

# Demonstrating The Value of the Appomattox Trail

Virginia State University  
Petersburg, Virginia



# VSU Team

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*JaiDa Robinson*



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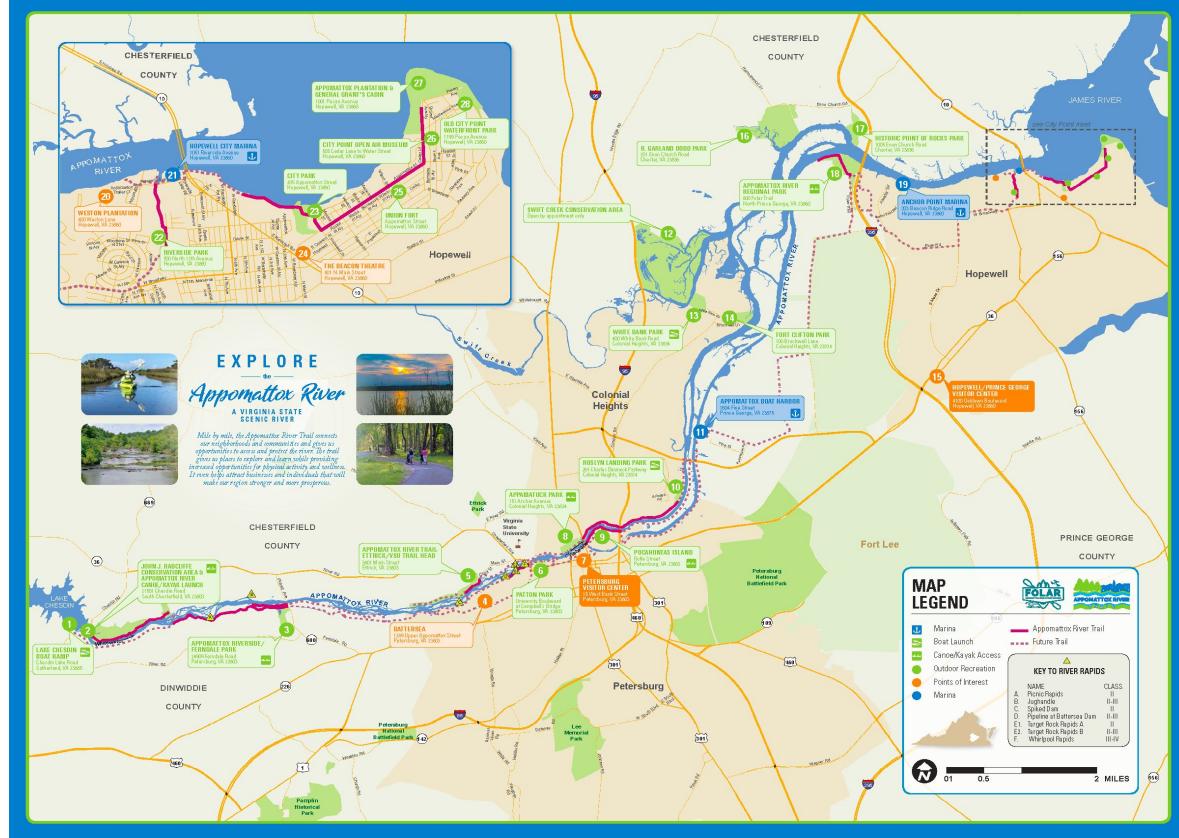


*Kyle Jacobs*



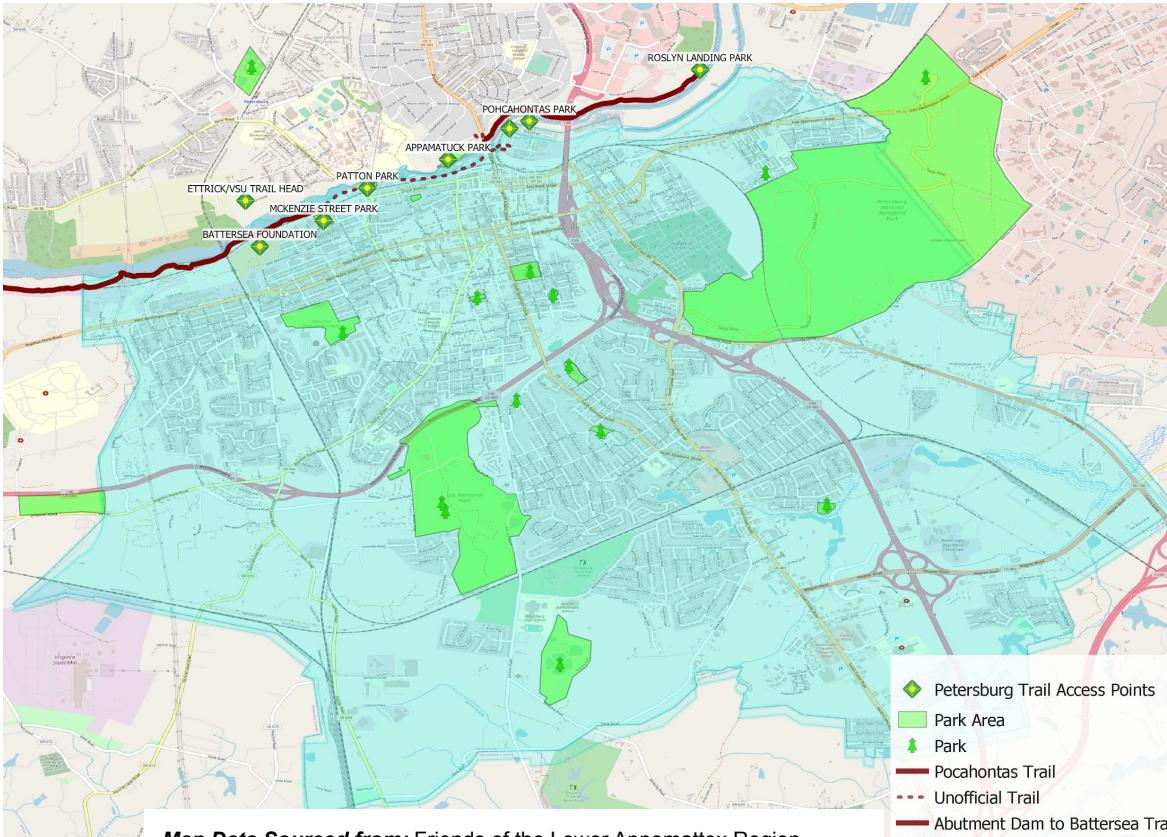
# What is FOLAR?

- “Friends of the Lower Appomattox River”
- The central mission is to conserve and protect the Appomattox River for all to enjoy.



The FOLAR Strategy: Develop, maintain, and protect  
25 mile long trail with 28 points of interest

# Current Parks, Trails, and Trail Access Points in Petersburg, VA



## Methods

- Problem Identification
  - Meeting with Shareholders
- Data Discovery/Data Ingestion
  - Filtering data sources and importing data into R server.
  - Using ggplot defining multiple variables to compare .
  - Aligning demographic and location data in QGIS

## Challenges

- Finding and filtering recent and accurate data of interest.
- Finding any pre-existing data relating local economy to the local trails
- Finding current and up to date policies for trails.
- Finding accurate and up to date data on trail usage
- Finding consistent community outreach for trails.

## Data Sources

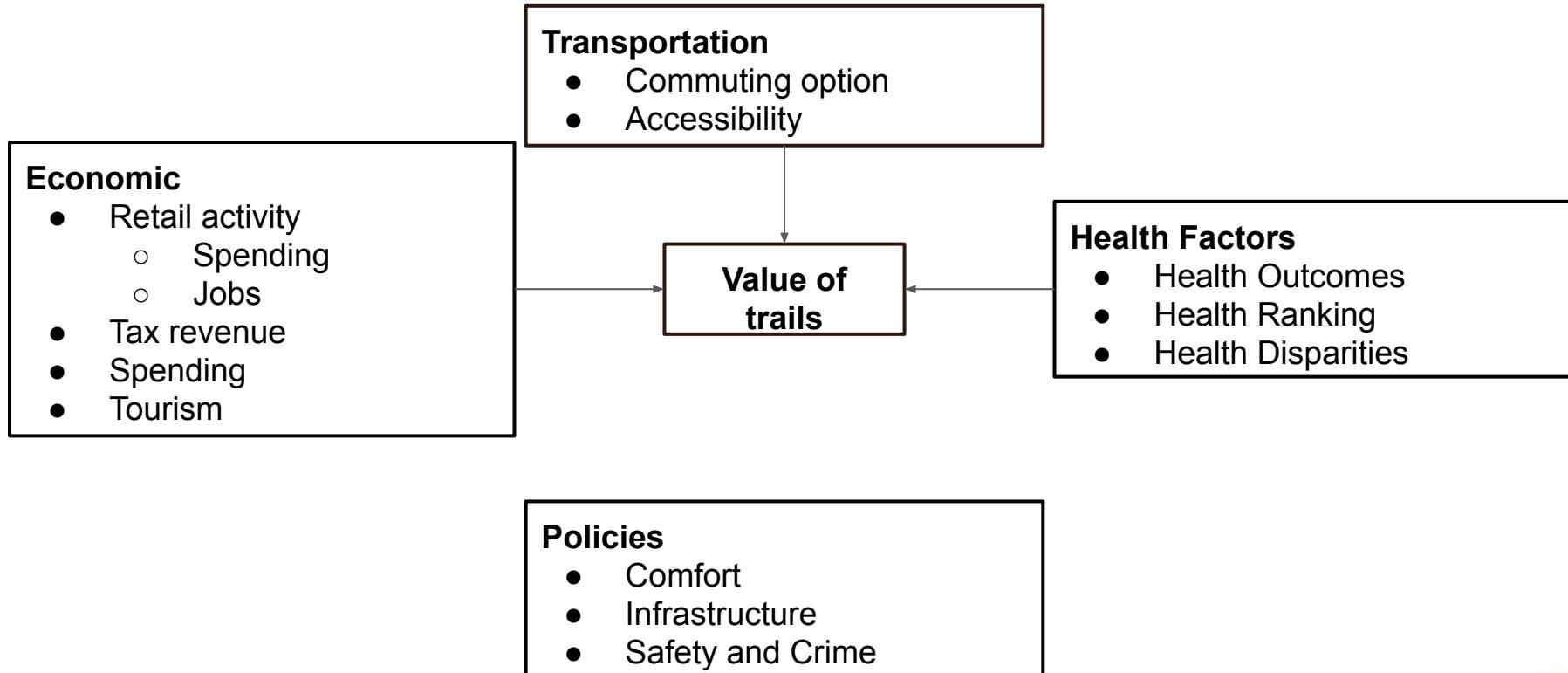
- American Community Survey 2018 5-Year Estimates
- US Census Bureau Geographic Support System
- Map data copyrighted OpenStreetMap contributors and available from <https://www.openstreetmap.org>
- County Health Rankings
- Data USA
- Enviroatlas

# Key Questions

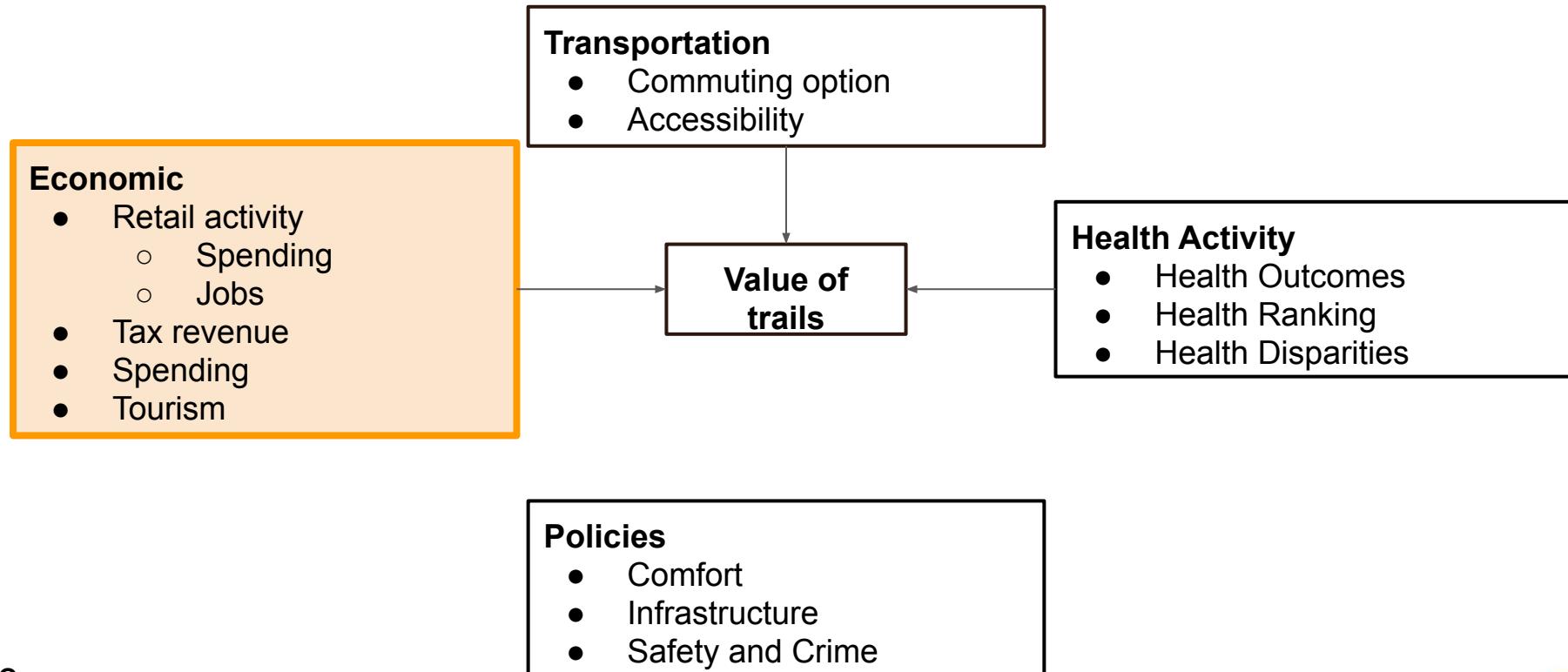
1. What will be the measurable positive impacts of completing the Appomattox River Trail (Blueway and Greenway) for the Petersburg and surrounding region?

2. What policy(ies) and/or systems change(s) can help facilitate achieving and maintaining the beneficial impacts?

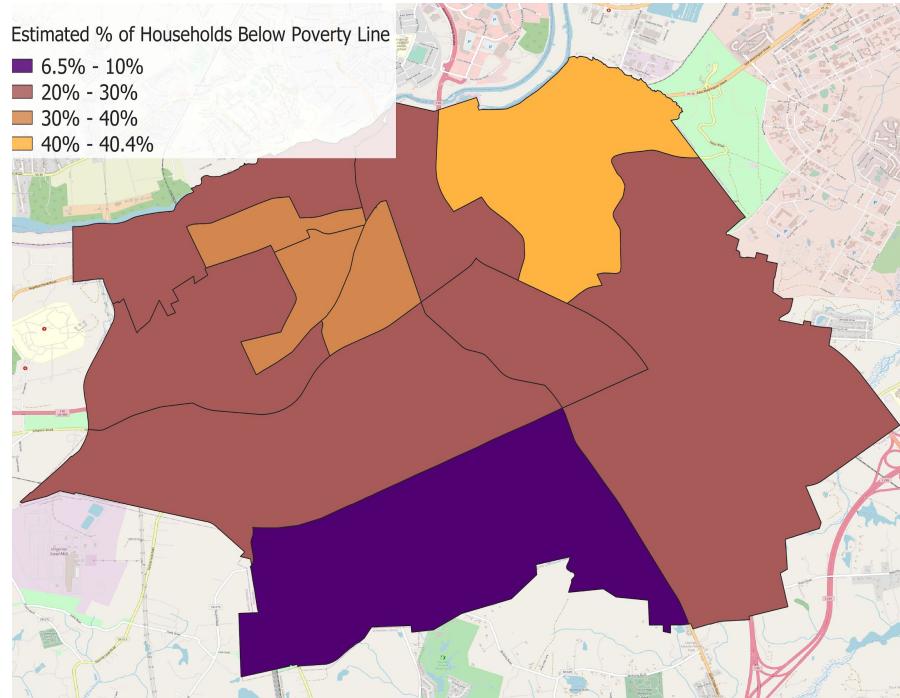
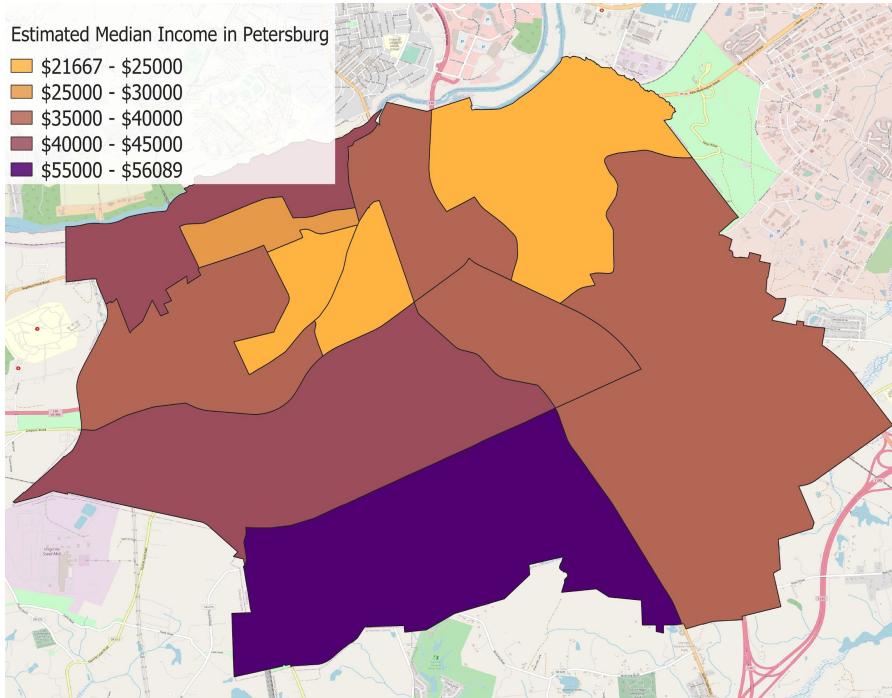
# Topics that Affect the Value of Trails



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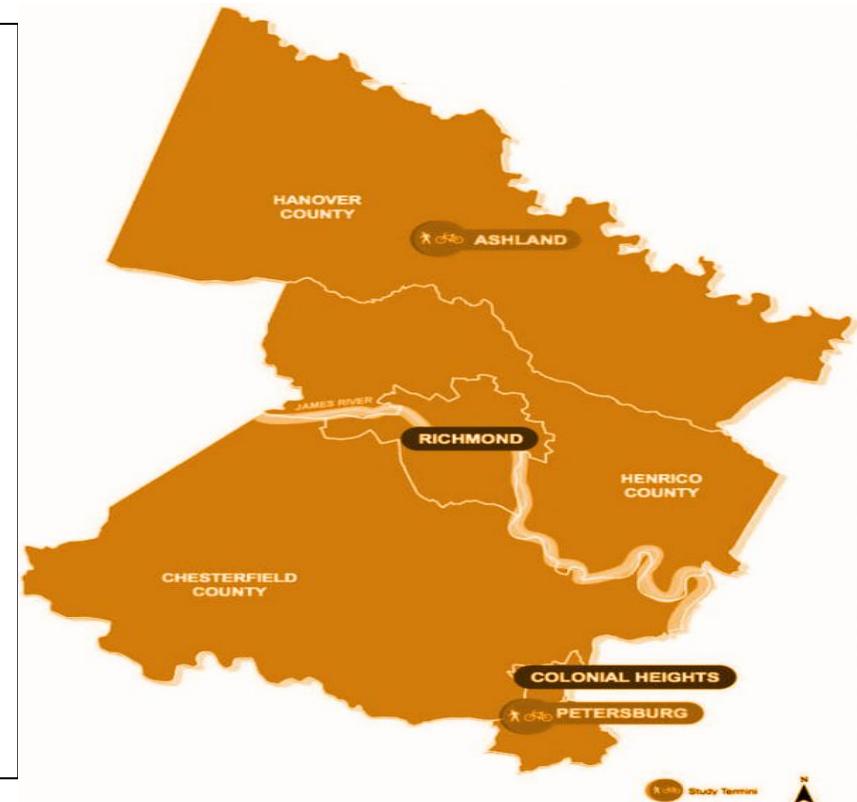
# Petersburg Economic Profile



# Economic Impact of Virginia Capital Trail

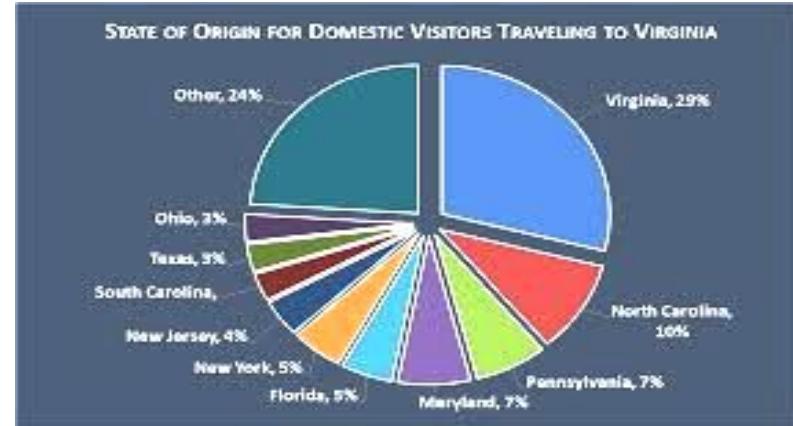
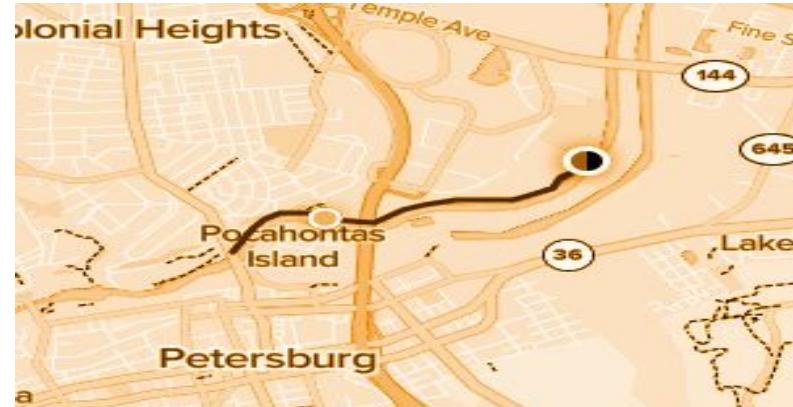
According to an Economic Impact Study conducted in the 2018-2019 Fiscal Year by the Virginia Capital Trail Foundation, The economic impact of the VA Capital Trail included

- \$6.1 Million in Visitor Spending
- 100 FTE JOBS Equivalent
- \$3.6 Million in Wages & Salaries
- \$613 thousand in State & Local Tax Revenue
- 3.7% More avg. Increase in assessed value of properties bordering the trail than similar properties not adjacent to the trail

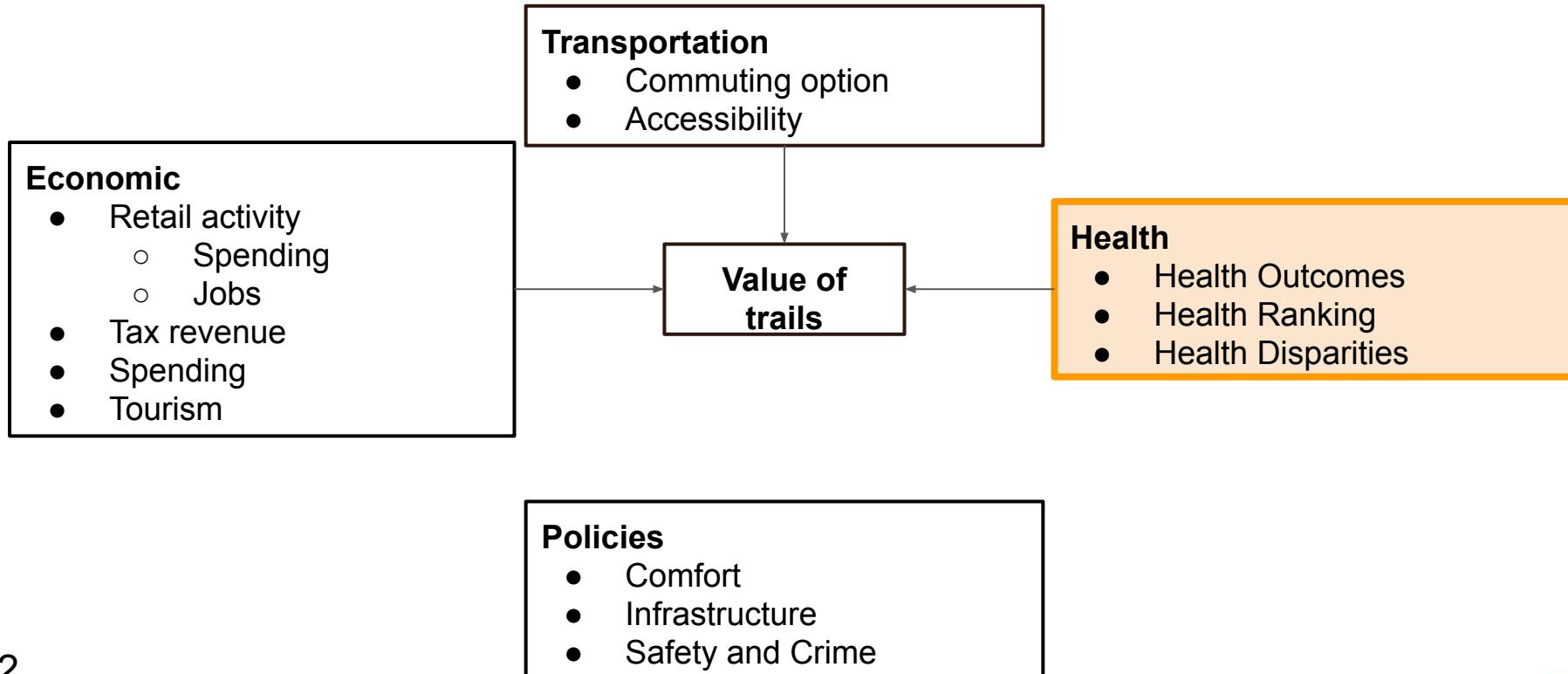


# Economic Impact of Appomattox River Trail to Petersburg

- \$21.3 million in tax revenue for the state.
- The economic activity stimulated by visitation to Virginia State Parks supported approximately 3,598 jobs.
- \$176 million in value added effects, visitors spent an estimated
- \$1.1 billion and supported 68,000 jobs.(state parks nationality)

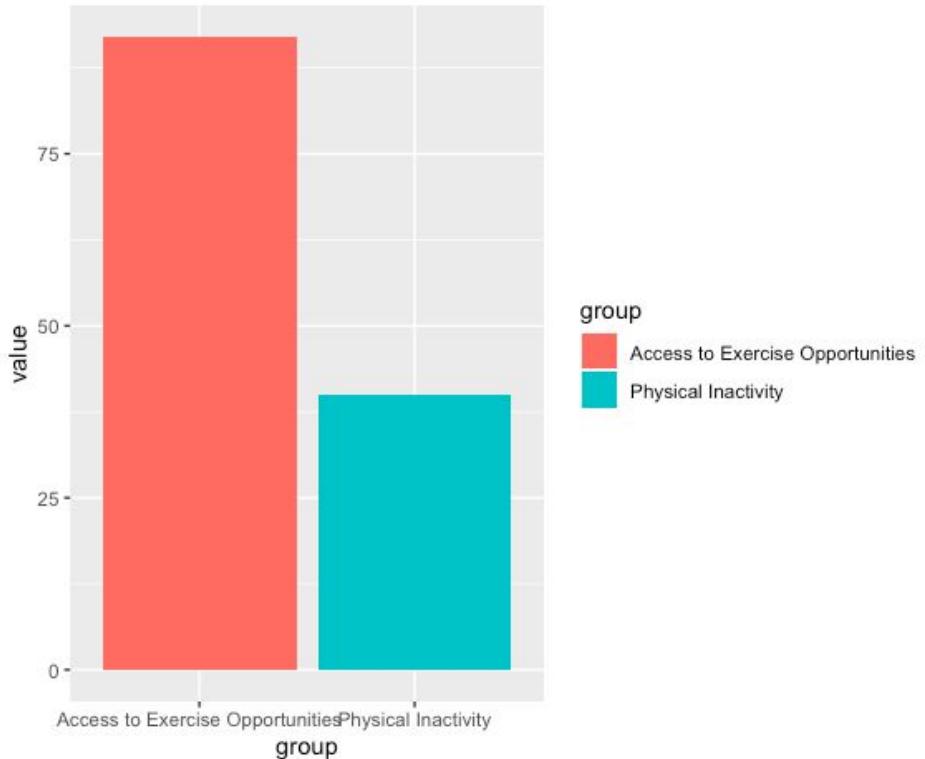


# Topics that Affect the Value of Trails



# Health Outcomes

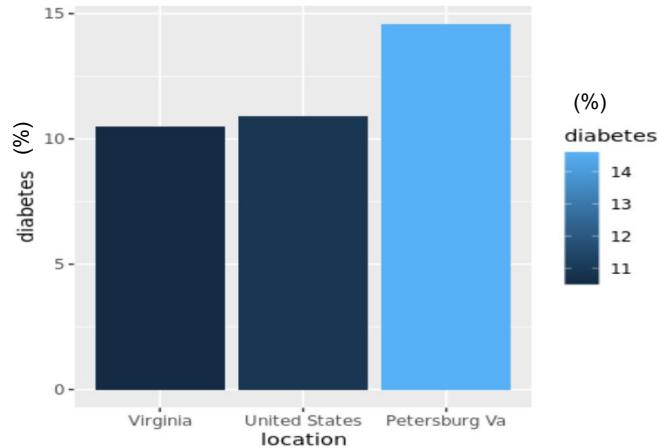
Petersburg Inactivity and Access to Exercise Opportunities



Obesity Health Outcomes

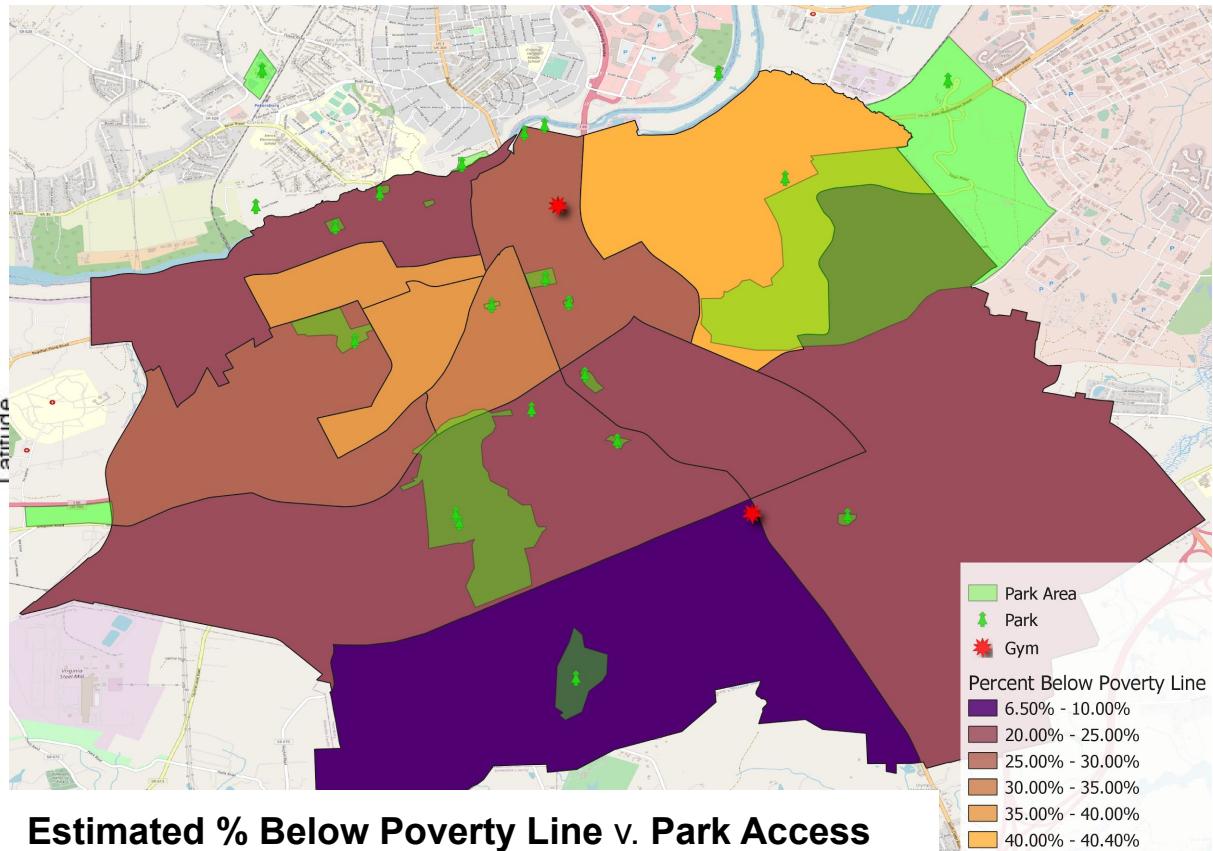


Diabetes Health Outcomes

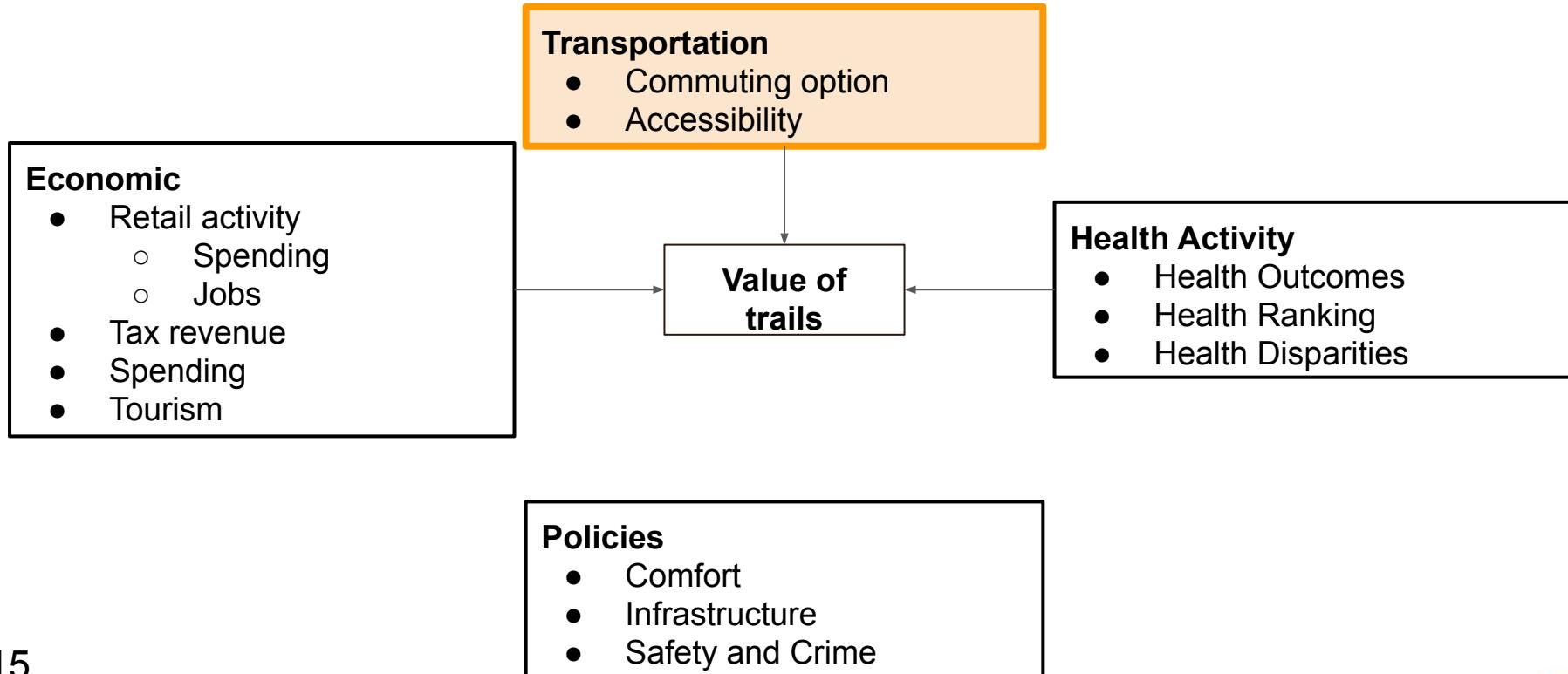


# Access to Parks

Petersburg has a park ranking of 92/100 but a obesity rate of 40%.



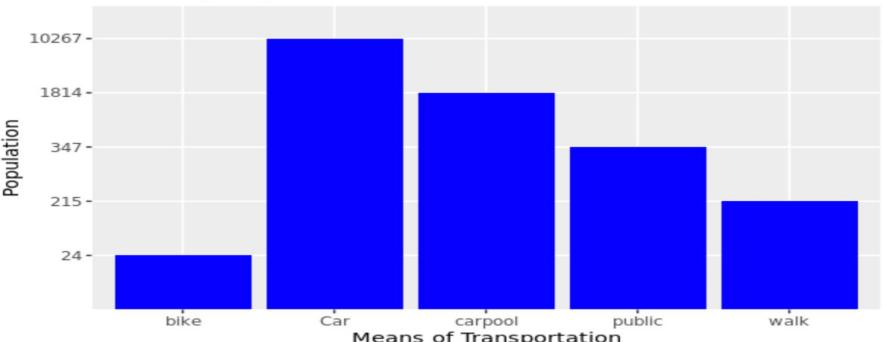
# Topics that Affect the Value of Trails



# Local Commuting Score Comparison

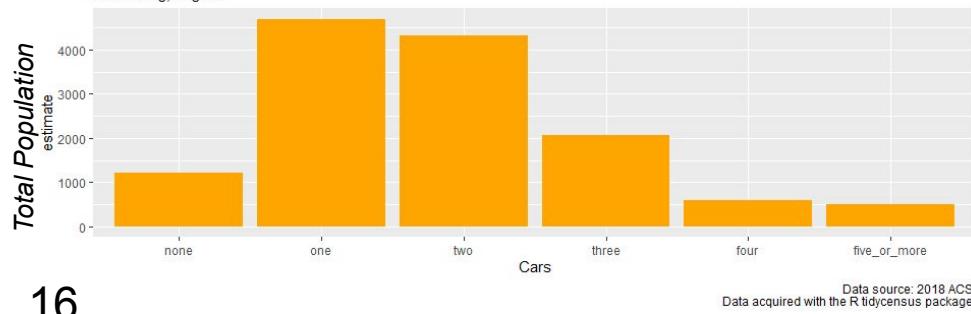
Preferred means of transportation

Petersburg, Virginia



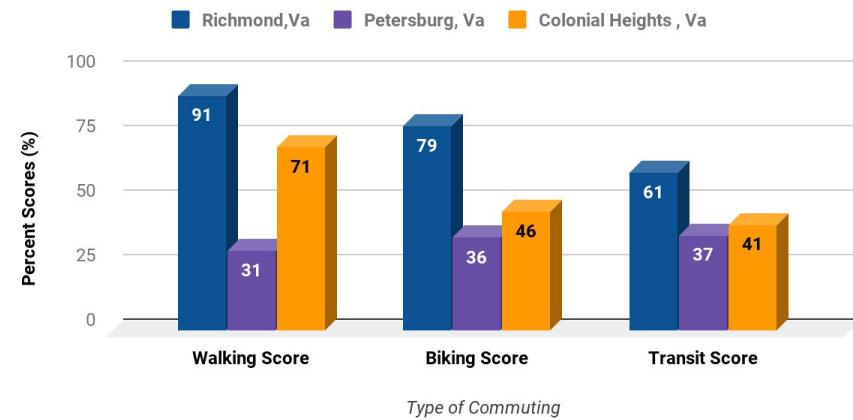
Number of Household vehicles available

Petersburg, Virginia



Additional Commuting Scores

VA. P. (2020). 325 Brown Street

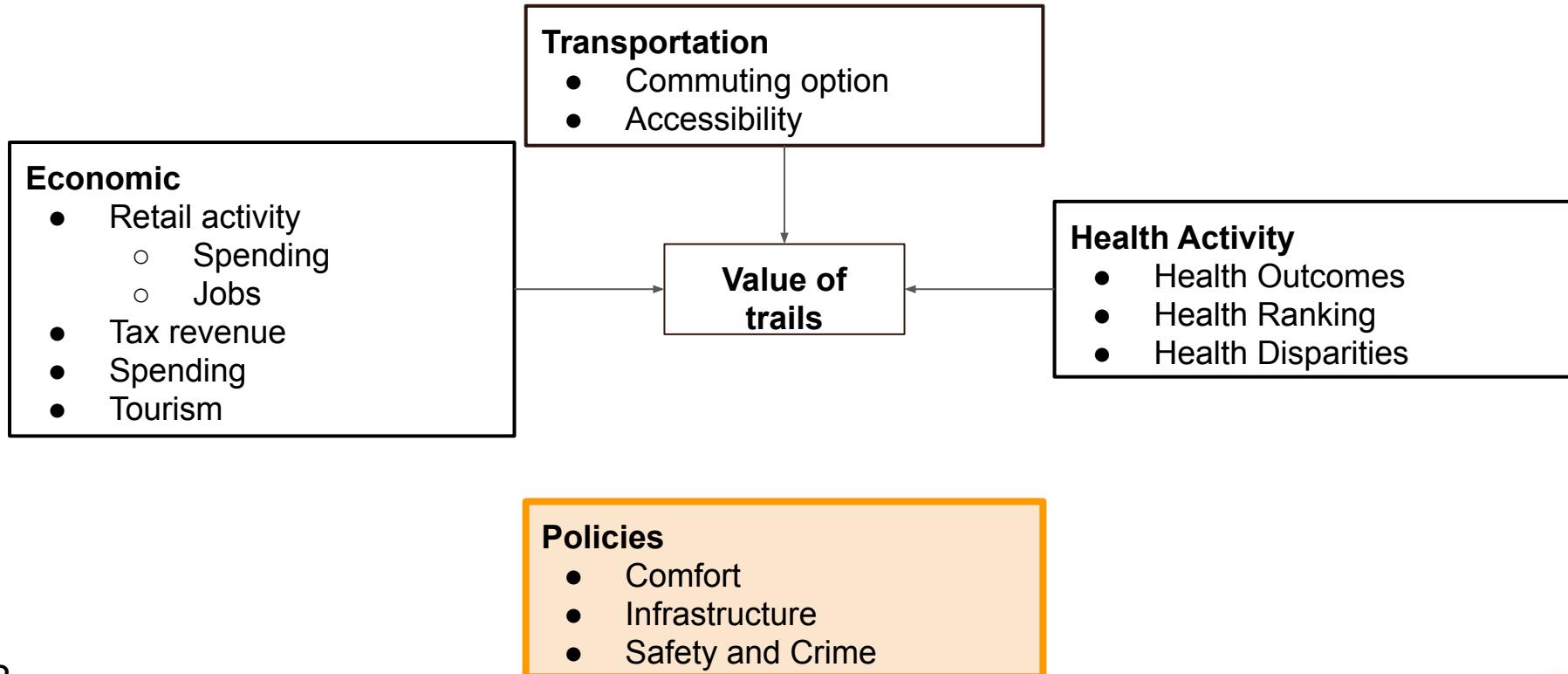


# Key Questions

1. What will be the measurable positive impacts of completing the Appomattox River Trail (Blueway and Greenway) for the Petersburg and surrounding region?

2.What policy(ies) and/or systems change(s) can help facilitate achieving and maintaining the beneficial impacts?

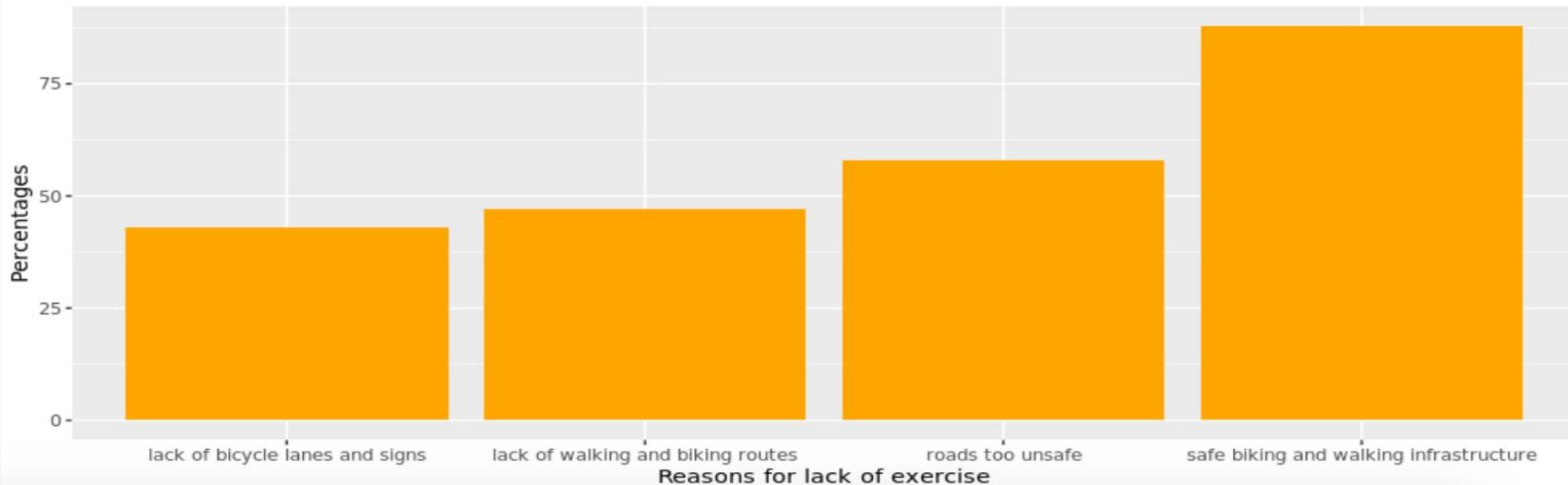
# Topics that Affect the Value of Trials



# Barriers to Higher Walkability Score

## Why residents do not exercise

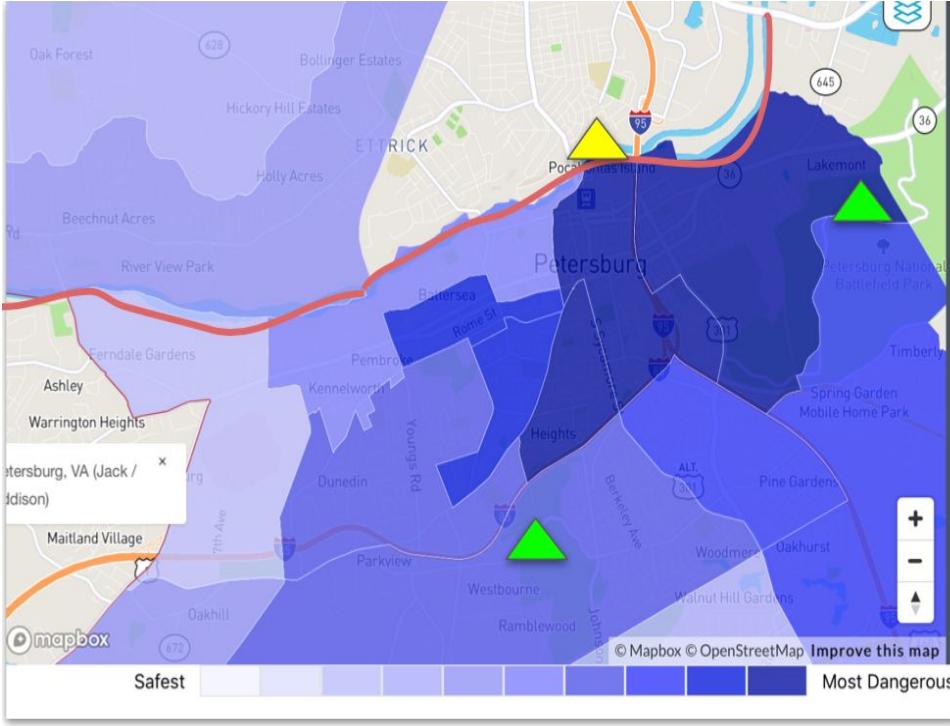
Petersburg, VA



- **87.9%** of residents want safe biking and walking infrastructure that connects destinations in Petersburg
- **58%** of residents find the roads too unsafe for walking and exercise
- **47%** of residents find the lack of connected walking and biking routes to be a barrier to fitness
- **43%** of residents perceive the lack of bicycle lanes, signs, and racks to be a factor

# Petersburg Safety and Crime

Ranked the most dangerous city in Virginia (24/7 Wall St.analysis)



20

▲ Local parks

▲ Pocahontas Island (Historic site)

Crime rate of 794 per 100,000 people in 2017 (FBI's Uniform Crime Report)  
2017 national violent crime rate was 383 per 100,000.

Statistic	Reported	Petersburg	Virginia	National
Total Crime	1,140	3,611	1,866	2,580
Murder	14	44.3	4.6	5.0
Rape	13	41.2	34.3	42.6
Robbery	53	167.9	42.3	86.2
Assault	144	456.2	118.7	246.8
Violent Crime	224	710	200	381
Burglary	141	446.7	182.2	367.0
Theft	681	2,157.3	1,356.4	1,594.6
Vehicle Theft	94	297.8	126.5	228.9
Property Crime	916	2,902	1,666	2,200



# Petersburg's Streetlight Policy

- This policy covers all street lighting installed in the city of Petersburg.

**DEVELOPER PROJECTS** DEVELOPERS ARE REQUIRED, AT THEIR COST, TO INSTALL STREET LIGHTING WITH ALL NEW CONSTRUCTION. WHERE NEW SUBDIVISION STREETS INTERSECT ADJACENT EXISTING ROADWAYS, ADEQUATE STREET LIGHTING SHALL BE PROVIDED, AT THE DEVELOPERS COST, TO PROPERLY ILLUMINATE THE INTERSECTION. IN THE CASE OF AN INTERSECTION WITH A MAJOR ROADWAY, THE LIGHTING SHALL BE SUFFICIENT TO ILLUMINATE THE APPROACHES AND ASSOCIATED TRANSITIONS. (HOMEOWNERS ASSOCIATIONS RESPONSIBLE FOR MAINTENANCE AND ELECTRIC CHARGE, WHERE APPROPRIATE).

## **FUNDING (EXISTING DEVELOPMENT)**

- A. THE CITY WILL PAY FOR THE INSTALLATION OF AN APPROVED STREETLIGHT PROVIDED INSTALLATION MONEY IS AVAILABLE. THE CITY WILL ALSO PAY FOR THE MONTHLY ELECTRIC CHARGES.
- B. IF THE LIGHT MEETS THE STREETLIGHT CRITERIA, BUT THERE ARE NO FUNDS AVAILABLE FOR INSTALLATION IN THE CURRENT FISCAL YEAR, THEN THE LIGHT WILL BE PLACED ON A SCHEDULE FOR FUND AVAILABILITY. IF THE APPLICANTS DESIRE, THEY MAY PAY THE INSTALLATION CHARGES ASSOCIATED WITH THE LIGHT AND THE CITY WILL TAKE OVER THE MONTHLY ELECTRIC CHARGE. THIS MONEY MUST BE PAID PRIOR TO AUTHORIZATION OF THE LIGHT INSTALLATION AND IS NON-REFUNDABLE.

# Petersburg's CCTV Policy

## CCTV Policy Statement

In accordance with National Park Service Law Enforcement Reference Manual 9 (RM-9), notice is hereby given that Petersburg National Battlefield uses Closed Circuit Television (CCTV) security camera monitoring.

The park's use of Closed Circuit Television (CCTV) for law enforcement and security purposes will only be to visually monitor public park areas and public activities where no constitutionally protected reasonable expectation of privacy exists. Such CCTV use – which will have adequate privacy and First Amendment safeguards – will be to help ensure public safety and security; facilitate the detection, investigation, prevention, and deterrence of terrorist attack and crime; help ensure the safety of citizens and officers; help assist in the proper allocation and deployment of law enforcement and public safety resources; and help facilitate the protection of the innocent and the apprehension and prosecution of criminals. (RM-9, 26.1)

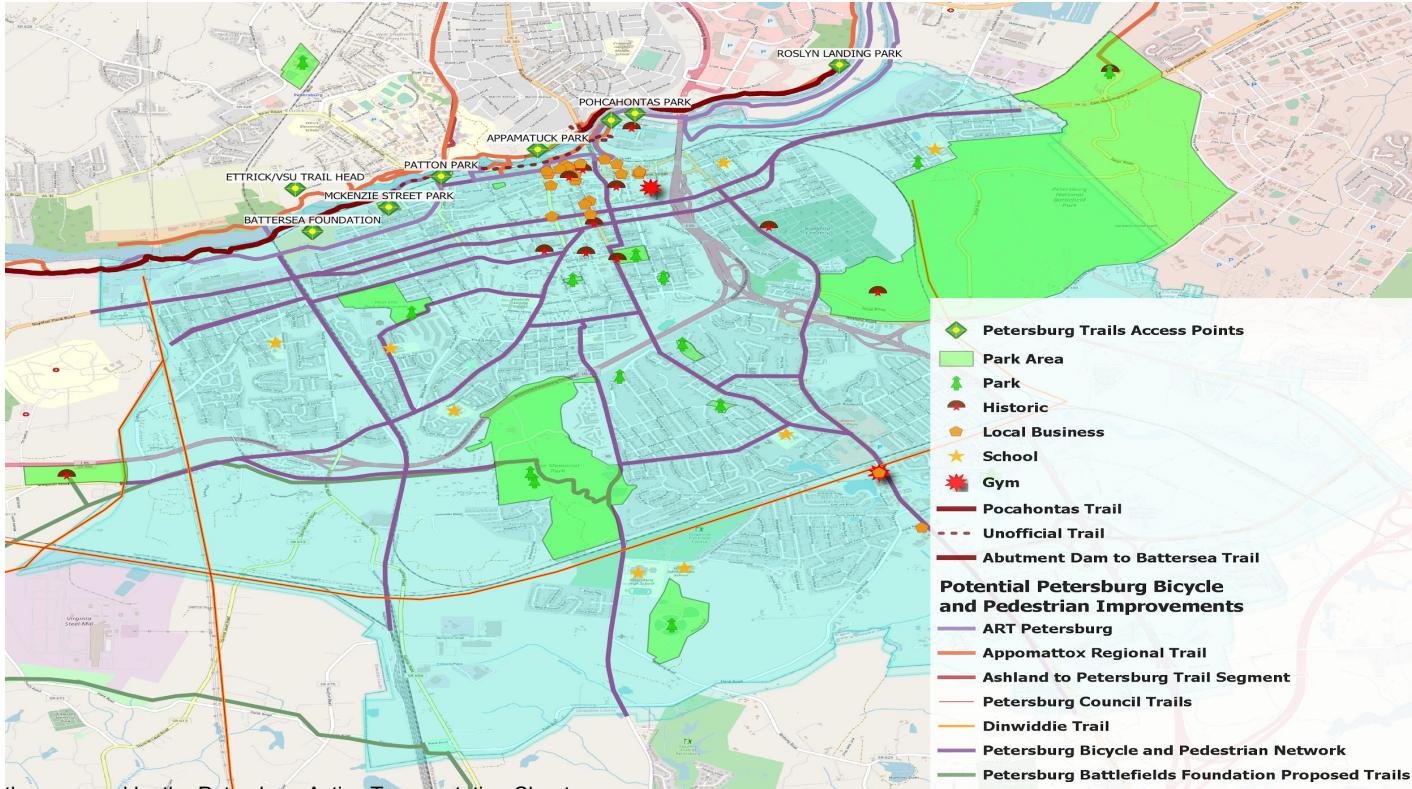
This policy does not restrict the official use of CCTV in government administrative areas, including administrative buildings, jail holding facilities (RM-9, 26.3.7), revenue collection sites, etc., where the government may record/monitor its facilities. For example, the government may perform unrestricted video/audio recording at revenue collection points (entrance stations, visitor center counters, etc.). This policy does not restrict the use of an Audio/Visual Recording Device (AVRD) in patrol vehicles or officer-worn recording devices used by commissioned rangers. (RM-9, 26.1).

Operation of CCTV cameras, maintenance of recorded images and use of recorded images will be in accordance with NPS and Department policy and applicable laws and regulations. (RM-9, 26.1-26.4) No person will be targeted or monitored merely because of race, religion, gender, sex, disability, national origin, or political affiliation or views. (RM-9, 26.4.2)

Nothing in this policy statement is intended to create any rights, privileges, or benefits not otherwise recognized by law.



# Proposed Future of Petersburg's Trails and Paths



# Findings and Conclusions

- Petersburg has measurable health and wealth disparities and derths
- Despite availability and desire, accessibility and perceived safety limit usage of local trails and parks
- Other means of transport exist but are not as accommodating for whole households
- There is pre-existing evidence for the value trails brings to a locality
- The expansion and improvement of the Appomattox Trail has the potential for economic and health benefits
- Proving the Appomattox Trail works can make the case for expanding and improving additional paths for pedestrians and bikers

# Acknowledgements

- Friends of the Lower Appomattox River
- The Petersburg Active Transportation Chapter
- The Petersburg Healthy Options Partnership(pHOP)
- Virginia State University Faculty
- University of Virginia's Biocomplexity Institute and the Data Science for Public Good program