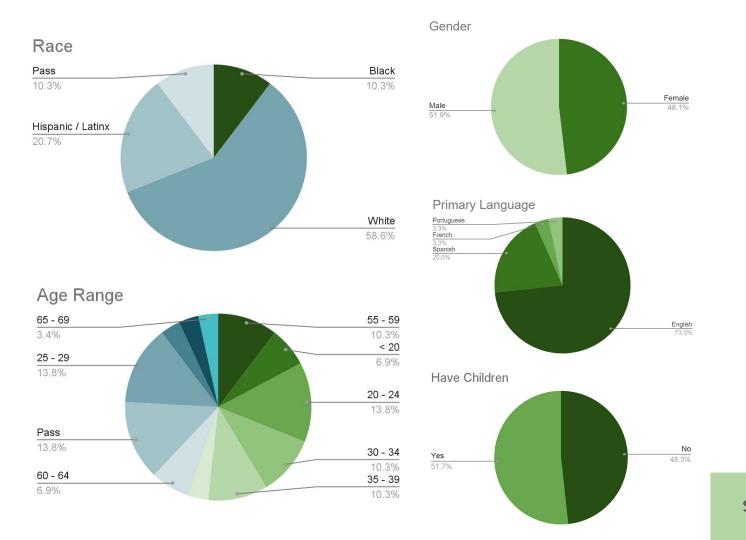
• Question #8: Level of perceived access

- 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.



URVEY P **SNO**

Surveys and Interviews



DEMOGRAPHIC DATA

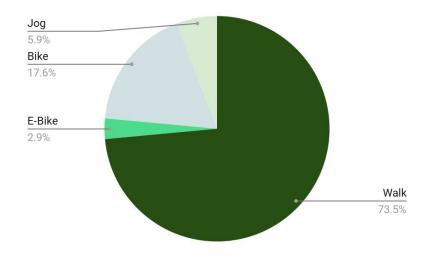
Surveys and Interviews 91

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.



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:

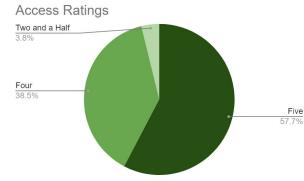
All bikers identified as white.

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

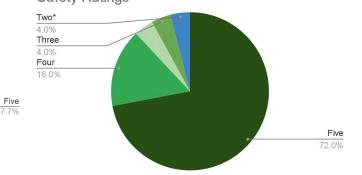
Safety:

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.



Safety Ratings



Surveys and Interviews 93



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

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

- 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

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

- 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

•

Surveys and Interviews



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



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"



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."



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 manylike 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."



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."



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



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 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



C. Anacostia River Trail



B. Trolley Trail



D. Northwest Trail



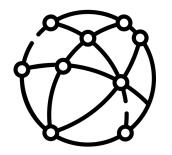
E. Paint Branch Trail: This trail starts at Lake Artemisia and goes southwest, with more visible maintenance and public amenities MPARISONS

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.









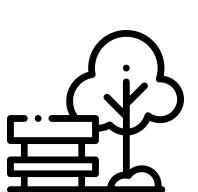


Images depict areas along the Northeast and Northwest trail that have low connectivity

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.









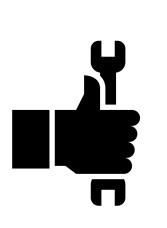


Images depict areas along the Northeast and Northwest trail that have trash cans or dog-waste receptacles

Physical Improvements

03

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.



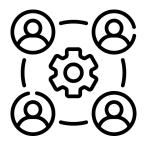


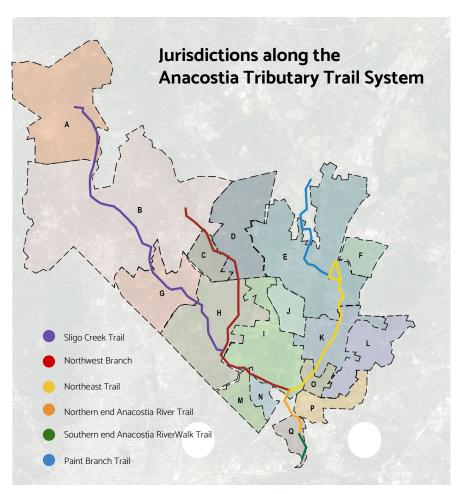


Images depict areas along the Northeast Trail section that show debris, flooding, disruption in the pavement, and narrow passages

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.



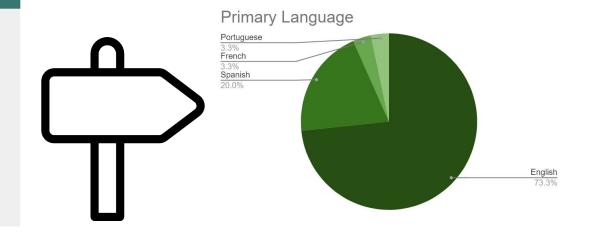


JURISDICTIONS

- Wheaton Α. Β. Silver Spring C. Langley Park D. Adelphi E. College Park F. Berwyn Heights G. Takoma Park Chillum Η. Hyattsville University Park K. Riverdale Park L. East Riverdale М. Mount Rainier N. Brentwood 0 Edmonston Ρ.
 - 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.





INSIGHTS

Recreational use

Trail users near counties with larger reported family sizes and lower incomes, like Brentwood and Aldelphi, 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





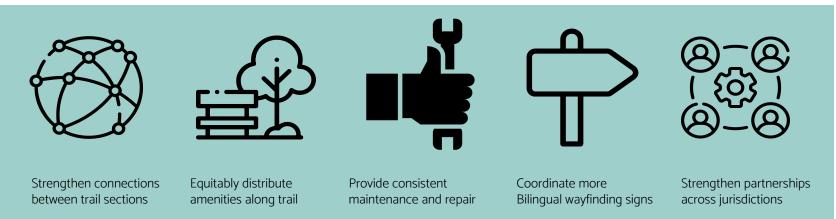


A. Adelphi park along the Indian creek trail has baseball fields but and no other amenities like a watering source, restroom facilities or additional seating along the trail to the fields



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:



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