



# Walk & Bike Camden!

A Community Vision for  
Active Transportation



September  
2022

# ACKNOWLEDGEMENTS

The project team would like to recognize and express appreciation to the numerous individuals who contributed information, participated in the survey and online map, attended an online meeting, or sent in a comment.

Special thanks to representatives from **City of Camden** and **Camden County** for their time in contributing this study and their ongoing commitment to safe, accessible, and enjoyable active transportation in the City of Camden.

A special thank you goes out to the **Walk & Bike Camden Steering Advisory Committee**:

- Amy Verbofsky, Delaware Valley Regional Planning Commission (DVRPC)
- John Boyle, Bicycle Coalition of Greater Philadelphia
- Justin Dennis, Trust for Public Land
- Kathy Cullen, Camden Community Partnership
- Latifah Sunkett, Cross County Connection TMA
- Sonia Szczesna, Tri-State Transportation Campaign

Thank you to the many organizations that helped to host meetings and provide feedback for Walk & Bike Camden, including:

- Camden County Municipal Utilities Authority
- Camden County Police
- Camden Lutheran Housing, Inc.
- Camden Parks and Open Space Plan Steering Committee
- Campbell's Soup
- Center for Aquatic Sciences at Adventure Aquarium
- Center for Environmental Transformation
- Center for Family Services
- East Camden Advisory Committee
- Hispanic Family Center of Southern New Jersey
- Hope Mobile Food Distribution
- Hopeworks
- KIPP Cooper Norcross Academy
- Latin American Economic Development Association
- New Jersey Conservation Foundation
- Parkside Business & Community in Partnership
- Power Corps
- Rowan University
- Salvation Army Kroc Center
- St. Joseph's Carpenter Society
- Subaru
- Waterfront South Neighborhood
- YMCA of Camden

## Project Team:

New Jersey Department of Transportation Bureau of Safety, Bicycle and Pedestrian Programs and the City of Camden, with NV5 and Susan G. Blickstein, LLC.



SUSAN G. BLICKSTEIN, LLC  
PLANNING ♦ POLICY ♦ RESEARCH

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## Disclaimer:

This publication has been financed with federal funds provided by the United State Department of Transportation’s Federal Highway Administration as administered by the New Jersey Department of Transportation (NJDOT). The United States Government assumes no liability for its contents or its use thereof.



# EXECUTIVE SUMMARY

Vision Plan Website:  
[www.walkbikecamden.com](http://www.walkbikecamden.com)



**Walk & Bike Camden** is a vision plan that takes a wide-ranging look at the city’s active transportation system, existing barriers, and potential improvements affecting active transportation mobility in Camden.

Through a dedicated community outreach process and feedback from residents, commuters, city officials, and other stakeholders, **Walk & Bike Camden** envisions a safe, comfortable, convenient, and affordable active transportation system to serve Camden’s residents well into the future. These values are the main components of the following Vision Statement and Goals.

## Active Transportation Vision Statement

Walking and biking between neighborhoods in Camden should be safe, comfortable, convenient, and affordable for all residents, at all times, with accessibility to parks, schools, local businesses, and transit stations.

## Active Transportation Goals

- Active transportation should be inclusive of residents of the city of Camden of all ages, abilities, and backgrounds.
- Maintenance and upkeep of the active transportation system is important.
- The balance of travel modes on Camden’s streets should be viewed equitably.
- Public safety on Camden’s streets should take priority over vehicular convenience.



**Walk & Bike Camden** is based on **community engagement** to understand existing conditions and perceptions related to active transportation, as well as to plan for future improvements. The primary goal of the **Walk & Bike Camden** engagement process has been to ensure that the needs and desires of Camden residents are reflected and incorporated into the vision for inclusive and equitable active transportation.



“The city wants to be walk and bike-friendly. It is an old city and I think it has all the dynamics... access to water; history... it has it all.”

— Mayor Victor Carstarphen

**Key Themes from Community Engagement:**

1. **People want to walk and bicycle more.**
2. **There is strong support for a bike share program.**
3. **Deferred maintenance and poor conditions are barriers to walking and biking.**
4. **Traffic and personal safety issues are barriers to walking and bicycling.**

**Recommendations**

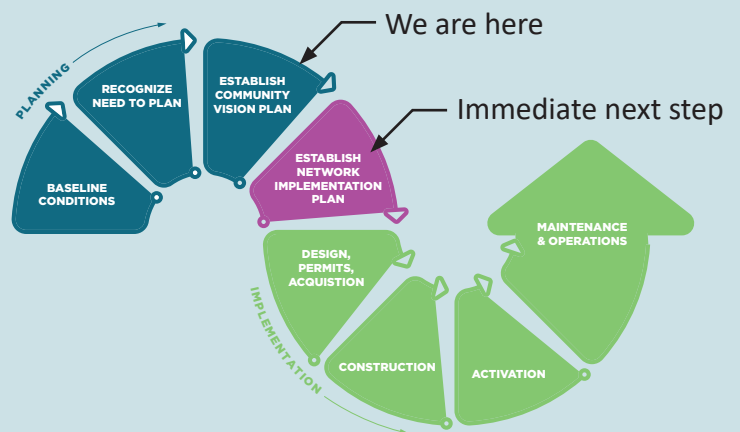
A well-designed active transportation network should seamlessly integrate into the existing community layout and enable residents to access the places they need to go on a daily basis — work, school, transit, food, healthcare, parks, and other destinations — using active transportation as a primary or complementary mode of travel. Active transportation facilities that are safe, accessible, convenient, and low-stress will attract and sustain new travelers. Therefore, the user experience is vital to all phases of planning, design, and maintenance.

Based on these principles, **Walk & Bike Camden** includes a community-driven Bicycle Network Concept along with the following recommendations:

- Design and implement a bicycle facilities network emphasizing safety, convenience, accessibility, and low-stress connectivity.
- Assess the condition of all sidewalks and crosswalks, explore avenues for funding repairs, and create a priority-based system for repair or replacement, including installation of ADA-compliant curb ramps at intersections.
- Identify locations for intersection improvements and traffic calming.
- Upgrade streetlight conditions.
- Organize a community conversation about safety and police enforcement.
- Foster a culture of bicycling.
- Revisit a bike share program.
- Pursue Vision Zero.

**Next Steps**

**Walk & Bike Camden** establishes the community vision for active transportation, describing existing barriers and proposed improvements at a citywide, thematic level. The immediate next step will be to establish a network implementation plan that describes the precise locations and types of facilities necessary to flesh out an active transportation network that meets the vision and goals of this plan, along with ongoing community engagement.



**Walk & Bike Camden** was a collaborative effort conducted through the New Jersey Department of Transportation Bureau of Safety, Bicycle, and Pedestrians Programs. The project team recognizes and appreciates the numerous individuals who contributed information, participated in the survey and online map, attended an online meeting, or sent in a comment. Special thanks to representatives from City of Camden and Camden County for their ongoing commitment to safe, accessible, and enjoyable active transportation.

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# INTRODUCTION

**Walk & Bike Camden** envisions a connected Camden, a city where residents from any neighborhood can routinely choose to walk or bicycle to destinations throughout the city and beyond because it is safe, comfortable, and convenient. In this vision, walking or bicycling to work, to parks, to stores, and to transit would be a common experience, preferred to car travel. The benefits would be tremendous for each individual resident of Camden, now and well into the future. While active transportation rewards the people who opt to walk or bicycle with health and economic benefits, the benefits conveyed across the community – to everyone – multiply exponentially as more and more people have increased mobility choices. Every trip replaced by active transportation helps to reduce traffic congestion and improves air quality, positively impacting public health.

That is just the beginning! **Walk & Bike Camden** implies a transformation of the transportation infrastructure from auto-centric to people-centric, where public streets are designed to prioritize the movement of people so that the experience of walking or bicycling anywhere in Camden not only feels safe and convenient, but translates into lives saved and harm averted. Although Camden is the fourteenth most populous municipality in New Jersey, the city ranks second highest in the state for crashes resulting in a fatality and sixth highest for fatal and severe injury crashes. This is a vision with high stakes and benefits for all. Best of all, it is achievable with the combined and coordinated effort of government, businesses, schools, community organizations, advocates, and residents. It is not possible to overstate the importance and urgency of this transformation.



Recognizing this, in 2020 the City of Camden applied to the New Jersey Department of Transportation for technical assistance to prepare **Walk & Bike Camden! A Community Vision for Active Transportation**, guided by input from a survey of residents of throughout Camden and discussions with representatives of government, schools, businesses, and nonprofit community development organizations. **Walk & Bike Camden** presents a snapshot of Camden today and illustrates how a citywide active transportation network could extend to every neighborhood, creating a fully-connected walkable and bikeable Camden accessible to everyone – regardless of age, ability, or circumstance.

**Walk & Bike Camden** recognizes the achievements of the city and its partners to date in planning and improving pedestrian and bicycle access to parks, businesses, schools, and transit, much of it focused in the downtown and along the waterfronts. The **Walk & Bike Camden Bicycle Network Concept Map** highlights locations to prioritize for improvements, and shows linkages where further study is needed. This project identifies synergies, recommendations, and priorities for a robust bicycle and pedestrian network that supports Camden’s collective future vision.



*Credit: Camden County Flickr*

Camden is a resilient, diverse, and historical city. The city continues to see investment from both residents and the private sector which are helping to create a more equitable and economically sustainable city. Camden's position in the region gives it many advantages, including a transit system that connects residents across the city and region, a growing parks system, and a community that works hard to improve its quality of life. **Walk & Bike Camden** builds upon these previous efforts to reflect a comprehensive vision for walking and biking developed by Camden residents.

The significance of the vision presented in **Walk & Bike Camden** is compounded when considering the disadvantaged populations in the city. Over 35 percent of households do not have access to a vehicle (in some census tracts, this is closer to 50 percent). The city's poverty rate of 36 percent is more than triple the national average (10.5 percent) and all of Camden County (10.7 percent). An active transportation system that is designed for all ages and abilities is key to creating an equitable mobility environment.

In June of 2013, the City of Camden passed a "Complete Streets" resolution to memorialize its commitment "to creating a comprehensive, integrated, connected street network that accommodates all road users or all abilities and for all trips." Complete Streets are designed to provide safe access for all users by implementing a comprehensive and integrated multi-modal network of transportation options. **Walk & Bike Camden** reinforces the City of Camden's commitment and sheds light on the remaining work, showing that a citywide Complete Streets network is not only possible, but within reach by leveraging the combined resources and actions of government, community development organizations, neighborhood leaders and residents.

*"NOW THEREFORE BE IT RESOLVED that all public streets projects, including new construction, reconstruction, retrofitting, extensive maintenance and operations, in the City of Camden, shall be designed and constructed as complete streets."*

*—City of Camden Complete Streets Resolution, June, 2013*

The next steps will involve a coordinated effort to fund and develop engineering solutions to overcome network connectivity barriers, which is the responsibility of the government jurisdictions. However, it is clear from the many voices behind this **Walk & Bike Camden** that a Complete Streets network will also require action by many others, and especially ongoing involvement and articulated support by the people who stand to gain the most – the people who live, work, and play in the "Invincible City" of Camden.



## Active Transportation Defined

Active Transportation is defined as any movement that is human-powered. This can include walking, traveling with a mobility aiding device such as a wheelchair, running, bicycling, roller skating, or riding a scooter. Even riding an electric-assist bicycle or scooter is an active transportation means of getting around! At its core, almost all Camden residents are engaged in active transportation in one way or another every day. **Walk & Bike Camden** expresses a community vision for active transportation initiatives and improvements that will support Camden residents well into the future.



Walking



Biking



Accessibility



Scotting



Safety



Connecting to Transit and Community Destinations



Supportive Facilities



Community, Culture, Exercise, & Fun



Sustainability & Resilience

# WALKING & BIKING IN CAMDEN TODAY

## Transportation System Overview

Transportation infrastructure in Camden can be described in four principal components, which include: (1) the grid layout of municipal streets, (2) highways and arterial streets that radiate to and from the Benjamin Franklin Bridge, (3) the transit system, and (4) the growing network of shared use paths along the Delaware and Cooper Rivers.

Overall, Camden contains approximately 197 centerline miles of streets and highways. The grid layout of municipal streets, which provides a density and redundancy that can be advantageous for bicycling and walking, expanded as the city grew, and was largely built out by the 1950s.

The highways and arterials — principally Interstate 676, US Route 30, and US Route 130 — provide an economic driver to industries in Camden and allow for quick vehicular transport to and across the city. However, they also impose physical barriers to crossing Camden on foot or by bicycle. The highways interrupt the street grid and drive local traffic to a select few street crossings. This also exacerbates the ability for residents to safely walk or bike across these highways.

For public transit, Camden is served by the PATCO High Speed Line, which has three stations within Camden, and the NJ TRANSIT RiverLINE, which has five stations within the city. Numerous bus routes connect across the city and into Philadelphia and adjacent suburbs. However, many portions of Camden are located more than a quarter mile (commonly referred to as the standard walking distance to a transit station or stop) from their nearest bus stop or rail transit station.

Through the combined efforts of numerous stakeholders, the shared use path network is growing along both the Delaware and Cooper Rivers. Growth of this system will provide high quality active transportation opportunities, both within Camden and as a connector to adjacent communities.



Municipal Streets



Arterials and Highways



Transit



Shared Use Path Network

# Map 1: Overview of Existing Camden Transportation Facilities



## Sidewalks & Crosswalks

There are approximately 273 miles of sidewalks throughout Camden. Built upon the grid system of municipal streets, many city streets in this network have sidewalks on both sides. In general, the sidewalk system should be a major contributor to active transportation for Camden residents.

However, there are a still numerous streets that either do not have any sidewalks, or have sidewalks that are in extremely poor condition. Additionally, most intersections in Camden have faded

or no crosswalk markings. There are also relatively few curb ramps (transitional ramps from crosswalk to sidewalk) that comply with the Americans with Disabilities Act (ADA). On some busier streets, crosswalks may be spaced over 1000 feet apart, which encourages dangerous mid-block crossing in order to reach businesses or bus stops. Walking can be considered difficult in some places by able bodied residents, but could be viewed as impossible for residents with a disability or impaired mobility.



*Credit: Camden Community Partnership*

## Bicycling in Camden

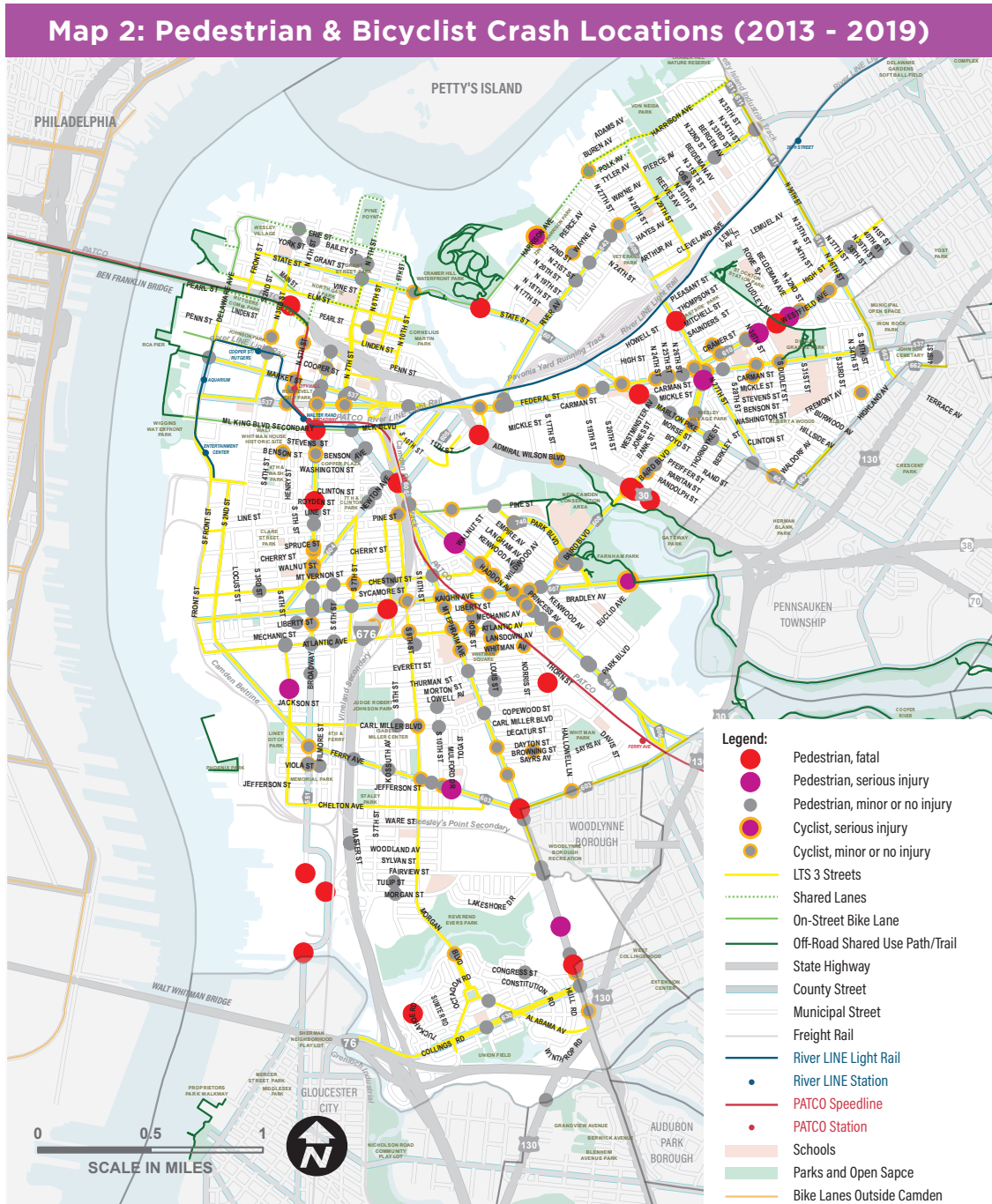
There are approximately 7 miles of on-street bicycle lanes located within Camden. The bike lanes within Camden are either painted buffered or non-buffered bike lanes; there are no protected bike lanes within Camden. The bike lanes within Camden do help provide a transportation utility by linking some neighborhoods together, such as Cramer Hill and North Camden, but the discontinuous nature of the bike lanes does not provide a true bicycling network across the city.

Camden also has about 6 miles of shared use paths, which are located within parks such as Cramer Hill Waterfront Park, Gateway Park, and Farnham Park. While these provide a much-needed recreational asset for Camden residents, their isolation within the parks provides little transportation utility. As noted previously, this network of shared use paths is growing, but the pace is slow given the long-term nature of these projects.



# Crashes

Camden residents are disproportionately affected by automobile crashes. Although Camden is the fourteenth most populous municipality in New Jersey, the city ranks second highest in the state for crashes resulting in a fatality and sixth highest for fatal and severe injury crashes. Among all travelers, people who walk or bike are most vulnerable to fatal or severe injury in the event of a crash. Within Camden, a significant number of crashes occur arterial streets, as opposed to residential streets or controlled access highways.



## Barriers to Active Transportation in Camden

Barriers to active transportation prevent residents from walking or biking to access destinations in their own neighborhood and surrounding communities. The barriers to active transportation in Camden are present at a range of scales in the community landscape and include natural, constructed, and social factors.

The impact of natural and constructed barriers on the boundaries of Camden's neighborhoods is illustrated in Map 3. The main natural barriers are the Cooper River and Newton Creek, which have a limited number of available crossings. Those crossings tend to invite higher volumes and speeds of traffic. Likewise, the main constructed barriers are the highways — Interstate 676, US Route 30, and US Route 130 — and freight railroads. Available crossings vary in configuration (at grade, grade separated, signalized, unsignalized, etc.) and can force bicyclists and pedestrians to choose between safety or convenience, with the potential for excessively indirect paths in order to feel safe.

Barriers to active transportation are evident in social factors, as well. Most of the space in Camden's streets is dedicated to the storage or movement of motor vehicles, yet over 35 percent of households in the city do not have access to a vehicle (in some census tracts, this is closer to 50 percent). The city's

poverty rate of 36 percent is more than triple the national average (10.5 percent) and all of Camden County (10.7 percent).

Some households may not be able to afford a bicycle in working condition or have the ability to fix and maintain a bicycle. There are currently no bicycle shops or co-ops located in Camden, and short of a two-month failed experiment by an outside vendor in 2018, Camden does not have a bike share program that many other cities have had for years. Bicycling is not very accessible to most residents, and it is vital that residents have safe and reliable active transportation network, as a matter of affordability and social equity.

**Map 3: Barriers to Active Transportation Connectivity**



# COMMUNITY ENGAGEMENT

## Engagement Process Overview

**Walk & Bike Camden** is a community vision for active transportation. As such, it is based on community engagement to understand existing conditions and perceptions related to active transportation, as well as to plan for future improvements. The primary goal of the **Walk & Bike Camden** engagement process has been to ensure that the needs and desires of Camden residents are reflected and incorporated into the vision for inclusive and equitable active transportation.

The engagement process was flexible and creative, with a mix of virtual and in-person events to reach Camden’s diverse population and neighborhoods, while accounting for COVID-19 considerations, social distancing, virtual meeting fatigue, and the need to engage people who do not have online access, as well as those hesitant to gather in crowds.

Residents provided input through a series of neighborhood meetings, focus group discussions, pop up events, a survey, and an interactive online WikiMap.



## Engagement Activities Timeline

Activity	Description	Date
Neighborhood Meeting	East Camden Advisory Committee Meeting	10/28/2021
Pop Up Event	Cramer Hill Waterfront Park Opening	11/6/2021
Neighborhood Meeting	Parkside Business & Community in Partnership Community Meeting	11/10/2022
Focus Group Discussion	Camden Parks and Open Space Steering Committee Meeting	11/16/2021
Neighborhood Meeting	Waterfront South / Heart of Camden Community Meeting	11/18/2021
Stakeholder Interview	Mayor Carstarphen Interview	12/8/2021
Focus Group Discussion	HopeWorks Trainees	12/10/2021
Pop Up Event	Camden Promise Neighborhood Food Distribution	12/15/2021
Focus Group Discussion	PowerCorps Camden Members	12/15/2021
Focus Group Discussion	Business and Institution Listening Session	12/16/2021
Focus Group Discussion	County and City of Camden Staff Representatives	2/15/2022
Pop Up Event	Bicycle Coalition Celebrate Trails Day at Cramer Hill Waterfront Park	4/23/2022
Stakeholder Interview	New Jersey Conservation Foundation	5/4/2022
Stakeholder Interview	Camden Lutheran Housing Inc.	5/5/2022
Pop Up Event	Camden Night Gardens at Cooper’s Poynt Waterfront Park	5/20/2022
Public Meeting	Virtual Public Information Center	8/23/2022
City Council Caucus	Presentation	9/6/2022

## Perceptions of Walking and Biking in Camden

The outreach process provided an opportunity for open conversation on biking and walking in Camden. The quotes presented to the right are a small selection of perspectives that communicate a diverse range of issues affecting the personal experiences of residents as they walk or bike in Camden.



Residents were prompted to complete the sentence, “People who ride bicycles to get around Camden are \_\_\_\_\_.” The word cloud below presents the diversity of positive and negative perceptions associated with bicycling in Camden.

### People who ride bicycles to get around Camden are...





# Envisioning Walking and Biking in Camden

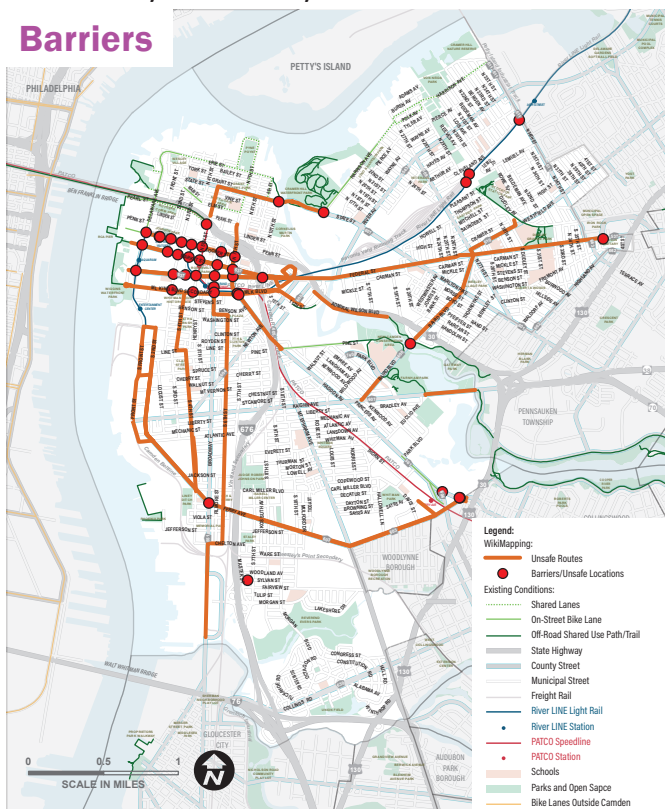
Residents were prompted to complete the sentence, “In the future, it will be easy to walk or bike to routine destinations from my neighborhood because \_\_\_\_\_.” The responses describe a diverse list of barriers to overcome:

- bike infrastructure exists/there are designated bike lanes
- lighting is clear and the path is designated for me
- the sidewalks are clear of weeds and are even
- there are less angry drivers
- the streets are traffic calmed: there are bump-outs, stop signs, and speed bumps near parks
- roads are designed for residents walking and bicycling and not as highways for people to get in and out of town quickly
- there are bike racks at destinations
- improved safety (bike lanes, sidewalk improvements, etc.)
- there is respect
- Camden has 100% off-road bike/ped paths
- paths are clear, clean, and well-lit
- there are resting places for those walking
- I have a bike / it isn't stolen
- there is a bike share program
- there's more space to ride and walk
- I feel safer
- there is better lighting
- there are no missing sidewalks, trash, or flooding
- there are more trails
- there are more crosswalks and push buttons

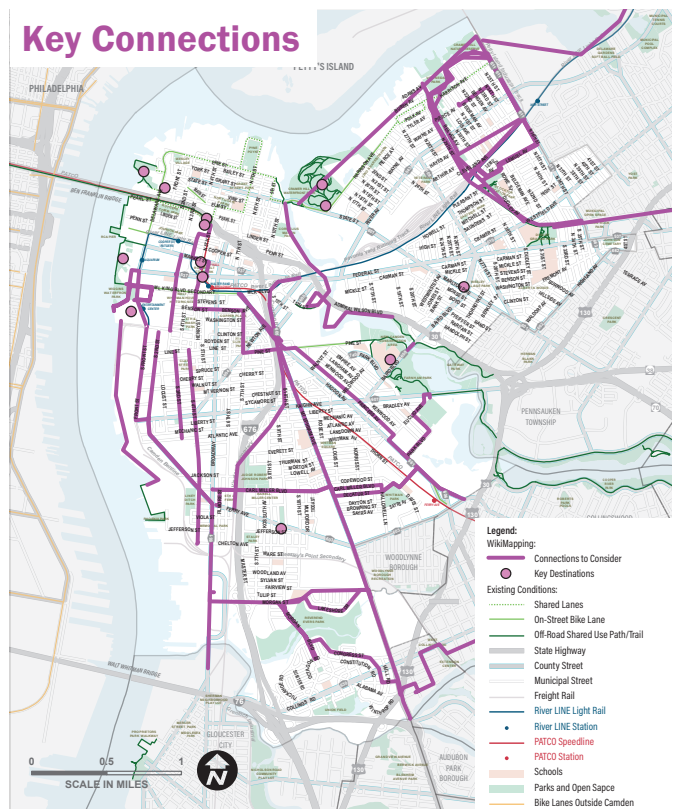
## WikiMap

Residents used an interactive online WikiMap to identify key walking and bicycling destinations, pinpoint specific locations that are especially difficult to walk or bike, and mark currently unsafe routes and/or future desired routes. The results helped to inform an understanding of physical conditions that affect active transportation, as well as key “desire lines” in a future active transportation network to connect key community destinations.

### Barriers



### Key Connections



## Survey

The **Walk & Bike Camden** survey, with the goal to obtain input for an improved walking and bicycling network in Camden, was available during the Fall of 2021. A total of 121 people took the survey, which was available in English and Spanish, providing over 1,850 responses and 250 comments. A full summary of the community outreach process and survey results is provided in **Appendix B: Community Engagement Summary**.

Key findings indicate that people would like to walk and bike more than they do currently and the biggest barriers to both walking and bicycling are poor sidewalk and road conditions. People would like to see a larger network of sidewalks, bikeways, paths, and trails and better maintenance of the same. There is also strong support for a bike share program in Camden.

The following key question indicates that there is no singular solution to improving active transportation in Camden; but, that it will require a multifaceted approach that addresses factors such as infrastructure, maintenance, traffic safety, and personal safety.

### Key Question: What would make it easier and more convenient for you to walk or bike more often in Camden? (Select the top 3)

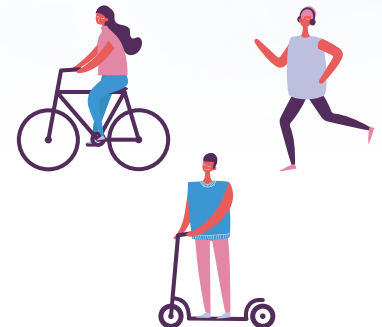
Growing the network of sidewalks, bikeways, paths, and trails	65%
Better maintenance of sidewalks, roads, bikeways, paths, and trails	48%
Improved lighting along sidewalks, bikeways, paths, and trails	46%
Providing more distance/separation between people walking/bicycling and cars	44%
Safer crossings at intersections	36%
Slowing down vehicle traffic	33%
More benches, trees, and shade along sidewalks, paths, and trails	32%
Providing maps and signs to destinations	24%
Other (please specify) <ul style="list-style-type: none"> <li>• “Public restrooms and other amenities along routes”</li> <li>• “More police”</li> <li>• “Protected bike lanes and (especially) intersections”</li> <li>• “Make the maps in Camden similar to Philly’s grid system so people will be able to navigate really well.”</li> <li>• “Always more green space!”</li> <li>• “Paving the streets”</li> <li>• “A city bike share program that actually works and has docking stations”</li> <li>• “Acknowledgement and reduction of just how car-biased our roadways and mentalities are. This can be manifested through more equitable roadway design when projects come up.”</li> <li>• “Less crime”</li> </ul>	13%

# Key Themes from Community Outreach

The following are key themes that emerged through the community engagement process. These themes are important aspects of the community vision for active transportation that help to inform the vision and goals, preliminary network concept, and recommendations for next steps.

## People want to walk and bicycle more.

Eight out of ten survey respondents indicated that they would like to walk more than they do now and seven out of ten would like to bike more. Many people are interested in walking and bicycling for exercise and to access the city’s parks.



## Strong support for bike share.

Many residents, especially young adults, indicated that they would ride more but don’t have access to a bicycle. Bikes, helmets, locks, and lights are expensive. Some residents expressed fears about having bicycles stolen and others are concerned about safely storing or properly maintaining a bicycle. Over 75 percent of survey respondents indicated that they would support a bike share program. While many residents are aware of the failed Ofo bike share program in the city a few years ago, they felt that the program did not do a good job educating the community or building trust.



## Deferred maintenance is a barrier to walking and bicycling.

Potholes, cracked sidewalks, litter, faded paint and crosswalks, and inoperable traffic signals and streetlights deter people from walking and bicycling. Maintenance issues came up in every outreach discussion.



## Traffic and personal safety issues are barriers to walking and bicycling.

Speeding, aggressive drivers, ATVs, dirt bikes, and unleashed dogs were a few of the reasons people do not walk or bicycle more. There was general support for targeted police enforcement of some of these high-risk activities.



# A COMMUNITY VISION FOR ACTIVE TRANSPORTATION

## Vision and Goals

**Walk & Bike Camden** is a vision plan that takes a high altitude look at the city’s transportation system, existing barriers, and other factors affecting active transportation mobility.

Through the community outreach process and feedback from residents, commuters, city officials, and other stakeholders, **Walk & Bike Camden** envisions a safe, comfortable, convenient, and affordable active transportation system to serve Camden’s residents well into the future. These values are the main components of the Vision Statement and Goals provided on the next page.

A well-designed active transportation network should seamlessly integrate into the existing community layout and enhance access to a full range of community destinations. This enables residents to access the places they need to go on a daily basis — work, school, transit, food, healthcare, parks, and other destinations — using active transportation as a primary mode of travel.

A key aspect of attracting new travelers and sustaining active transportation as a viable mode of travel is to consider the user experience through all phases of planning, design, and maintenance. Active transportation facilities that are safe, convenient, and low-stress will attract and sustain new travelers. Facilities that are continuous (connected to key destinations, without gaps) and accessible to users of all ages and abilities will be the most useful to all residents. Well-maintained facilities will support daily use and communicate to residents and visitors alike the value placed on active transportation.



# Active Transportation Vision Statement

Walking and biking between neighborhoods in Camden should be safe, comfortable, convenient, and affordable for all residents, at all times, with accessibility to parks, schools, local businesses, and transit stations.



## Active Transportation Goals

- Active transportation should be inclusive of residents of the city of Camden of all ages, abilities, and backgrounds.
- Maintenance and upkeep of the active transportation system is important.
- The balance of travel modes on Camden’s streets should be viewed equitably.
- Public safety on Camden’s streets should take priority over vehicular convenience.

Key Destinations for Active Transportation in Camden



Key Characteristics of Active Transportation Mobility

Safe
Convenient
Low Stress
Intuitive & Continuous
Accessible
Well Maintained

# Preliminary Bicycle Network Concept

A part of **Walk & Bike Camden** is a community-driven bicycle network concept, which has been assembled based on feedback from residents, commuters, city officials, and other stakeholders, as well as analyses and recommendations from related local, county, and regional plans. The objective of the concept, illustrated in Map 4, is to guide strategic planning, design, and implementation of active transportation facilities in Camden.

On Map 4, the purple lines indicate specific streets that are envisioned as future rights-of-way where bicycle-specific facilities may be located. Meanwhile, the wide orange arrows indicate corridors that will require future study to determine a preferred route from among the streets in that area. Future study should include outreach to the local neighborhoods and residents who will use the corridor, with the objective to determine preferred bicycle lane configurations, while accounting for and integrating the vision and development activities of the individual neighborhoods.

Future study of all routes to determine optimal street design for safe and comfortable bicycle travel will be necessary, considering facility options such as:

**Neighborhood Greenways** (sometimes referred to as bicycle boulevards) are streets with low traffic volumes and speed, further enhanced with signage, pavement markings, and traffic calming elements to create a low-stress environment for bicyclists within a single shared lane of traffic.

**Bicycle Lanes** (already present within Camden) include pavement markings and signs to designate travel space for bicyclists on the roadway. They are typically five feet wide, and may include a buffer area where space permits.

**Protected Bicycle Lanes** are enhanced bicycle lanes that are physically separated from vehicular traffic by an element such as parked cars or curbs.

**Shared Use Paths** (currently present in Camden) are paved trails (shared with pedestrians) constructed within an independent right-of-way, or parallel to the street, but separated from vehicular traffic.

**Neighborhood Greenway**



**Bicycle Lanes**



**Protected Bicycle Lanes**



*Credit: Bicycle Coalition of Greater Philadelphia*

**Shared Use Paths**



# Map 4: Bicycle Network Concept



# NEXT STEPS

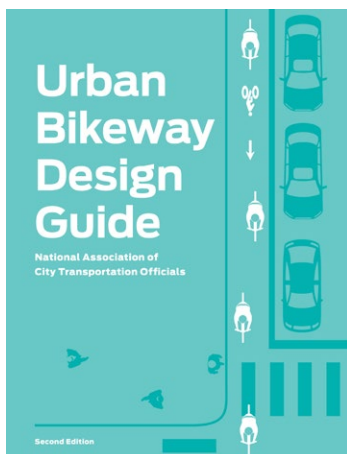
Based on feedback from residents during the public outreach phase of **Walk & Bike Camden** and observations from the engineering and planning team in the field, the following recommendations are being made to improve the walking and bicycling experience in the city of Camden.

## Bicycle Facility Design

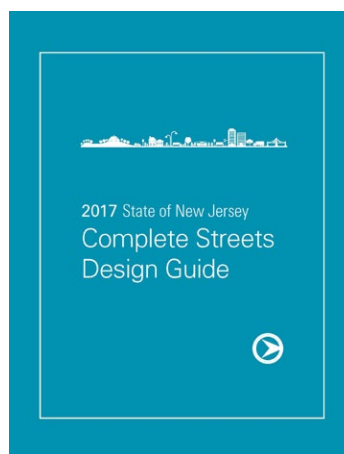
Design and implementation of a bicycle facilities network emphasizing safety, convenience, accessibility, and low-stress connectivity is key to achieving the bicycling goals of **Walk & Bike Camden**. Facility design, in order to achieve mobility for people of all ages and abilities, begins with analysis of existing street and motor vehicle characteristics. Bicycle facilities should then be selected based on guidance from the National Association of City Transportation Officials (NACTO) publications, *Urban Bikeway Design Guide* and *Designing for All Ages & Abilities*, and other resources listed below, accounting for factors such as Average Daily Traffic (ADT) and vehicular speed of a given street, as illustrated in the table on the next page.

The City of Camden is fully built out and has little capacity to reconstruct streets from scratch; therefore, creating bicycle facilities for people of all ages and abilities may not be possible in all locations. Advanced study of the entire bicycle network should be conducted to determine the most suitable corridors, which can then be implemented as a core component of the overall network. During this advanced study, one of the identified corridors can be advanced to establish momentum for the rest of the network, and act as the backbone of the system. This will encourage more trips to be conducted by bicycle, create visibility for bicycling across the city, and help foster a culture of safe bicycling. Funding sources, such as Safe Routes to School or Safe Routes to Transit, should be identified early in the process, so that projects can be developed within program guidelines and maximize the opportunity for funding allocations.

## Bicycle Facility Design Resources



<https://nacto.org/publication/urban-bikeway-design-guide/>



[https://www.state.nj.us/transportation/eng/completestreets/pdf/NJCS\\_DesignGuide.pdf](https://www.state.nj.us/transportation/eng/completestreets/pdf/NJCS_DesignGuide.pdf)



<https://nacto.org/publication/dont-give-up-at-the-intersection>



## From NACTO: Contextual Guidance for Selecting All Ages & Abilities Bikeways

Roadway Context				All Ages & Abilities Bicycle Facility
Target Motor Vehicle Speed*	Target Motor Vehicle Volume (ADT)	Motor Vehicle Lanes	Key Operational Considerations	
Any		Any	Any of the following: high curbside activity, frequent buses, motor vehicle congestion, or turning conflicts‡	Protected Bicycle Lane
< 10 mph	Less relevant	No centerline, or single lane one-way	Pedestrians share the roadway	Shared Street
≤ 20 mph	≤ 1,000 – 2,000		< 50 motor vehicles per hour in the peak direction at peak hour	Bicycle Boulevard
≤ 25 mph	≤ 500 – 1,500		Single lane each direction, or single lane one-way	Low curbside activity, or low congestion pressure
	≤ 1,500 – 3,000	Buffered or Protected Bicycle Lane		
	≤ 3,000 – 6,000	Protected Bicycle Lane		
	Greater than 6,000	Multiple lanes per direction		
Greater than 26 mph†	≤ 6,000		Single lane each direction	
		Multiple lanes per direction	Low curbside activity, or low congestion pressure	Protected Bicycle Lane, or Reduce to Single Lane & Reduce Speed
	Greater than 6,000	Any	Any	Protected Bicycle Lane
High-speed limited access roadways, natural corridors, or geographic edge conditions with limited conflicts		Any	High pedestrian volume	Bike Path with Separate Walkway or Protected Bicycle Lane
			Low pedestrian volume	Shared-Use Path or Protected Bicycle Lane

Source: NACTO Urban Bikeway Design Guide: Choosing an All Ages & Abilities Bicycle Facility, “Contextual Guidance for Selecting All Ages & Abilities Bikeways.” <https://nacto.org/publication/urban-bikeway-design-guide/designing-ages-abilities-new/choosing-ages-abilities-bicycle-facility/>

\* While posted or 85th percentile motor vehicle speed are commonly used design speed targets, 95th percentile speed captures high-end speeding, which causes greater stress to bicyclists and more frequent passing events. Setting target speed based on this threshold results in a higher level of bicycling comfort for the full range of riders.

† Setting 25 mph as a motor vehicle speed threshold for providing protected bikeways is consistent with many cities’ traffic safety and Vision Zero policies. However, some cities use a 30 mph posted speed as a threshold for protected bikeways, consistent with providing Level of Traffic Stress level 2 (LTS 2) that can effectively reduce stress and accommodate more types of riders.

‡ Operational factors that lead to bikeway conflicts are reasons to provide protected bike lanes regardless of motor vehicle speed and volume.

## Street, Sidewalk, and Crosswalk, Maintenance

Well maintained streets, sidewalks, and crosswalks can improve driver behavior and support safety and mobility for all modes. On streets, this can mean repair of potholes and improvements to traffic signs, parking signs, and signals.

While most Camden streets currently include sidewalks, many are in substandard condition or disrepair. Likewise, the majority of intersections either do not include marked crosswalks, or the crosswalks are in disrepair. The City of Camden should inventory the current condition of all sidewalks and crosswalks, explore avenues for funding repairs, and create a priority-based system for repair or replacement, including installation of ADA-compliant curb ramps at intersections. The city could consider a partnership with local non-profits and/or DVRPC to perform the inventory and priority analysis, in conjunction with DVRPC's Greater Philadelphia Pedestrian Portal data set ([walk.dvrpc.org/](http://walk.dvrpc.org/)).



## Identify Locations for Intersection Improvements and Traffic Calming

The City of Camden and Camden County should also look at potential intersection improvements and slowing traffic down along selected corridors. An analysis should be performed to identify the most unsafe intersections and blocks in the city based on crash data and to identify ways to improve the pedestrian and bicyclist experience, including:

- Improve traffic signals by adding pedestrian heads, countdown timers, and leading pedestrian intervals.
- Introduce traffic calming measures at intersections to slow down turning traffic, reduce the pedestrian crossing distance, and prioritize bicyclists and pedestrians.
- Consider mid-block crossings along commercial corridors where traffic signals and crosswalks are spaced more than 750' apart. Utilize pedestrian crash data to determine hot spots for potential locations. Mid-block crossings could have warning beacons, raised crosswalks, and/or median islands.
- Work with the Camden County Municipal Utilities Authority to determine if Green Stormwater Infrastructure, such as curb bump-outs at intersections, can serve a dual purpose between stormwater management and intersection safety.



## Upgrade Streetlight Conditions

Residents from across Camden expressed the concern that insufficient or lack of street lighting in many areas act as a barrier to walking or biking. The darker streets make residents feel unsafe at night. The city and county will soon begin to upgrade streetlights in the city with LED fixtures.



## Organize a Community Conversation about Safety, Police Enforcement, and Active Transportation

Residents from across Camden expressed concerns for personal safety as an issue and barrier to walking or biking. Safety issues include erratic driver behavior (such as speeding and rolling through stop signs) and fear of crime or harassment. Residents also mentioned an issue with ATVs and dirt bikes running throughout the city, as well as a lack of parking enforcement. While many residents agreed that more enforcement of traffic laws is needed, there was a mixed reaction when asked how this should be performed and concerns about the treatment of residents who identify as minorities.



The City of Camden and the Camden County Police Department should engage in ongoing conversations with local neighborhoods on specific issues related to personal safety in and along Camden's streets, and to reexamine traffic enforcement protocols.

The City of Camden should also consider organizing a bicycle and pedestrian task force or advisory committee, which may consist of residents and city staff. The purpose of this group would be to promote biking and walking in the city, track issues and improvements over time, provide ongoing communication with residents, and engage in ongoing conversations with elected officials and city or county departments involved in the design and maintenance of Camden's streets and trails.

## Foster a Culture of Bicycling

While some Camden residents do currently bike, there are no bike shops within Camden. The lack of bike shops is a barrier to bicycle maintenance and repair, especially since many residents obtained their bicycles through the second-hand market. Theft of bicycles is also a issue for residents.

The advocacy community and local non-profits should work together to establish a bicycle co-op that helps residents buy and sell new and used bicycles, offers repair and maintenance services, and helps to educate residents of all ages and abilities on riding and routine repairs, such as fixing a flat tire.

The Camden Community Partnership (CCP) or a partner organization should consider expanding annual “I Bike Camden” event to multiple times a year, and encourage the “wheelie kid” community to get involved.

The City of Camden should consider updating building and zoning codes to require bicycle racks in all commercial and multi-family construction projects. All street reconstruction projects should also include bicycle racks in businesses, schools, and multi-family buildings. The advocacy and non-profit community should work together to identify locations where bicycle racks can be installed along streets where reconstruction is not likely in the near future. Employers should consider secure long-term parking for employees to lock a bike up for the duration of the day.



Credit: Connect the Lots Camden



Credit: Connect the Lots Camden

## Revisit Introducing a Bike Share Program

Residents from across Camden expressed the sentiment that the barriers to bicycle ownership can be too high. Some residents reported owning a bike at one time, but because it had fallen into disrepair, were unable to buy a new one. Bike share is one potential solution to the barrier of bicycle ownership, making bicycles publicly available to rent on a time-based fare. When asked if they would support a bike share program, 52% of survey respondents in Camden said they strongly agree, and 22% somewhat agreed. Only 9% of respondents disagreed with the return of a bike share program.



Many residents are aware of the failed two-month Ofo bike share pilot program in Camden in 2018. Many felt that the program did not do a good job educating the community or building trust, and that the dockless model may not have been right for Camden. The City of Philadelphia has had a successful bike share program, called Indego, operated by the organization Bicycle Transit Systems since 2015. Indego, as do several other successful bike share programs, offers a low cost pass option to residents who are a part of the Supplemental Nutrition Assistance Program (SNAP).

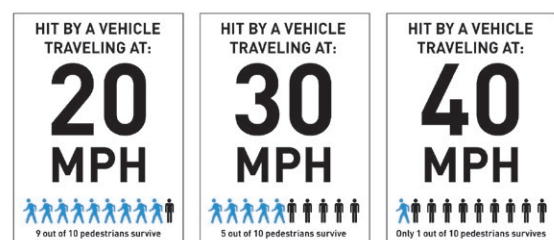
The City of Camden should revisit introducing a bike share program. A new program should include community outreach, continuity with Philadelphia, and the ability to cross the Ben Franklin Bridge. Service providers that indemnify the municipality, maintain insurance for the system and operations, and maintain the shared fleet, docking/parking infrastructure, and payment method should be considered.

## Pursue Vision Zero

Vision Zero is an approach to eliminate all traffic fatalities and severe injuries on our roadways. The Vision Zero approach was first implemented in Sweden in 1997 and has spread to the United States. Vision Zero looks at several components of roadway safety to drive down fatalities and serious injuries through engineering, education, enforcement, evaluation, and encouragement. It recognizes that humans make mistakes, and this should be accounted for in our roadway system. Today over 40 cities in the United States have formally adopted Vision Zero policies.

Given Camden's disproportional crash rate compared to the rest of New Jersey, and the even more disproportionate rate of pedestrian and bicyclists crashes, it is recommended that the City of Camden develop a Vision Zero policy and action plan.

# VISION ZERO



Credit: Seattle Department of Transportation





# Walk & Bike Camden!

## A Community Vision for Active Transportation

### Appendices:

**Appendix A: Literature Review & Existing Conditions**

**Appendix B: Community Engagement Summary**



**September  
2022**

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# Walk & Bike Camden!

## A Community Vision for Active Transportation

### Appendix A: Literature Review and Existing Conditions



SUSAN G. BLICKSTEIN, LLC  
PLANNING ♦ POLICY ♦ RESEARCH

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# INTRODUCTION

**Appendix A: Literature Review and Existing Conditions** is a component of **Walk & Bike Camden: A Community Vision for Active Transportation**.

The objective of **Walk & Bike Camden** is to build upon and enhance existing bicycle and pedestrian networks in Camden and improve connections to and through all Camden neighborhoods, the downtown/central business district (CBD), adjacent communities, schools, businesses, and key destinations. **Walk & Bike Camden** presents a community-driven bicycle and pedestrian network concept that is based on the combined synergies, analyses, recommendations, and priorities of related local, county, and regional plans. The network concept will become the focus of further technical analysis and refinement as part of a future implementation plan.

This appendix is comprised of a literature review to examine the history of active transportation planning in Camden and current planning initiatives, as well as a series of assessment maps to provide an understanding of the Camden landscape relative to active transportation. A separate, yet vital component for reference is the companion **Appendix B: Community Engagement Summary**, that provides a record of outreach steps and public input that has been collected throughout this project. The literature review, assessment maps, and community engagement findings are the foundation of the **Walk & Bike Camden** vision, goals, and next steps.

## Camden Active Transportation Planning Process

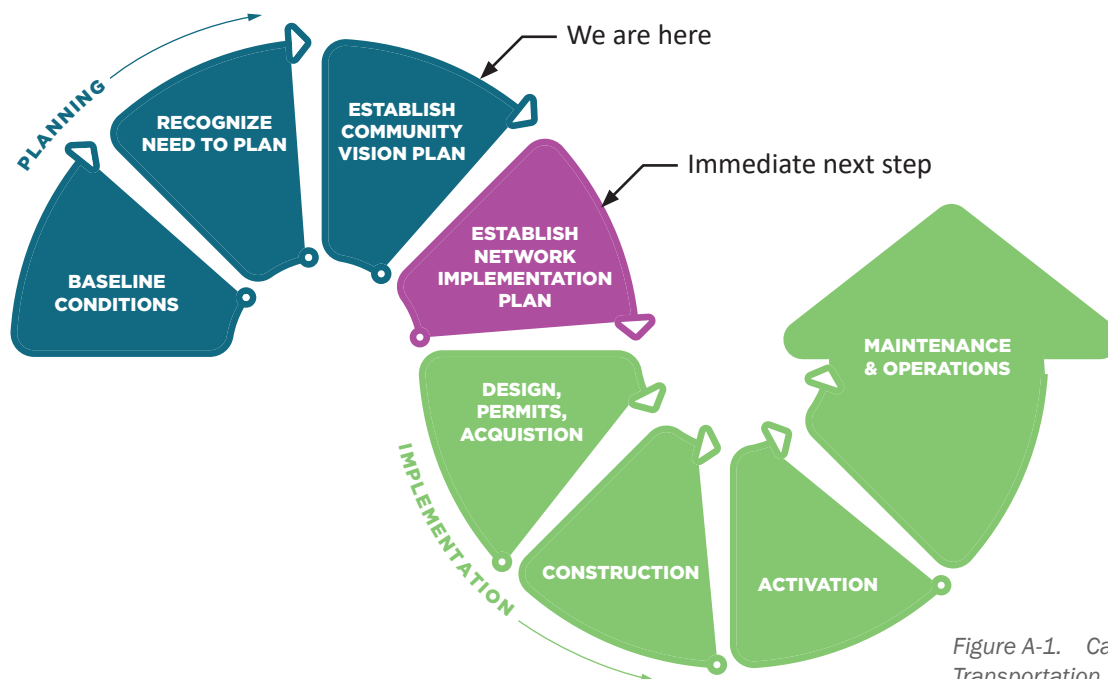


Figure A-1. Camden Active Transportation Planning Process

# LITERATURE REVIEW

Planning and implementation of active transportation projects in the City of Camden has been an ongoing process over the past twenty years. Camden’s comprehensive master plan, **FutureCAMDEN** in 2002, established a vision for a bicycle and pedestrian network in the city. Since then, other network plans, updated national design guidelines, and regional efforts including The Circuit and the Camden County LINK Trail have evolved the look of the citywide network. This section provides an overview of key planning initiatives that have influenced active transportation in Camden since 2002.

## FutureCAMDEN

— City of Camden, 2002

As a comprehensive master plan, **FutureCAMDEN** casts a broad vision for the future, yet its goals and strategies for pedestrian and bicycle networks remain relevant today. **FutureCAMDEN** presents the following vision for *Integrating Camden’s Transportation Network*:

*“A reliable and accessible circulation network provides Camden residents with easy and convenient commuting to jobs and personal, business and recreational activities. Public transportation and a light rail system that now travels the length of the City provides comprehensive service for all residents with direct connections to the surrounding metropolitan area, reinforcing Camden’s role as a regional service center.*

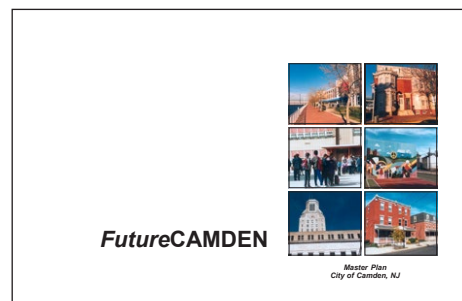
*The City’s streets and bridges are well maintained through routine street sweeping, pothole repair, street reconstruction and resurfacing. Every major bus stop has a shelter and adequate lighting. Mini-buses get residents, the elderly and the City’s youth to recreation, education, medical services and activity centers.*

*A series of road improvements coupled with truck route signage has substantially reduced or eliminated truck traffic through neighborhoods. An efficient system of freight movement from an expanded port and new industrial job centers to the interstate highway network supports the continuing growth of the City and region’s economy.*

**Pedestrians and bicyclists find the City’s network of new and repaired sidewalks, bike routes and greenway trails inviting and safe as they provide another way to reach major parks as well as friends and neighbors who live nearby** [emphasis added].” (page VII-1).

Goal Five of this objective is to “Promote and maintain pedestrian and bicycle networks within the downtown, the waterfront area and in neighborhoods,” and includes a broad strategy to, “Improve sidewalk and bicycle systems.” The strategy emphasizes network-level planning of off-road shared use paths (then referred to as bicycle paths) and on-road bicycle facilities (referred to as bicycle routes), along with repair and improvement of the existing sidewalk network. The strategy includes a proposed network map (see next page) and describes design standards for on- and off-road facilities, such as operating width, paving surface, signage, and other considerations. Importantly, the master plan states that sidewalks should be at least 5 feet wide, adequate for two pedestrians walking together, or for two people in wheelchairs to pass in opposing directions.

Implementation of the bicycle and pedestrian network was envisioned to be carried out incrementally through application of new zoning, subdivision, and site plan ordinances applicable to new development and redevelopment projects, and through federal funding equivalent of the current Transportation Alternatives program.



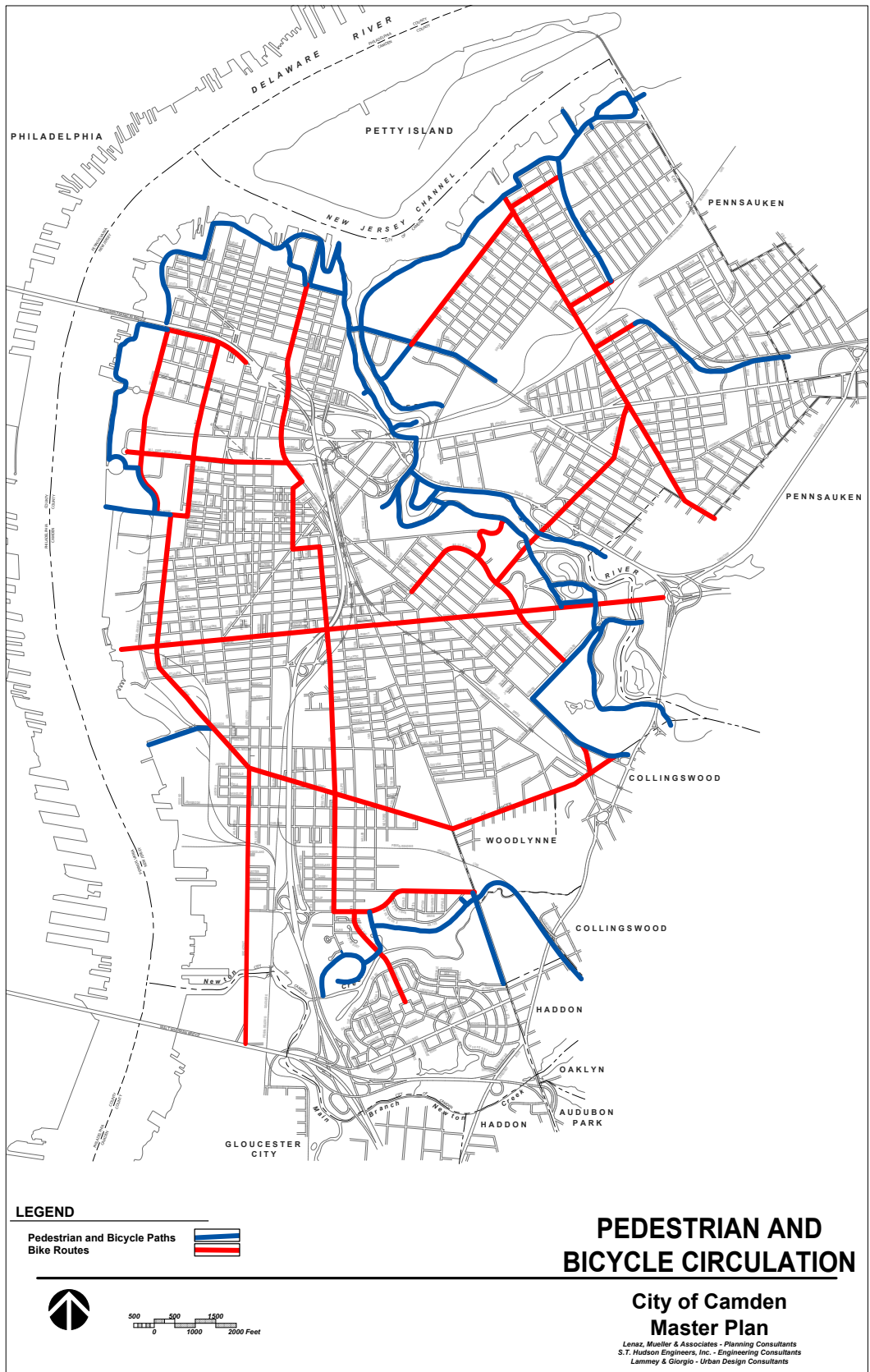


Figure A-2. Pedestrian and Bicycle Circulation Map from FutureCAMDEN, 2002. Credit: City of Camden.

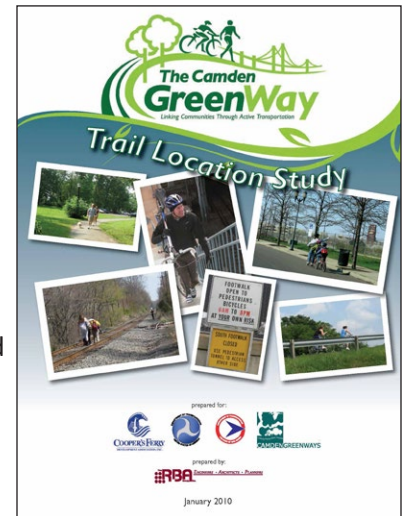
## Camden GreenWay Trail Location Study

— NJDOT Local Technical Assistance, 2010

In 2009 - 2010, the NJDOT Local Bicycle/Pedestrian Planning Assistance Program funded the creation of the **Camden GreenWay Trail Location Study**. With a focus on off-road trails, this purpose of this study was to refine the *FutureCAMDEN* (2002) planned network, prepare for federal funding opportunities, and possibly qualify as a Non-motorized Transportation Pilot Project. This planning study examined Camden from a high level, providing an analytical, feasibility-based planning process that included:

- Evaluation of existing routes, gaps, suitable locations for off-road shared use path facilities, and refined recommendations for on-road bicycle facilities,
- GIS-based preliminary environmental screening,
- Bicycle and pedestrian route recommendations and preliminary cost estimates.

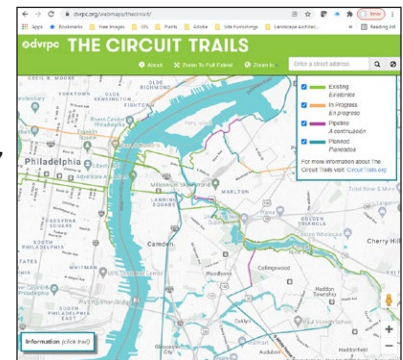
Importantly, the **Camden GreenWay Trail Location Study** expanded of the *FutureCAMDEN* network to include regional connectivity, with bicycle and pedestrian facilities connecting Camden residents with surrounding New Jersey communities to the north, east, and south, and with Philadelphia to the west via the Benjamin Franklin Bridge.



## The Circuit Trails

Between 2010 - 2015, the Circuit Trails Network emerged as a collaborative, regional vision for over 750 miles of trails within the nine-county DVRPC region and connecting to surrounding areas. In that time, Circuit Trails advocates were able to secure funding for trail planning, outreach, data collection, construction, and tracking of projects through sources including the William Penn Foundation and the DVRPC Transportation Improvement Program.

Regional connectivity for active transportation is a bedrock goal of the Circuit Trails program, and Camden is a key location for connecting population centers in New Jersey and Pennsylvania. The Circuit Trails organization maintains an inventory of existing, in progress, pipeline, and planned trails in the region.



# Camden County Bicycling & Multi-Use Trails Plan

—Delaware Valley Regional Planning Commission, 2015

The *Camden County Bicycling & Multi-Use Trails Plan* is a long-range effort to improve bicycle and pedestrian mobility in Camden County and guide municipalities that seek to enhance local mobility and accessibility. The plan includes an inventory of trip generators/attractors and existing bicycle facilities, and identifies a countywide network of off-road trail alignments and on-road facilities.

As the plan relates to the City of Camden, there is a proposed network using the Camden GreenWay/Circuit Trails as a foundation. These trails — some existing, some planned — extend from the Camden Central Waterfront/Benjamin Franklin Bridge and along the Cooper River through Camden's interior, connecting to Pennsauken and Collingswood. The plan also identifies greenway connections along the Delaware River waterfront, beginning at the recently completed Cramer Hill Waterfront Park (2021) and connecting to Pennsauken. An additional easterly connection to Pennsauken and beyond is identified along the abandoned railroad right-of-way that parallels Federal Street (CR-537) to the north. Since 2015, additional portions of this trail have been constructed or planned. Planned under the moniker Burlington-Camden Trail, the trail will extend about 5 miles from Camden, into Pennsauken, and connecting to Maple Shade in Burlington County.

The planned on-road network is indicated in the figure below.

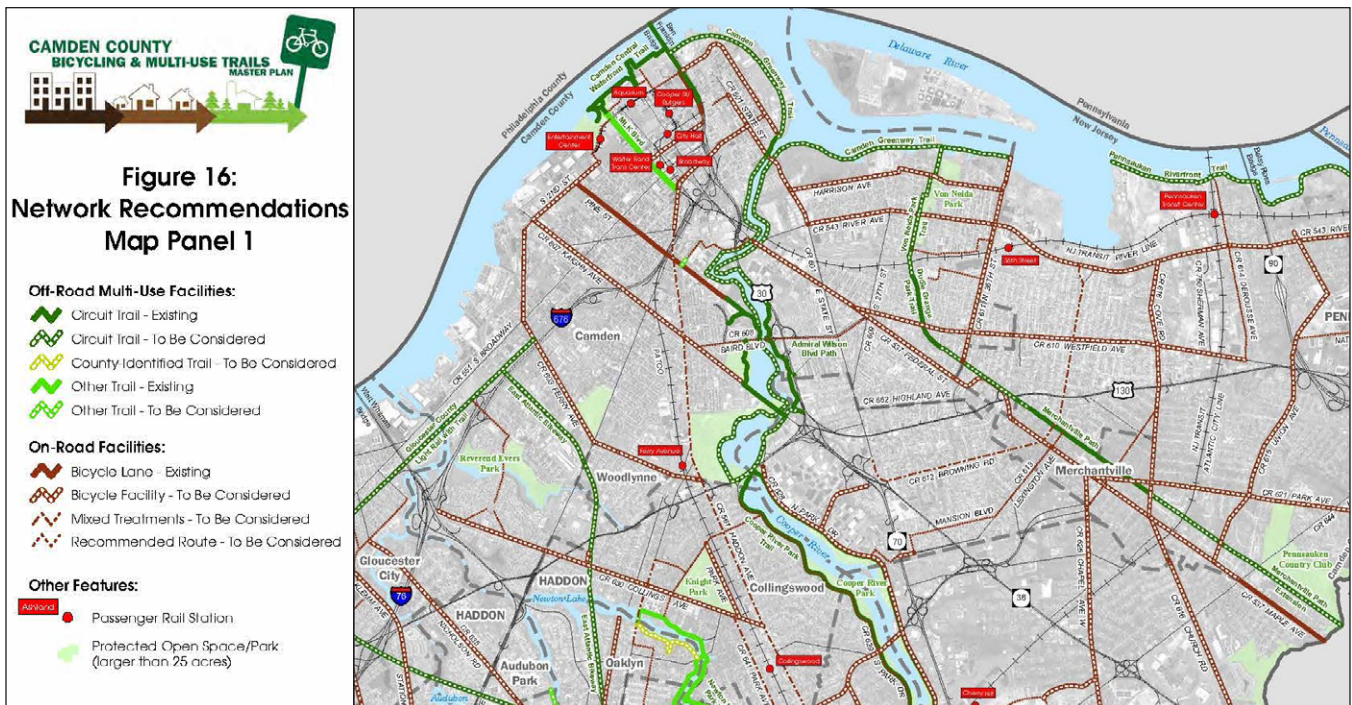
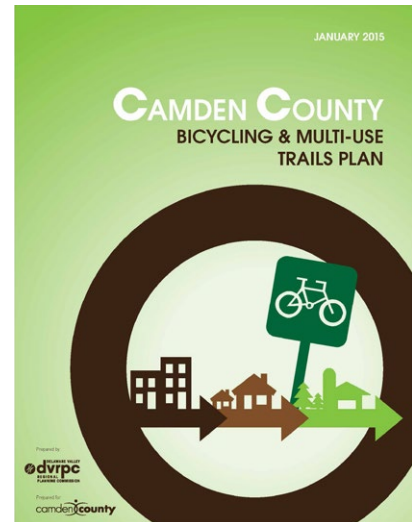
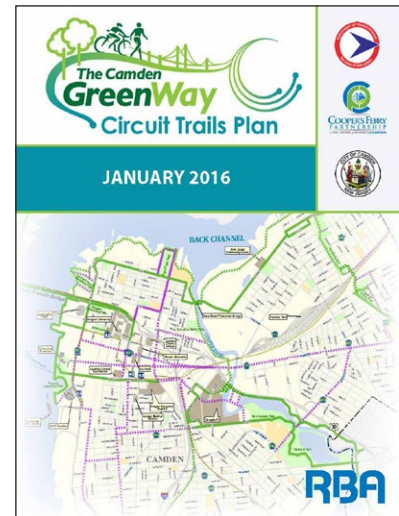


Figure A-3. Network Recommendations Map from the Camden County Bicycling & Multi-Use Trails Plan, 2015. Credit: DVRPC.

## The Camden GreenWay Circuit Trails Plan

— NJDOT Local Technical Assistance, 2016

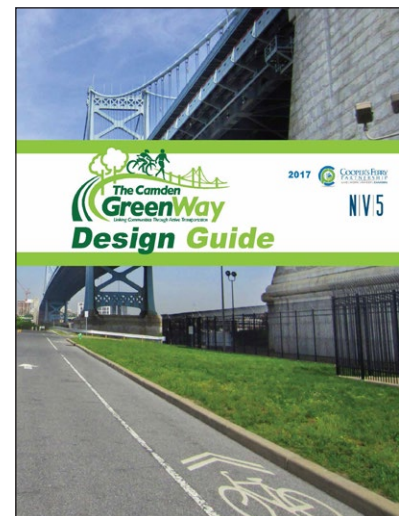
In 2015 - 2016, the NJDOT Local Bicycle/Pedestrian Planning Assistance Program funded the creation of the **Camden GreenWay Circuit Trails Plan**. The objective of this plan was to combine (and distinguish between) routing elements of the **Camden GreenWay Trail Location Study** (2010) and the emerging **Circuit Trails** network, and to develop conceptual routing solutions to close gaps in the trail network. The plan builds from two public outreach events and input from a Steering Committee, supporting the construction of a network of active transportation infrastructure for bicycle and pedestrian mobility throughout the City of Camden with regional connectivity.



## CamdenGreenWay Design Guide

—Coopers Ferry Partnership, 2017

Building on the **Camden GreenWay Circuit Trails Plan** (2015), Camden Community Partnership (formerly Coopers Ferry Partnership) funded the development of the **Camden Greenway Design Guide**. The purpose of this design guide is to describe a series of effective bicycle and pedestrian facilities that are appropriate for the Camden GreenWay, both on- and off-road. The guide was developed as a resource for developers, builders, planners, and allied professionals to identify bicycle and pedestrian facilities for inclusion in new projects, developments, and investments throughout Camden, leveraging ongoing redevelopment projects to incrementally build out the Camden GreenWay. The guide includes information on facilities to support both pedestrian and bicycle mobility.





# 2018 Complete Streets Case Study

—NJ Bicycle and Pedestrian Resource Center (Rutgers); NJDOT

The **2018 Complete Streets Case Study** provides an overview of Complete Street projects undertaken within Camden since the Complete Streets resolution was passed in 2013, along with a narrative describing the factors that affect walking and bicycling. The study discusses successful projects (Camden GreenWay Circuit Trail Phase 1; Cooper’s Poynt Waterfront Park; 7th Street Gateway Streetscape Improvement) as well as existing and future challenges (abundance of parking, stormwater infrastructure, city layout, funding issues), and identifies next steps including specific projects that are in various stages of planning or development.

The **2018 Complete Streets Case Study** points out relevant demographic and transportation data, as shown in the figures below. **Walk & Bike Camden** can draw from the background data overview, map of completed and planned projects, and thematic recommendations, such as creating a culture of active transportation by combining elements of Complete Streets and creative placemaking.

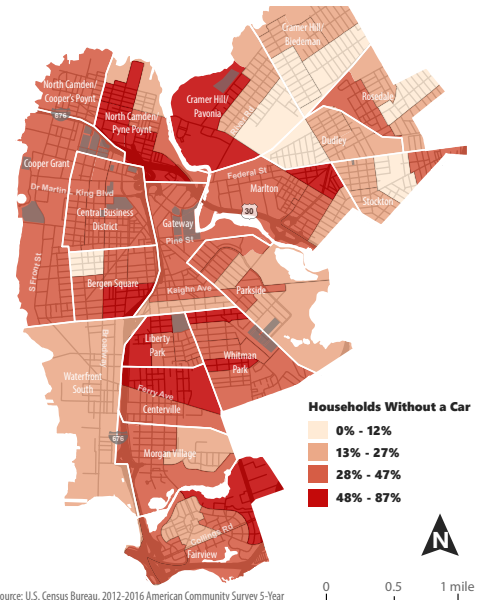
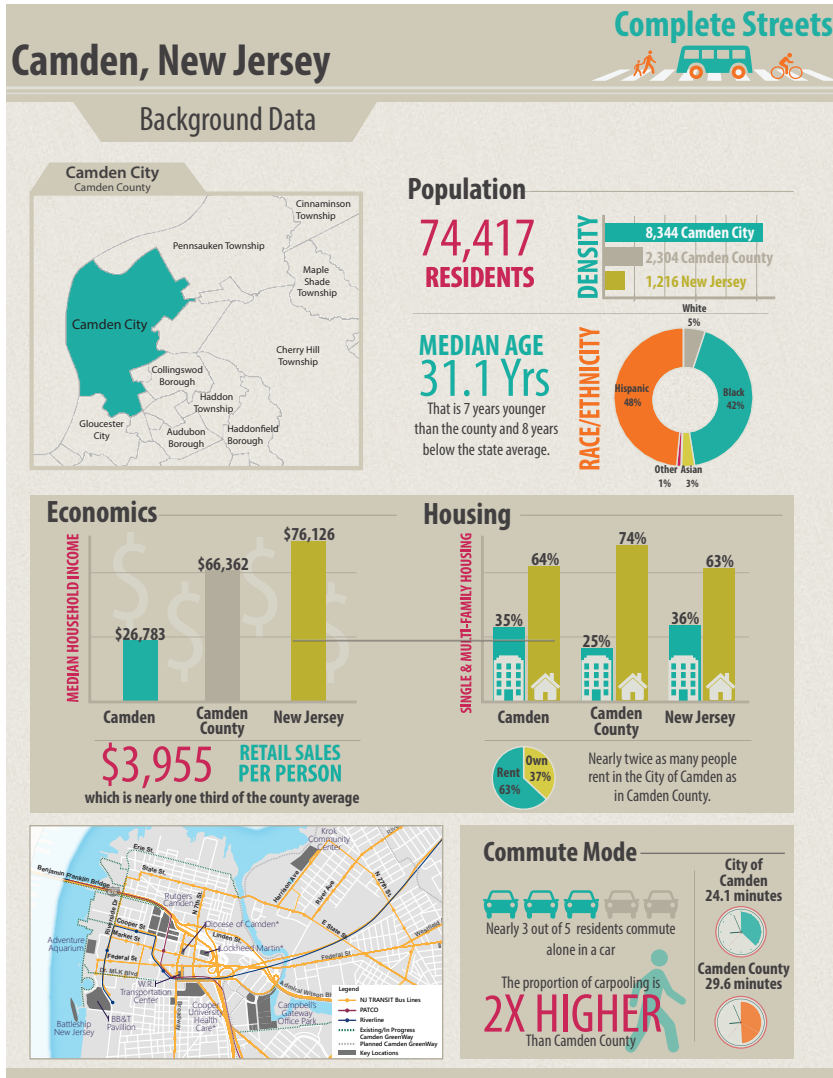
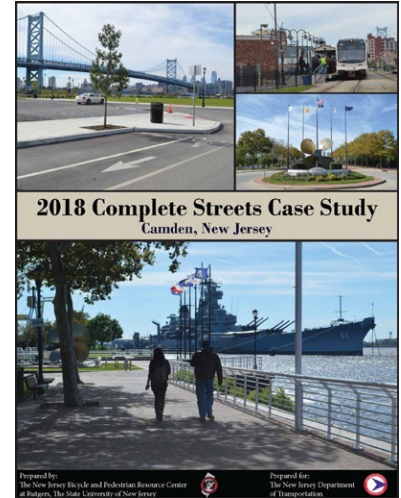


Figure A-4. Reproduction of Figure 10: Percent of Households without a Car in Census Tracts across the City of Camden, 2018 Complete Streets Case Study, page 9. Credit: NJBPRC

Figure A-5. Reproduction of Background Data infographic, 2018 Complete Streets Case Study, page 3. Credit: NJBPRC.

## Camden County LINK Trail

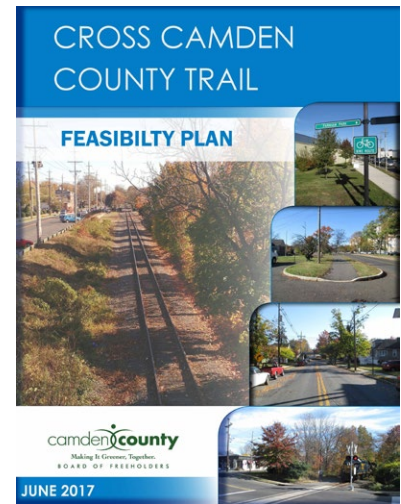
— Camden County, 2017 (originally known as Cross Camden County Trail)

The 2017 **Cross Camden County Trail Feasibility Plan** details a recommended alignment for what today is known as the Camden County LINK Trail, or The LINK.

As described by Camden County:

*"The Camden County LINK is a planned 33-mile multi-use, off-road trail designed to serve as the "spine" for a County-wide trail network.*

*In 2017, the County completed a feasibility study for this spine, known at that time as the Cross Camden County Trail. The result was a trail alignment that travels through seventeen municipalities from the Benjamin Franklin Bridge in Camden to the Gloucester County line in lower Winslow Township. Along the way, the trail will travel through urban, suburban, and rural environments connecting many municipal and County parks and several downtown business districts. In addition, the trail will provide users with the opportunity to access hundreds of acres of public open space in Winslow Township. The feasibility study also identified the benefits of the trail to the local economy and the improved health of our residents." (<https://www.camdencounty.com/service/parks/cross-county-trail/>, accessed December 2021).*



In Camden, the proposed Camden County LINK Trail will:

- Begin at the Benjamin Franklin Bridge with access to the new ramp near 5th Street,
- Continue along the Delaware River waterfront through North Camden along a series of new parks and environmental enhancements currently under development, and
- Close the gaps of the existing trails along the Cooper River, providing safe access for people of all ages and abilities to Cooper River Park.

Additional detail on the proposed trail alignment and design parameters is provided in the **Cross Camden County Trail Feasibility Plan**.

# Map A-1: Camden County LINK and Other Planned Trails



# General Reexamination of the Master Plan and Master Plan Amendment

—City of Camden, 2018

This second reexamination of the **FutureCAMDEN**, the City of Camden Master Plan (2002), begins with an optimistic introduction:

*“...the City of Camden is an attractive urban community to live, work, and recreate. It is well-known for its waterfront that has historic, cultural, and family-oriented amenities that attract both residents and visitors. From a land use perspective, Camden is largely built out but is undergoing a renaissance. Planned redevelopment and rehabilitation projects, a sustainability and green infrastructure agenda, walking and bicycling trails, along with persistence and grit, are reshaping the City” (page 1).*

Reexamining the planning issues and initiatives that were described the 2008 reexamination report, the 2018 report continues to acknowledge the importance of bicycling and walking: “The role of public transit, walking, and bicycling must play a major role in Camden’s accessibility plan to link land use and transportation investments” (page 15).

The section "Changes in Planning Assumptions" provides, “a snapshot in time of the City of Camden’s current profile... meant to serve as a guide for the development of future plans,” and describes (among other topics): Transportation Services, Sustainability/Green Initiatives, and Parks and Greenways (pages 32-34).

Active transportation networks and facilities can help to achieve goals for transportation/mobility, sustainability, recreation, and public health, producing a number of returns on public investment. Understanding and communicating active transportation as a method to achieve multifaceted community goals will help to reinforce the importance of **Walk & Bike Camden**. This is an important distinction from the reexamination report, where transportation, sustainability, and greenways are described separately. **Walk & Bike Camden** provides an opportunity to renew and re-express a holistic vision for active transportation that is derived from residents and directly informs new initiatives. Clearly communicating the multifaceted value created by investment in active transportation can help to build consensus and contribute progress toward implementation.



# Camden Parks and Open Space Plan

—Trust for Public Land; Cooper’s Ferry Partnership, 2020

The **Camden Parks and Open Space Plan** includes a comprehensive analysis of the parks and open space network throughout Camden with a goal of identifying opportunities to prioritize open space investment to maximize community benefits and improve the urban environment. The plan aims to ensure all Camden residents have safe and easy access to a high quality park within a 10-minute walk of home by 2050. Community engagement efforts found that over 52% of survey respondents currently walk to parks and the need for safe walking routes was identified as a major community priority.

The plan describes the “Current Context” for planning in Camden (page 7), noting trends such as:

- Population decline: "Since the 1950s, Camden’s population has steadily declined from its peak of 125,000 to 73,973 in 2018. Today, Camden is home to a predominantly young, poor, and minority population."
- Health Inequity: "Lack of access to healthy foods, safe places for physical activity, and affordable health prevention/treatment services in Camden results in devastating consequences for residents."
- Environmental Inequity: Camden, "scores at or above the 90th percentile in all exposure pathways and scoring between the 95th and 99th percentiles for wastewater discharges, superfund sites, lead paint, traffic proximity, risk management plans, and multiple air contaminant categories."
- Resilience and Investment : "Buoyed by strong and stable leadership, passionate and diverse residents, a multitude of high-quality education and health institutions, a favorable business climate, and a strategic location, Camden is rising... Camden today is in the midst of a \$2.5 billion development boom."

**Walk & Bike Camden** has the potential to complement and advance the **Parks and Open Space Plan** through high quality (safe, connected, and accessible) active transportation network to support access to high quality parks and open space. This is in keeping with findings of the **Parks and Open Space Plan** community engagement survey, most notably that 97% of respondents indicated walking paths or trails as a top priority for open space amenities (Figure 17, page 42). Green infrastructure is also described in the **Parks and Open Space Plan** as solution to both mitigate the effects of flooding and improve environmental quality in the city. This creates an opportunity for concurrent planning and buildout of walking trails and paths (active transportation) and green infrastructure, which would greatly benefit Camden residents in a number of ways.

## Top Priority Open Space Amenities:

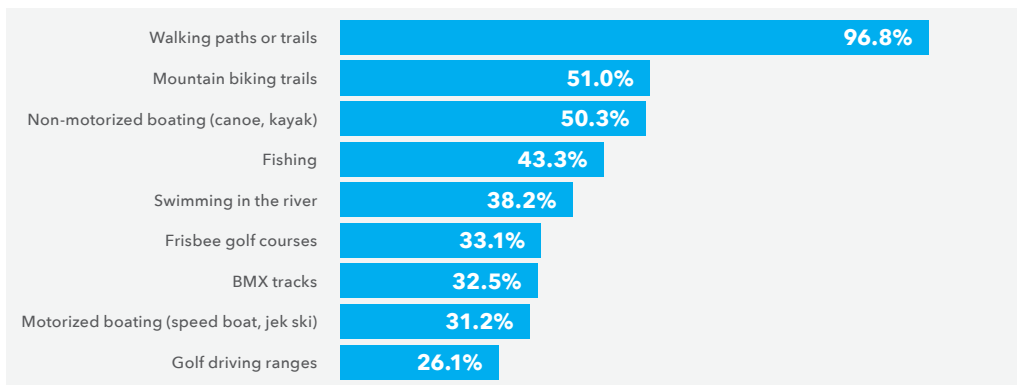


Figure A-6. Reproduction of Figure 17, page 42, from Camden Parks and Open Space Plan, Credit: Trust for Public Land and Cooper’s Ferry Partnership



The Camden Parks and Open Space Plan  
2020



# The Camden Health Element

—Delaware Valley Regional Planning Commission, 2021

The **Camden Health Element** is a new component of Camden’s Master Plan with the objective to incorporate community health and well-being into the city’s policies, programs and public spaces. Key to the plan is the link between planning and public health: “The way communities are designed and built can have a significant impact on the health of individuals, as well as on the community at large” (page 2). It describes co-beneficial relationships between public health and active transportation in a direct and memorable way:



*The transportation system not only influences how people get around their communities but also affects their health in direct and indirect ways. ...Communities with diverse mobility options; multimodal amenities; attractive and safe streetscapes; and a high concentration of places to live, learn, work, and play can reduce the need to drive and promote a healthier lifestyle. These conditions make it convenient to walk and bike, giving people an active way to reach key destinations and get exercise at the same time. Although vehicle access can expand residential, employment, recreational, and health care options, communities that are “auto-centric” and overemphasize the needs and preferences of motorists may face greater challenges with pollution, roadway safety, physical inactivity, stress, and social isolation. The CDC warns that a “lack of efficient alternatives to automobile travel disproportionately affects vulnerable populations such as the poor, the elderly, people who have disabilities, and children.”<sup>(A)</sup> A healthier Camden requires a balanced approach to transportation needs and improvements, with equity of access for all users as its focus.*

<sup>(A)</sup>Centers for Disease Control and Prevention, “CDC Transportation Recommendations,” February 2018, [www.cdc.gov/transportation/recommendation.htm](http://www.cdc.gov/transportation/recommendation.htm).

As shown in the figure below, each the social determinants of health presented in the Camden Health Element can be strengthened and supported by active transportation:

## Social Determinants of Health:

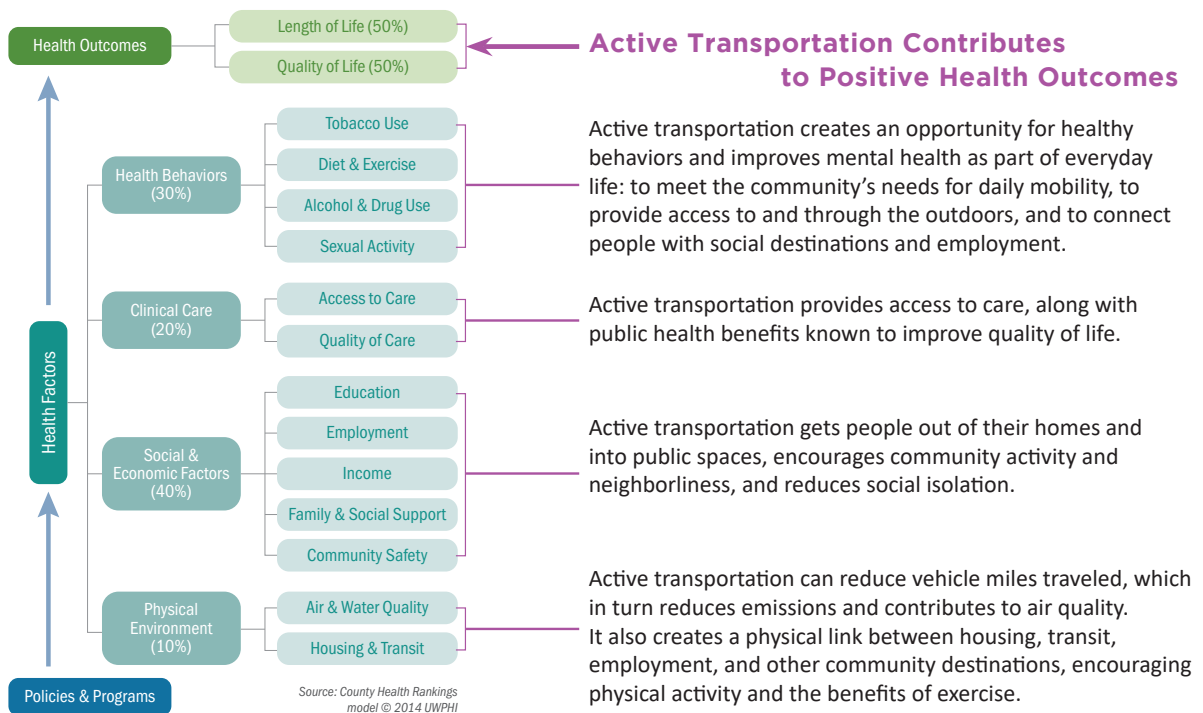


Figure A-7. Derived from Figure 1: Social Determinants of Health, Camden Health Element, page 3. Credit DVRPC. Active transportation contributions added by NV5.

The Camden Health Element also provides a succinct and relevant overview of the City of Camden at a glance, as shown in the infographic below:

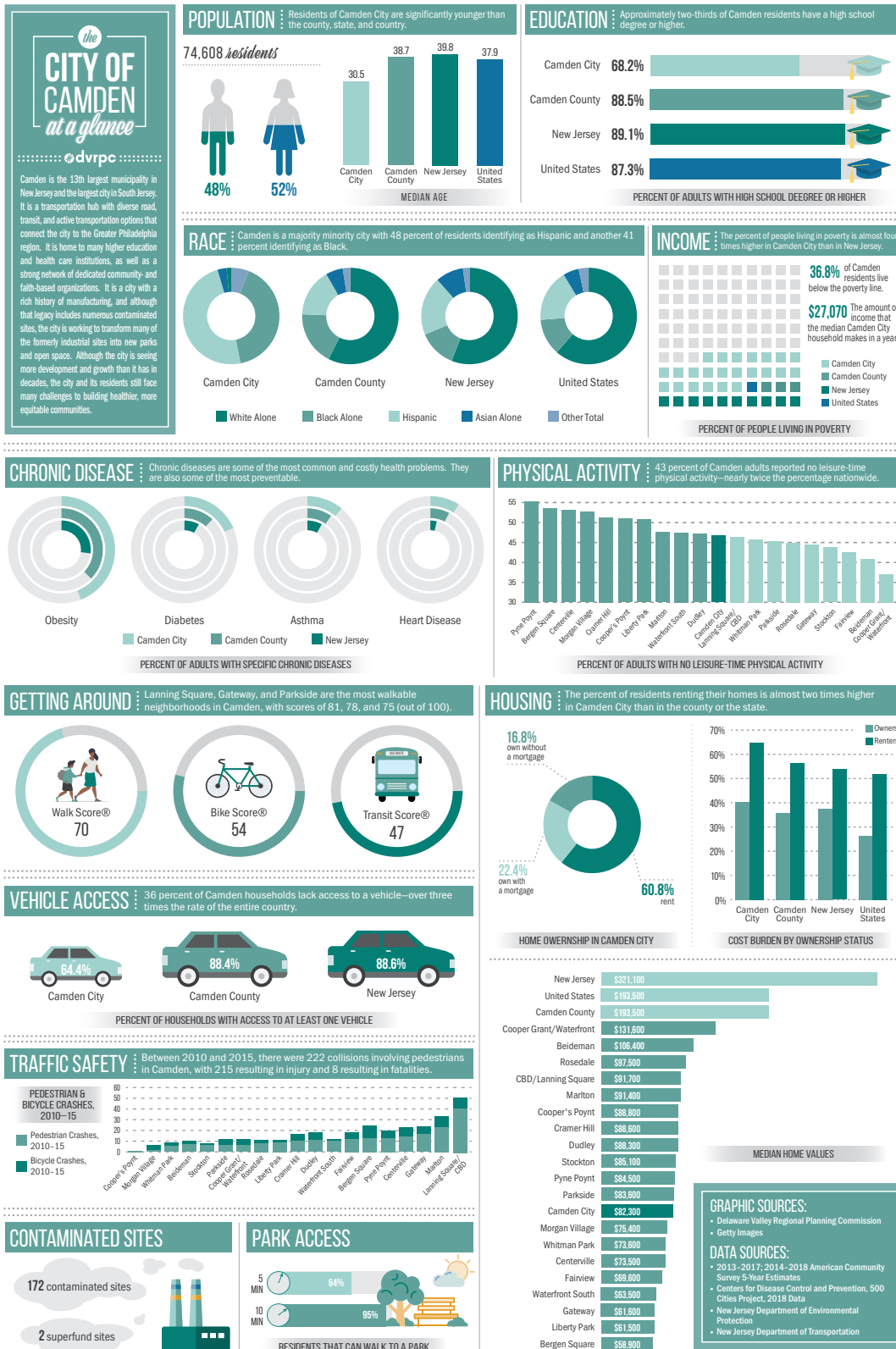


Figure A-8. Reproduction of Figure 2: Camden at a Glance, Camden Health Element, pages 4-5. Credit: DVRPC.

## Inclusion, Equity, and Environmental Justice Resources

Inclusion, equity, and environmental justice are essential inputs for active transportation planning. This section provides key findings from five studies that examine inclusion, equity, and environmental justice from different perspectives related to demographics and environmental conditions. The studies include the following:

1. Social Vulnerability Index (US CDC/Agency for Toxic Substances and Disease Registry)
2. Environmental Justice Overburdened Communities (NJDEP)
3. Equity Analysis for the Greater Philadelphia Region (DVRPC)
4. Green + Healthy Camden (Trust for Public Land)
5. Equity of Access to Trails: Market Research Conducted Fall 2020 (Circuit Trails Justice Equity, Diversity, and Inclusion Task Force , William Penn Foundation, OPINIONWORKS)

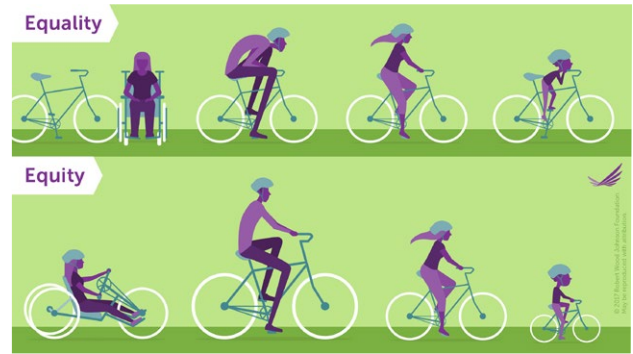


Figure A-9. Image by Robert Wood Johnson Foundation

From each study, it is evident that Camden has a need and can benefit from active transportation planning that seeks to include the voices of local residents, understand their needs, challenges, and desires, and envision a network that provides cross-functional benefits for daily mobility and access, health and recreation, and environmental restoration.

### 1. Social Vulnerability Index

— US CDC/Agency for Toxic Substances and Disease Registry

The Social Vulnerability Index (SVI) compares census tracts nationally on four main themes (with sub-factors) that include Socioeconomic Status, Household Composition & Disability, Minority Status & Language, and Housing Type & Transportation.

*"Social vulnerability refers to the potential negative effects on communities caused by external stresses on human health. Such stresses include natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss." (https://www.atsdr.cdc.gov/placeandhealth/svi/index.html)*

Based on the (SVI) methodology, each of the census tracts in Camden ranks within the range of the highest social vulnerability (75th - 100th percentile). Active transportation provides a level of resilience to communities that are affected by external stresses.

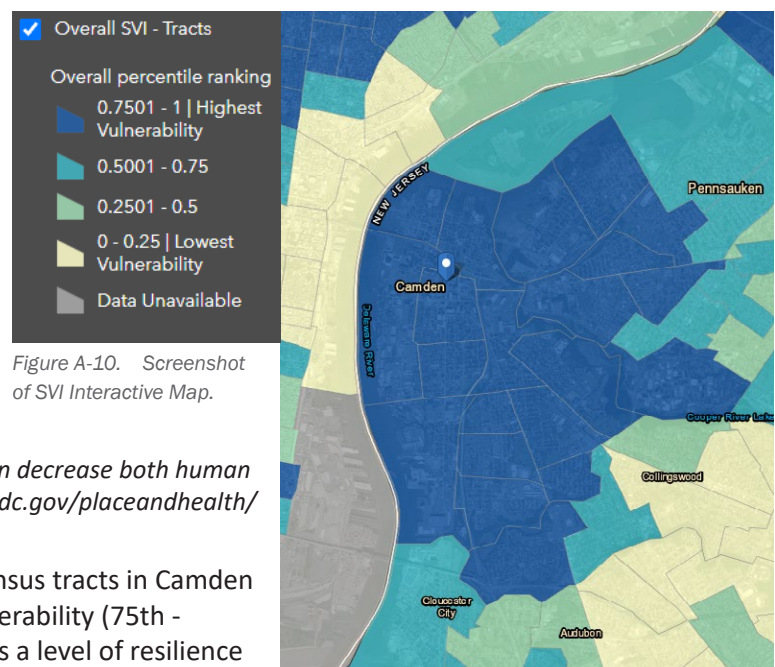


Figure A-10. Screenshot of SVI Interactive Map.



## 2. Environmental Justice Overburdened Communities

— NJDEP

New Jersey’s Environmental Justice Law, N.J.S.A. 13:1D-157, (Law) requires the New Jersey Department of Environmental Protection (NJDEP) to evaluate the contributions of certain facilities to existing environmental and public health stressors in overburdened communities when reviewing certain permit applications.

*“An Overburdened Community (OBC), as defined by the law, is any census block group, as determined in accordance with the most recent United States Census, in which:*

1. *at least 35 percent of the households qualify as low-income households (at or below twice the poverty threshold as determined by the United States Census Bureau);*
2. *at least 40 percent of the residents identify as minority or as members of a State recognized tribal community; or*
3. *at least 40 percent of the households have limited English proficiency (without an adult that speaks English “very well” according to the United States Census Bureau).”*

As an Overburdened Community, planning an active transportation network that meets the needs of local Camden residents can be as much a physical and functional asset as it is a symbol of renewal and community.

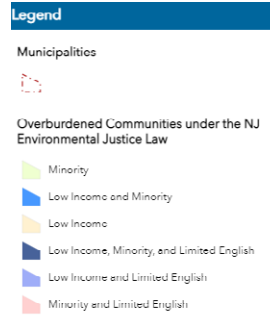
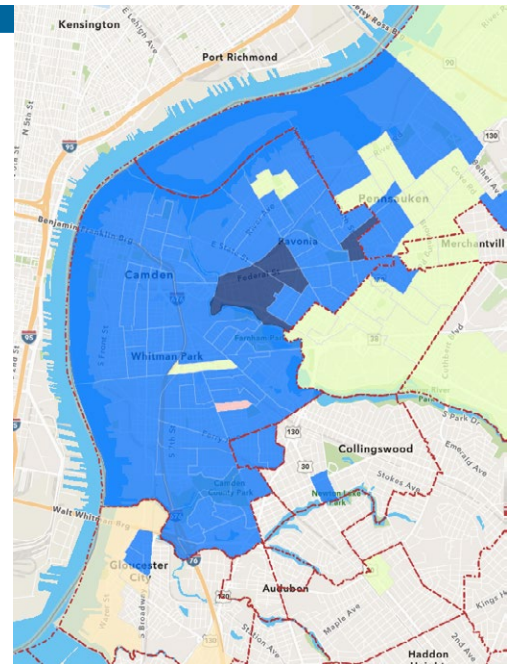


Figure A-11. Screenshot of NJ Environmental Justice Mapping Tool.



## 3. Equity Analysis for the Greater Philadelphia Region

— Delaware Valley Regional Planning Commission

The Delaware Valley Regional Planning Commission provides an equity analysis known as Indicators of Potential Disadvantage (IPD). The IPD analysis identifies populations of interest under Title VI and EJ using U.S. Census American Community Survey (ACS) 2014-2018 five-year estimates data and maps these populations in each of the Census tracts in the region. Each population group is an “indicator” in the analysis and includes the following:

Youth	Racial Minority	Limited English Proficiency
Older Adults	Ethnic Minority	Disabled
Female	Foreign-Born	Low-Income

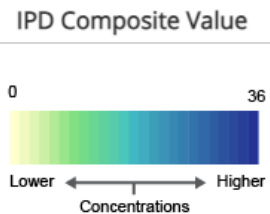
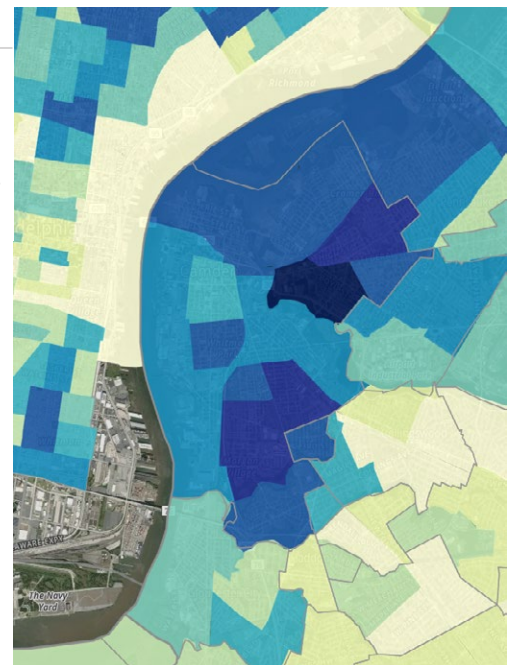


Figure A-12. Screenshot of the Indicators of Potential Disadvantage interactive map.



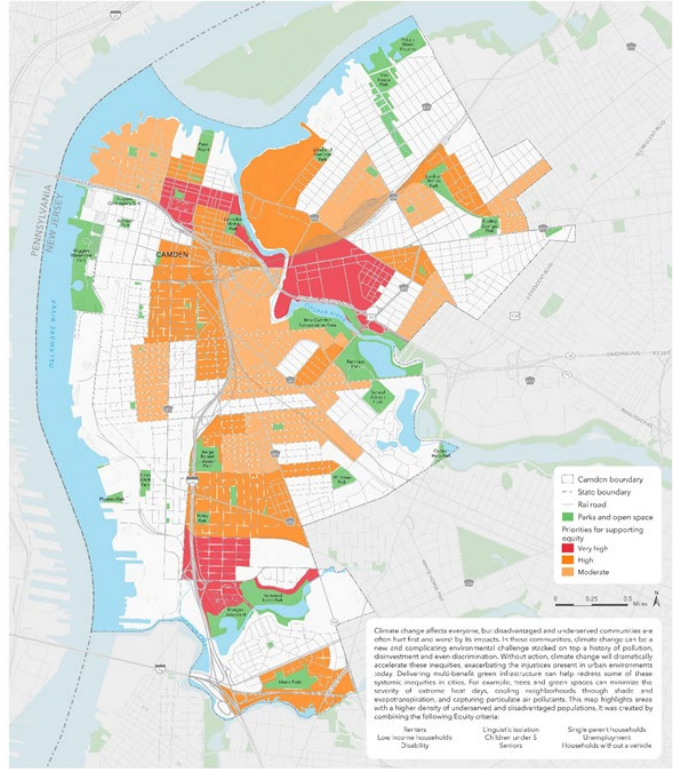
Understanding the needs of diverse populations within the Camden community creates the opportunity to integrate new voices and creative solutions to the planning and development of an active transportation network.

#### 4. Green + Healthy Camden

—Trust for Public Land, 2021

This online mapping tool analyzes climate preparedness, equity, health, and parks/open space planning in Camden, enabling users to model potential climate change scenarios and planning decision outcomes in the context of four themes related to climate preparedness and resiliency: Connect, Cool, Absorb, Protect. The analysis and resulting "Supporting Equity" Map creates a convergence between planning considerations for climate change and underserved communities:

*Climate change affects everyone, but disadvantaged and underserved communities are often hurt first and worst by its impacts. In these communities, climate change can be a new and complicating environmental challenge stacked on top a history of pollution, disinvestment and even discrimination. Without action, climate change will dramatically accelerate these inequities, exacerbating the injustices present in urban environments today. Delivering multi-benefit green infrastructure can help redress some of these systemic inequities in cities. For example, trees and green spaces can minimize the severity of extreme heat days, cooling neighborhoods through shade and evapotranspiration, and capturing particulate air pollutants. This map highlights areas with a higher density of underserved and disadvantaged populations.*



#### Supporting equity

CLIMATE-SMART CITIES CAMDEN: EQUITY PRIORITIES

November 22, 2019. Copyright © The Trust for Public Land. The Trust for Public Land (TPL) and The Trust for Public Land (TPL) are both 501(c)(3) nonprofit organizations. For more information, visit [www.trustforpublicland.org](http://www.trustforpublicland.org).



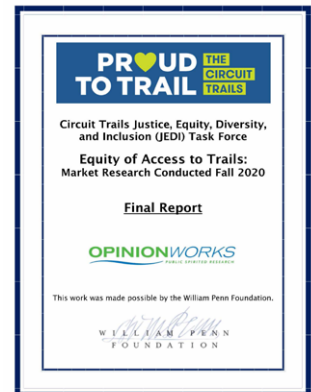
Figure A-13. Equity priority mapping through Green + Healthy Camden. Credit: Trust for Public Land.

Understanding and communicating the multifaceted benefits of active transportation can help to build support from diverse coalitions to reverse historical injustices and implement active transportation improvements that provide social and economic opportunity while restoring degraded environmental conditions.

#### 5. Equity of Access to Trails: Market Research Conducted Fall 2020

—Circuit Trails Justice, Equity, Diversity, and Inclusion Task Force, William Penn Foundation, OPINIONWORKS

This research study was, "designed to identify the motivators and barriers to trail use in diverse and underserved neighborhoods that are adjacent to Circuit Trails, to explore the perceptions of trails and the motivations of nearby residents, and to recommend the actions that would better connect and engage these residents with their trails (page 2)." Focusing on four communities in the DVRPC region, one of which was Camden and Pennsauken, the study included community stakeholder meetings, an intercept survey of 237 trail users, a survey of neighborhoods surrounding trails (718 participants by mail and online), and eight focus groups to identify barriers to trail use and methods to overcome such barriers.



The study resulted in a synthesis of 10 actions to take right now for more inclusive trails, provided as Figure A-14 on the next page.

## 10 actions to take right now for more inclusive trails

welcoming	Programming	<p><b>1. Invite everyone to have their fun on the trail</b> The best way to overcome a subtle lack of welcome is to offer compelling activities geared towards the tastes of the audience. Live music, festivals, family-oriented activities, pop-up shops, local artisans, historical commemorations, and food trucks were key ideas.</p>
		<p><b>2. Extend an overt welcome</b> Imagery can be meaningful. Stakeholders suggested that public art at trail access points feature people of color, and posting the message “Black Lives Matter” in key locations would also convey a sense of respect and welcome.</p>
		<p><b>3. Host organized group activities</b> Many people want to be on the trail with a friend or in a group, both for fellowship and to alleviate their safety concerns. Post-COVID, offer opportunities to join up with other people along the trail to pursue similar interests, with activities such as guided nature hikes or birdwatching walks, yoga along the trail, exercise groups, and activities for children.</p>
appropriate	Security	<p><b>4. Create spaces where people feel safe.</b> With few exceptions, people insisted they did not want to see a police presence on the trail. Most people would welcome “ambassadors” or “park rangers,” whom they felt would use a friendly approach, or simply callboxes along the trail in areas where safety is a concern.</p>
		<p><b>5. Develop places to gather and relax</b> Numerous people asked for amenities that would allow them to gather with family and friends, entertain their children, or just sit and read a book or enjoy nature. These could include places to picnic and barbecue, playgrounds, and benches and other places to sit.</p>
inviting	Infrastructure	<p><b>6. Prioritize trail maintenance and amenities</b> People hoped for better maintenance of the trail surface, lighting in certain areas, and easier or safer access points including adequate parking. In addition, they hoped for amenities along the trail, such as bikeshare, restrooms, sports courts or fields, and boat rentals.</p>
		<p><b>7. Install useful signage</b> Study participants asked for signs in their neighborhoods to point the direction to the trail. It was also suggested that signage could tie into the Circuit Trails Network, not just pointing the way to the local trail, but also indicating further destinations that could be accessed through the regional trail network, to enhance that thirst for exploration.</p>
creative	Greening	<p><b>8. Build an urban oasis</b> Residents want trails that provide a respite from the urban environment. They want a creatively designed trail that offers glimpses of water, the sound of birds, splashes of color. Residents hope for accessible places where they can dip out of their normal world and dip in to a peaceful, green environment, even if only for a short time.</p>
		<p><b>9. Show people enjoying the trail</b> People want to see images of people who look like them enjoying the trail. They want to imagine themselves on the trail, and know that they belong there. The Circuit’s website and outreach should show real people from these neighborhoods having fun on the trail.</p>
authentic	Outreach	<p><b>10. Leverage Local Social Media and Traditional Door-to-Door</b> Getting social media influencers on the trail and curating images to their local followers would help create a new constituency for the trails. At the same time, many people asked for more traditional means of communication – flyers, conversations, and traditional mail.</p>

Figure A-14. Actions by the Circuit Trails Justice Equity, Diversity, and Inclusion Task Force

# ASSESSMENT MAPS

The following series of maps provides a high level assessment of active transportation considerations in the City of Camden.

## Camden Transportation Overview

Paved roadways are dominant in the Camden landscape. Within the city, there are approximately 197.2 centerline miles of streets and highways. By comparison, there are 6.3 miles of shared use paths (paved trails) that are separated from motor vehicle traffic, and 3.8 centerline miles of streets that include a bicycle lane. Sidewalks, on the other hand, are abundant with approximately 273 miles of sidewalk throughout the city. (Note: Sidewalks are measured in total miles, not centerline miles).

Map A-2 illustrates the street hierarchy, trails, and rail transit available to Camden residents. Sidewalks are not included on this map due to their ubiquity throughout the city.

In advancing a plan for active transportation in Camden, the following will be important considerations:

- Shared use paths that are separated from motor vehicle traffic provide mobility for people on foot and on bicycle, and are attractive to users of all ages and abilities. Increasing the availability of shared use paths can help to attract new people to active transportation and meet other goals for health, recreation, and environmental quality.
- The existing roadway network is an opportunity for increasing active transportation. Facilities such as bicycle lanes and bicycle boulevards can take advantage of the existing street network and employ traffic calming to improve bicyclist mobility.
- Sidewalks, though prevalent, vary in condition. The sidewalk network should be examined closely to identify the scale of intervention needed to provide a serviceable and ADA-compliant network.

# Map A-2: Overview of Existing Camden Transportation Facilities



- Legend:**
- ⋯ Shared Lanes
  - On-Street Bike Lane
  - - - Off-Road Shared Use Path/Trail
  - State Highway
  - County Street
  - Municipal Street
  - Freight Rail
  - River LINE Light Rail
  - River LINE Station
  - PATCO Speedline
  - PATCO Station
  - Schools
  - Parks and Open Space
  - Bike Lanes Outside Camden

## Level of Traffic Stress

The Delaware Valley Regional Planning Commission published Existing Condition Bicycle Level of Traffic Stress data (in 2019) for use in the planning of bicycle routes and networks throughout the DVRPC region. According to DVRPC:

*Level of Traffic Stress (LTS) is a road classification technique based on the comfort of bicyclists in the traffic stream. One commonly used LTS framework ranges from LTS 1 to LTS 4, classifying road segments that would be comfortable for any bicyclist to segments that only the fearless would brave on a bicycle, respectively.*  
[\(https://www.dvrpc.org/webmaps/bike-lts/\)](https://www.dvrpc.org/webmaps/bike-lts/)

Map A-3 illustrates the DVRPC LTS methodology as it applies to the Camden street network.

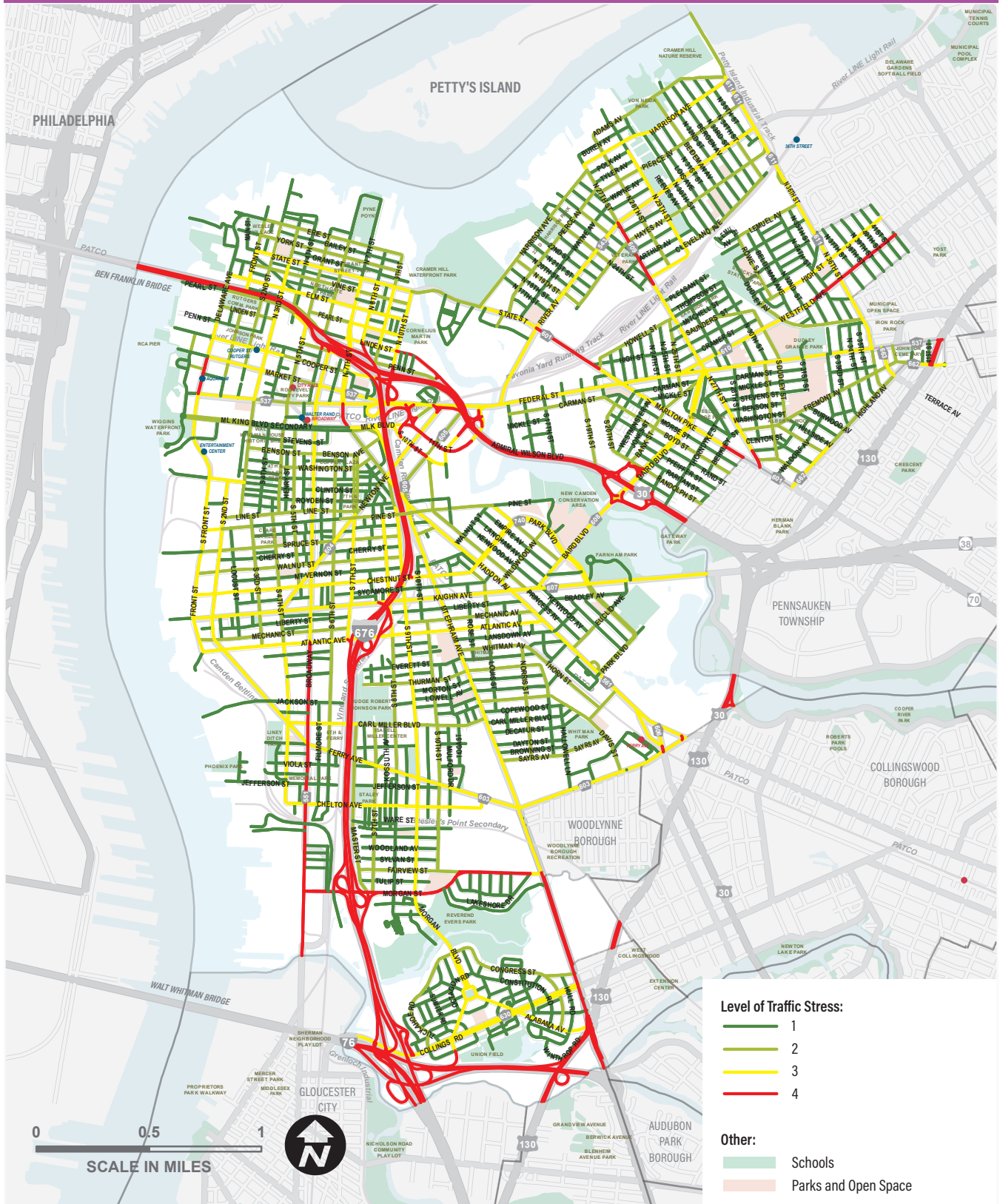
A street that is typical for LTS 1 would be a narrow, residential street, where traffic volumes and speeds are low, and the street is not usually used for through traffic going long distances. It is the kind of street where you might allow your kids to ride their bikes. LTS 2 streets may see a little more traffic, but are still relatively calm for most capable adults to ride on. The street may also include a bike lane to separate cyclists from vehicular traffic. LTS 3 streets tend to be more of the "collector" type of streets in the network, where there is more through traffic at more moderate speeds. LTS 4 streets are generally those with multiple lanes of traffic vehicular speeds above 35 mph, and without bicycle lanes. The table below summarizes the classification of roadways in the LTS map.

LTS	Comfortable Enough For (Cyclist Type)	Characteristics
1	Most people	<ul style="list-style-type: none"> <li>• Lowest stress</li> <li>• Comfortable for most ages and abilities</li> </ul>
2	Interested, but concerned	<ul style="list-style-type: none"> <li>• Suitable for most adults</li> <li>• Presenting little traffic stress</li> </ul>
3	Enthused and confident	<ul style="list-style-type: none"> <li>• Moderate traffic stress</li> <li>• Comfortable for those already biking in American cities</li> </ul>
4	Strong and fearless	<ul style="list-style-type: none"> <li>• High traffic stress</li> <li>• Multilane, fast moving traffic</li> </ul>

Source: DVRPC

While streets that are classified as LTS 1 (dark green) and LTS 2 (light green) are visually abundant, they tend to be isolated into "islands" surrounded by LTS 3 (yellow) and LTS 4 (streets). This indicates that the higher LTS streets may act as barriers to greater connectivity and mobility throughout Camden. One of the major goals of this plan is to ensure connectivity between these "islands" and identify improvements to select LTS 3 and LTS 4 roadways to make cohesive, intuitive, and safe bicycle connections between neighborhoods and across barriers such as highways, railroads, and waterbodies. Because there are few crossings at these kind of barriers, they tend to be higher stress streets due to increased traffic volume.

# Map A-3: Camden Bicycle Level of Traffic Stress



Data Source: Greater Philadelphia Existing Condition Level of Traffic Stress, DVRPC, updated May 27, 2021

## DVRPC Level of Traffic Stress Connectivity Screening

Building on Existing Condition Bicycle Level of Traffic Stress data, DVRPC developed a Bicycle LTS & Connectivity Analysis website, available as of November 2021 (<https://www.dvrpc.org/webmaps/bike-lts/>).

The LTS & Connectivity Analysis recognizes that LTS 1 and LTS 2 streets tend to be isolated in islands and that improvements to LTS 3 streets have the potential to expand connectivity among the isolated islands. DVRPC performed an algorithm to identify the shortest path between every census block in the region to other census blocks within five miles using LTS 1, 2, or 3 streets. This produced a tallied number of shortest paths for each street segment, which, when compared across the region, provides an indication of which street segments are used in the greatest number of shortest paths (in other words, which shortest paths offer the greatest potential connectivity benefit). The shortest path analysis was also weighted to include DVRPC's Indicators of Potential Disadvantage (IPD) mapping, resulting in equity-based mapping of priority segments with significant connectivity. Shortest paths on LTS 3 streets were then prioritized by county, identifying the top 10, 20, 30, 40, and 50th percentiles.

Map A-4 (by DVRPC, from <https://www.dvrpc.org/webmaps/bike-lts/>) indicates the results of this Low-Stress Network Connectivity analysis in Camden.



Credit: DVRPC



## Barriers to Active Transportation Connectivity

Barriers to active transportation prevent people from walking or biking to access destinations in their community and surrounding communities. The barriers that prevent active transportation mobility are present at a range of scales in the community landscape, and may include:

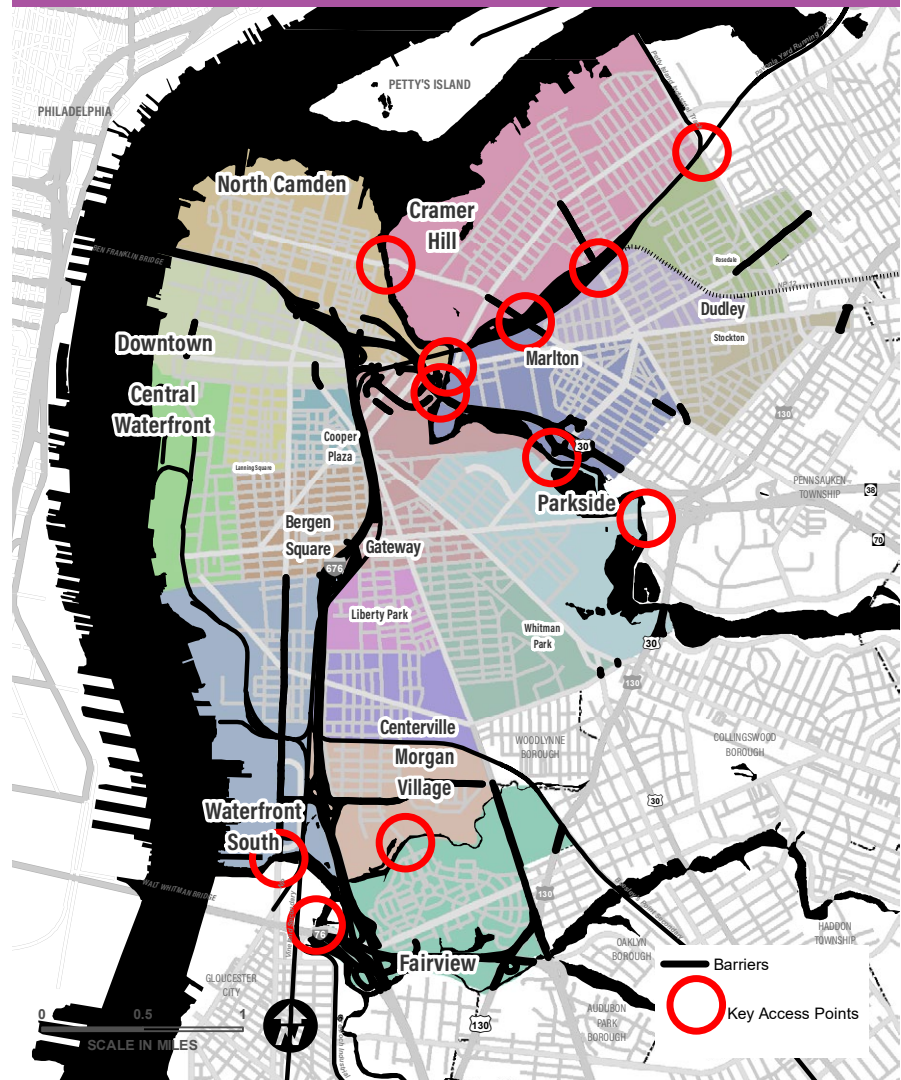
- Natural/geophysical features that are difficult to cross, such as landform and watercourses,
- Infrastructure that is unwelcoming to people on foot or on bikes, such as highways, high-stress streets, and rail corridors,
- Perceptions of danger or threat to personal safety, and
- Absence of supportive infrastructure, such as sidewalks, crosswalks, trails, and bike lanes.

Map A-5 illustrates how barriers within the Camden landscape correspond to the borders that have developed among Camden's neighborhoods. These barriers

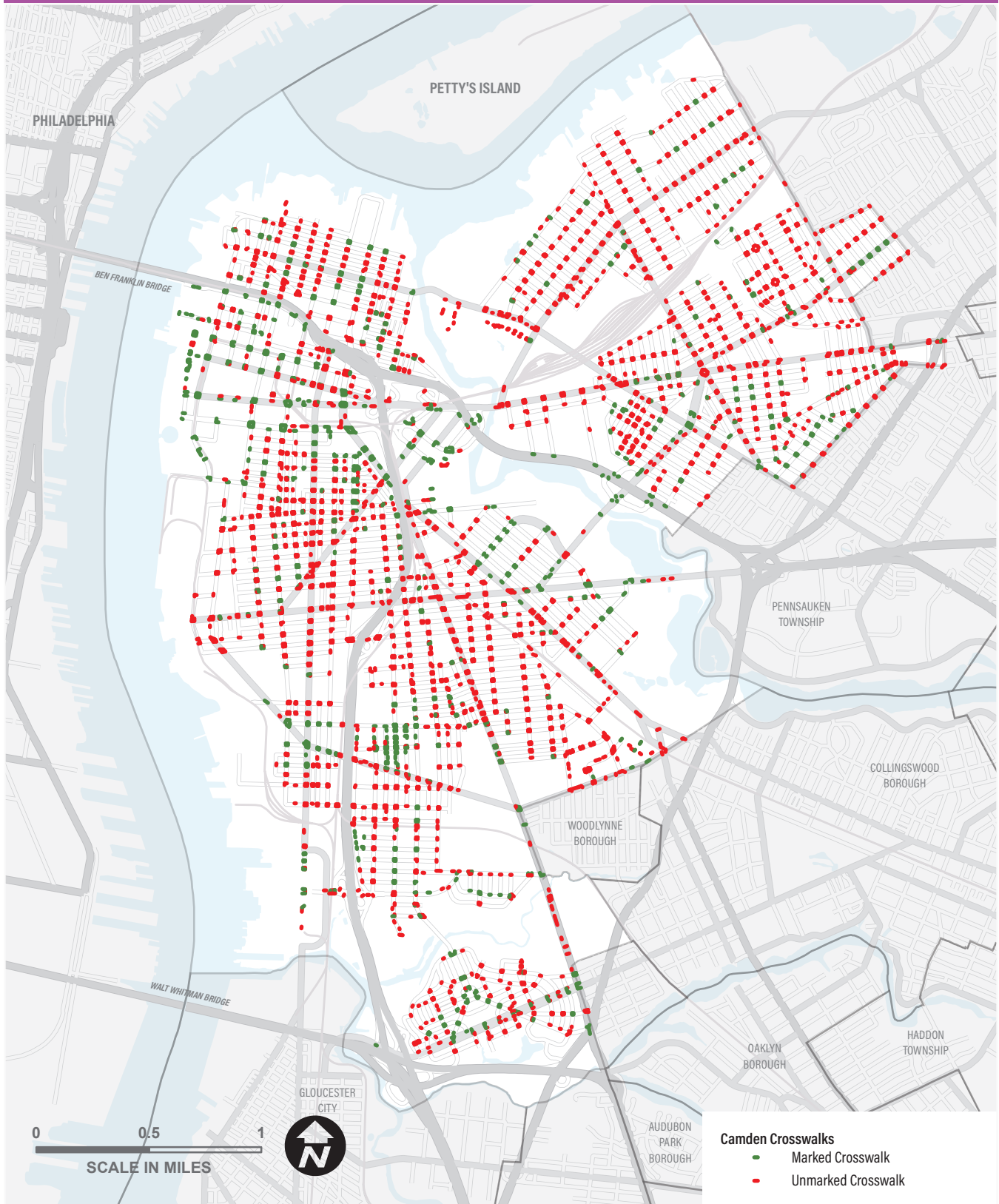
include the Cooper River, high-stress streets, and freight railroad, and result in a limited number of key access points that serve as important inter-neighborhood junctions for people on foot or on bikes.

The absence of supportive infrastructure prevents people from walking or biking safely or with a sense of confidence or convenience. For a pedestrian, supportive infrastructure includes sidewalks in good condition and ADA compliance, along with safe, effective crosswalks at intersections. As shown on Map A-6, the inventory of crosswalks within Camden indicates a lack of support for pedestrian mobility, as unmarked crosswalks greatly outnumber marked crosswalks throughout the city, by a rate of nearly 3 to 1. Furthermore, while there is a large network of over 273 miles of sidewalks in Camden, the condition of the sidewalk network varies. An assessment to quantify the incidence of good, acceptable, or poor conditions, and/or identify missing links in the network is beyond the scope of this *Vision Plan*. DVRPC's [Greater Philadelphia Pedestrian Portal](#) is a crowd-sourced data inventory and interactive map designed to aid in identifying and closing gaps in the network as a way to prioritize pedestrian mobility. The portal can be used in future efforts in Camden to identify and prioritize specific pedestrian network improvements.

Map A-5: Barriers to Active Transportation Connectivity



## Map A-6: Camden Crosswalks



Data Source: Greater Philadelphia Pedestrian Network - Crosswalks, DVRPC, updated April 27, 2021

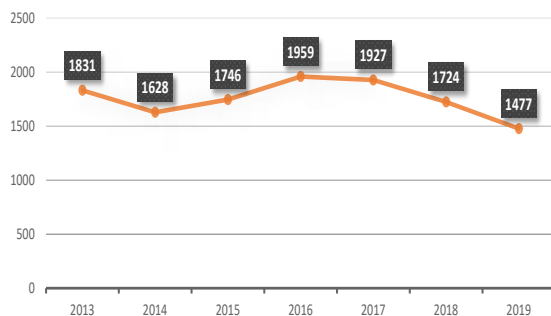
## Crash Assessment

Understanding trends and characteristics around vehicle crashes, with a focus on those that affected pedestrians and bicyclists, can help to identify locations for engineering improvements and enforcement efforts to support a safe active transportation network. Crash data for the City of Camden was obtained from the New Jersey Division of Highway Traffic Safety's Numetric crash tool for the seven year period 2013-2019. (Note that this data only represents the crashes that are reported and does not include data from hospital records or crashes unreported to authorities). From 2013-2019 in Camden there were:

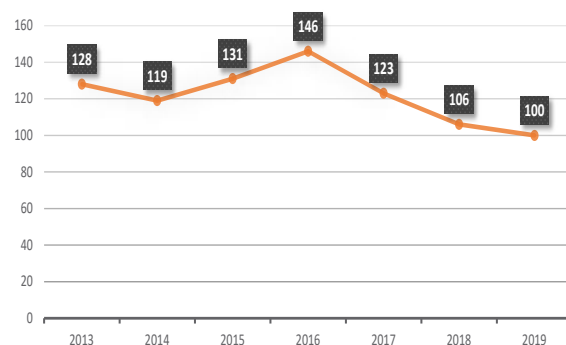
- 12,292 total crashes
  - 66 crashes resulting in fatality (0.5 percent)
  - 109 crashes resulting in serious injury (0.9 percent)
- 853 crashes involving a pedestrian (6.9 percent)
  - 28 resulting in fatality (0.2 percent of Camden crashes, 3 percent of Camden crashes involving a pedestrian)
  - 19 resulting in serious injury (0.1 percent of Camden crashes, 2.2 percent of Camden crashes involving a pedestrian)
- 244 crashes involving a bicyclist (2 percent)
  - 1 resulting in fatality (0.4 percent of Camden crashes involving a bicyclist)
  - 4 resulting in serious injury (1.6 percent of Camden crashes involving a bicyclist)

Overall, the number of crashes in the city has been trending downwards from 2013-2019. Note, however, that the data in this analysis predates the COVID-19 pandemic, during which there has been an [increase in fatal crashes](#) around the state (in 2021, there were 701 fatalities, an increase of 19 percent over 2020). The impact of this trend has not been measured to date in Camden because crash data through only 2019 was available.

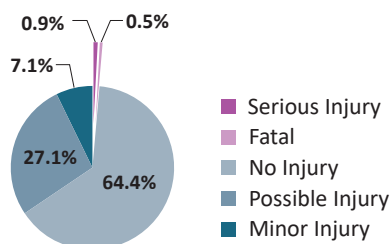
**Camden Crashes by Year (2013 - 2019)**



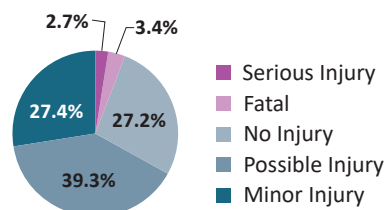
**Camden Bicyclist & Pedestrian Crashes by Year (2013 - 2019)**



**Camden Crashes by Severity (2013 - 2019)**



**Camden Bicyclist & Pedestrian Crashes by Severity (2013 - 2019)**



## Crashes in Camden

Camden residents are disproportionately affected by automobile crashes. With about 74,000 residents, Camden is the fourteenth most populous municipality in New Jersey and makes up about 0.8 percent of the state population. Yet with 66 crashes resulting in a fatality, Camden ranks second in the state. Camden is ranked sixth highest for fatal and severe injury (KSI) crashes, recording 1.4 percent of all such crashes in New Jersey.

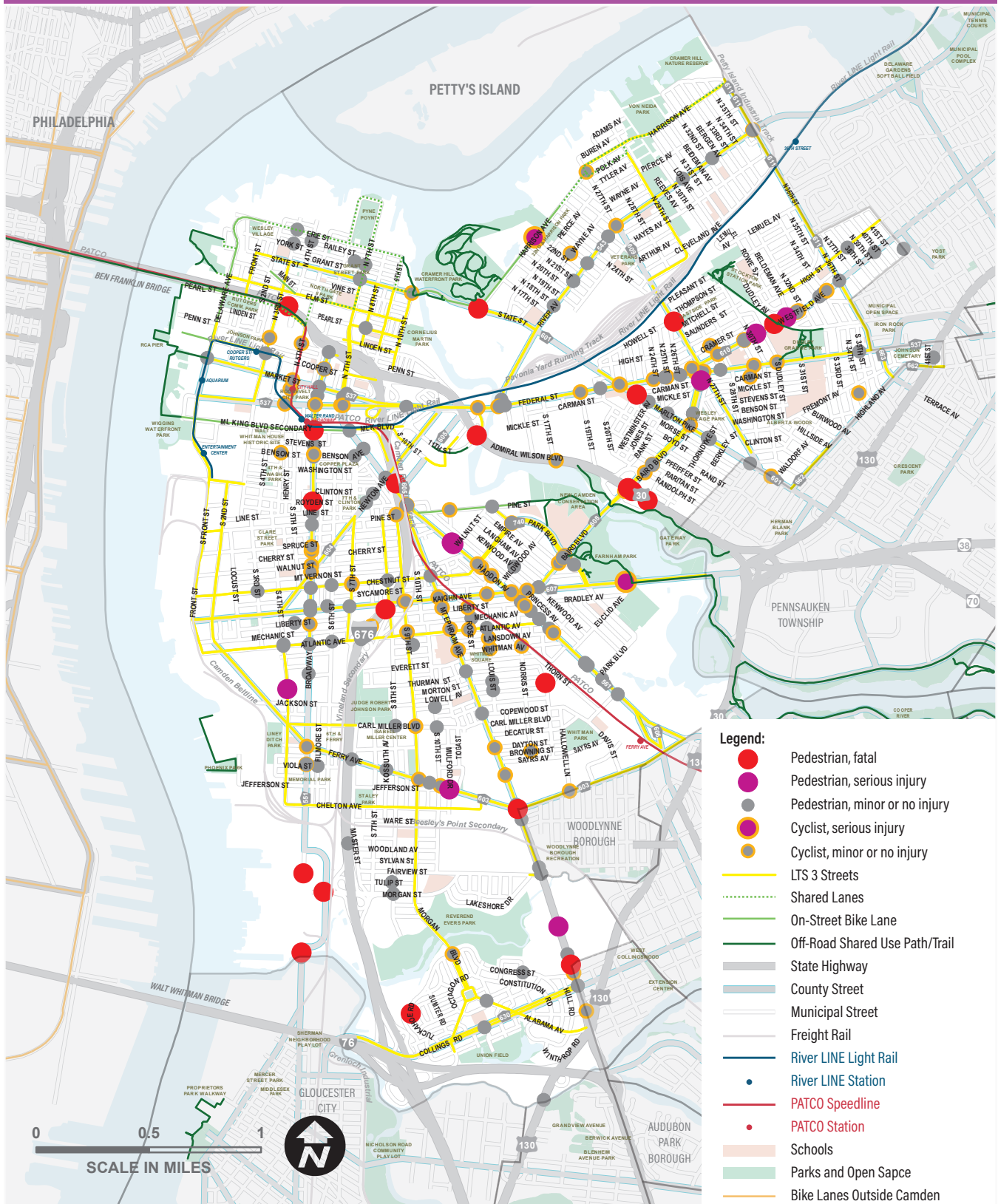
Furthermore, more than 70 percent of the bicycle and pedestrian crashes in Camden resulted in an injury, compared to 35 percent of crashes for motorists. For pedestrians and bicyclists in Camden, 4.7 percent of crashes resulted in fatal or severe injury, in comparison 1.4 percent of crashes for motorists. This underscores the fact that people who walk or bike are most vulnerable to fatal or severe injury in the event of a crash.

Trends in the crash data for Camden also include:

- **Lighting.** More than 30 percent of all crashes and more than 35 percent of bicycle and pedestrian crashes occurred in the dark. Of the 35 percent of bicycle and pedestrian crashes that occurred in the dark, almost 80 percent occurred in areas where street lights were on, potentially indicating that lighting levels may not be adequate.
- **Distracted Driving.** Nearly a third of all bicycle and pedestrian crashes occurred due to distracted driving.
- **Pedestrian Conspicuity.** More than 60 percent of the drivers involved in a bicycle or pedestrian crash were “going straight ahead” and 13 percent were “making a left-turn” prior to the crash. Taken in consideration with the lack of marked crosswalks throughout Camden, there may be an opportunity to improve on this trend by marking high-visibility crosswalks that will better designate the pedestrian space at intersections, provide traffic calming effects, and alert motorists to the potential presence of pedestrians.
- **Level of Traffic Stress 3.** Map A-7 provides geolocated pedestrian or bicycle crash locations overlaid to the LTS 3 (Level of Traffic Stress 3) network of streets, and shows a strong visual correlation between crash locations and the LTS 3 network. This may indicate network level needs for traffic calming and mitigations to improve pedestrian and bicyclist visibility and conditions. Note that the LTS 3 network in Camden is associated with many County roads.

As active transportation in the City of Camden advances, it will be vital to focus on interventions that provide both mobility and safety for people who walk or bike. While the intention of this plan is to develop a network-level community vision, future planning and design efforts will advance to a site-specific level of detail. The approach to future planning and design efforts should be rooted in Complete Streets principles, to ensure that where pedestrian and bicycle infrastructure investments are made, appropriate traffic calming and proven countermeasures are employed.

# Map A-7: Camden Crash Locations (2013 - 2019)



Data Source: New Jersey Division of Highway Traffic Safety Numeric Crash Tool, 2013-2019. Note: Of the 12,292 recorded crashes in Camden, only 5,280 are geocoded and displayed on this map.

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# Walk & Bike Camden!

## A Community Vision for Active Transportation

### Appendix B: Community Engagement Summary

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# INTRODUCTION

Community engagement is key to creating an inclusive and equitable active transportation plan and building community support for future implementation. The primary goal of the outreach effort is to ensure that the needs and desires of Camden residents are reflected and incorporated into the plan and to create a document that gives residents ownership of future improvements.

A mix of virtual and in-person strategies were used to reach Camden’s diverse population and neighborhoods. Due to COVID-19 considerations, social distancing requirements, and virtual meeting fatigue, it was understood that the engagement process needed to be both flexible and creative. It remained important to engage both people who do not have online access as well as to reach those hesitant to gather in crowds.

The project team held a virtual public workshop on August 23, 2022, attended three neighborhood meetings, facilitated five focus group discussions, and participated in four pop up events. There were also interviews with residents, civic leaders, business representatives, and other stakeholder groups. Activities took place in neighborhoods all across the city. See Table B-1 for a list of events and meetings.

Additionally, a project website (walkbikecamden.com), community survey (online and paper), and online interactive mapping tool (WikiMap) were used to collect focused input and feedback. The project website, flyer, survey, and materials were provided in both Spanish and English.

Table B-1. Outreach Meetings and Events

Activity	Description	Date	Approx. Number of People Engaged
Neighborhood Meeting	East Camden Advisory Committee Meeting	10/28/2021	18
Pop Up Event	Cramer Hill Waterfront Park Opening	11/6/2021	75
Neighborhood Meeting	Parkside Business & Community in Partnership Community Meeting	11/10/2022	15
Focus Group Discussion	Camden Parks and Open Space Steering Committee Meeting	11/16/2021	60
Neighborhood Meeting	Waterfront South / Heart of Camden Community Meeting	11/18/2021	10
Stakeholder Interview	Mayor Carstarphen Interview	12/8/2021	2
Focus Group Discussion	HopeWorks Trainees	12/10/2021	25
Pop Up Event	Camden Promise Neighborhood Food Distribution	12/15/2021	75
Focus Group Discussion	PowerCorps Camden Members	12/15/2021	6
Focus Group Discussion	Business and Institution Listening Session	12/16/2021	10
Focus Group Discussion	County and City of Camden Staff Representatives	2/15/2022	5
Pop Up Event	Bicycle Coalition Celebrate Trails Day at Cramer Hill Waterfront Park	4/23/2022	15
Stakeholder Interview	New Jersey Conservation Foundation	5/4/2022	2
Stakeholder Interview	Camden Lutheran Housing Inc.	5/5/2022	1
Pop Up Event	Camden Night Gardens at Cooper’s Poynt Waterfront Park	5/20/2022	55
Public Meeting	Virtual Public Information Center	8/23/2022	15
City Council Caucus	Presentation	9/6/2022	15

# WHAT WE HEARD

Based on the community engagement activities and tools used, a series of key themes emerged.

## People want to walk and bicycle more.

Eight out of ten survey respondents indicated that they would like to walk more than they do now and seven out of ten would like to bike more. Many people are interested in walking and bicycling for exercise and to access the city's parks.

## Maintenance is a barrier to walking and bicycling.

Potholes, cracked sidewalks, litter, faded paint and crosswalks, and inoperable traffic signals and streetlights deter people from walking and bicycling. Maintenance issues came up in every outreach discussion.

## Strong support for bike share.

Many residents, especially young adults, indicated that they would ride more but don't have access to a bicycle. Bikes, helmets, locks, and lights are expensive. Some residents expressed fears about having bicycles stolen and others are concerned about safely storing a bicycle. Over 75% of survey respondents indicated that they would support a bike share program. While many residents are aware of the failed Ofo bike share program in the city a few years ago, they felt that the program did not do a good job educating the community or building trust.

## Concern for traffic and personal safety deter people from walking and bicycling.

Speeding, aggressive drivers, ATVs, dirt bikes, and unleashed dogs were a few of the reasons people do not walk or bicycle more. There was general support for targeted police enforcement of some of these high-risk activities.



*A man bicycling against traffic on Broadway in Camden.*



*More than 100 people attended the "I Bike Camden" tour of art installations on June 12, 2021.*

# TOOLS AND ACTIVITIES

A mix of tools, materials, and activities were used to ensure an open and inclusive process and to provide various options for community input.

## Online Engagement

Multiple online tools were used to share and solicit information about **Walk & Bike Camden**. To engage with the widest audience possible, the city's existing social media channels (Facebook, Twitter, and Instagram) were used to build awareness of the plan and provide up-to-date information.

The project website ([www.walkbikecamden.com](http://www.walkbikecamden.com)) provided general information for the plan, including an overview of the plan purpose, project schedule, and contact information. The website included links to a community survey and an online interactive map.



Project Website



@CityofCamdenGovernment Instagram Post

## Community Survey

A community survey was conducted to gain insight into the perspectives of a cross section of residents and visitors regarding bicycling and walking in the City of Camden, both current conditions and future vision. The survey was accessible through a link on the project website through the fall of 2021. In addition, a paper survey was available at in-person events. It should be noted that the information collected via the survey is akin to what would be collected at an in-person public open house meeting and is not intended to be a statistically valid sample.

A total of 121 people completed the survey – a greater number than would likely have attended an open house meeting during the pandemic. The demographics of the survey respondents reflect the diversity of the city's population.

Table B-2. Demographics of City Population Compared to Survey Participants

Race & Hispanic Origin	City Population <sup>1</sup>	Survey Participants
White	24%	39%
Black or African American	41%	30%
Asian	2%	3%
Multiracial	5%	5%
Hispanic or Latino	51%	20%

Almost half of participants reported that they walk daily in Camden while less than 10% bicycle daily. The top barrier to walking and bicycling in Camden was poor sidewalk and road conditions. While half of individuals selected concern for personal safety as an obstacle to walking, only a quarter of people indicated concern for personal safety as an obstacle to bicycling.

Table B-3. Biggest Obstacles to Walking and Bicycling in Camden

What are the biggest obstacles you face when trying to walk in Camden?	What are the biggest obstacles you face when trying to bike in Camden?
1. Poor sidewalk conditions (litter, obstructions, uneven surface)	1. Poor road conditions (potholes, poor street lighting)
2. Concern for personal safety (fear of crime or harassment)	2. Lack of safe bikeways (bicycle routes, bicycle lanes, paths, and trails)
3. Unsafe street crossings	3. Aggressive motorist behavior (fear of being hit by a car)

Almost all participants indicated that they would like to walk and bike more than they do now. Growing the network of sidewalks, bikeways, paths, and trails was the top response to make it easier and more convenient to walk or bike in Camden. The Community Survey Results at the end of this document provides a detailed summary of the survey results.

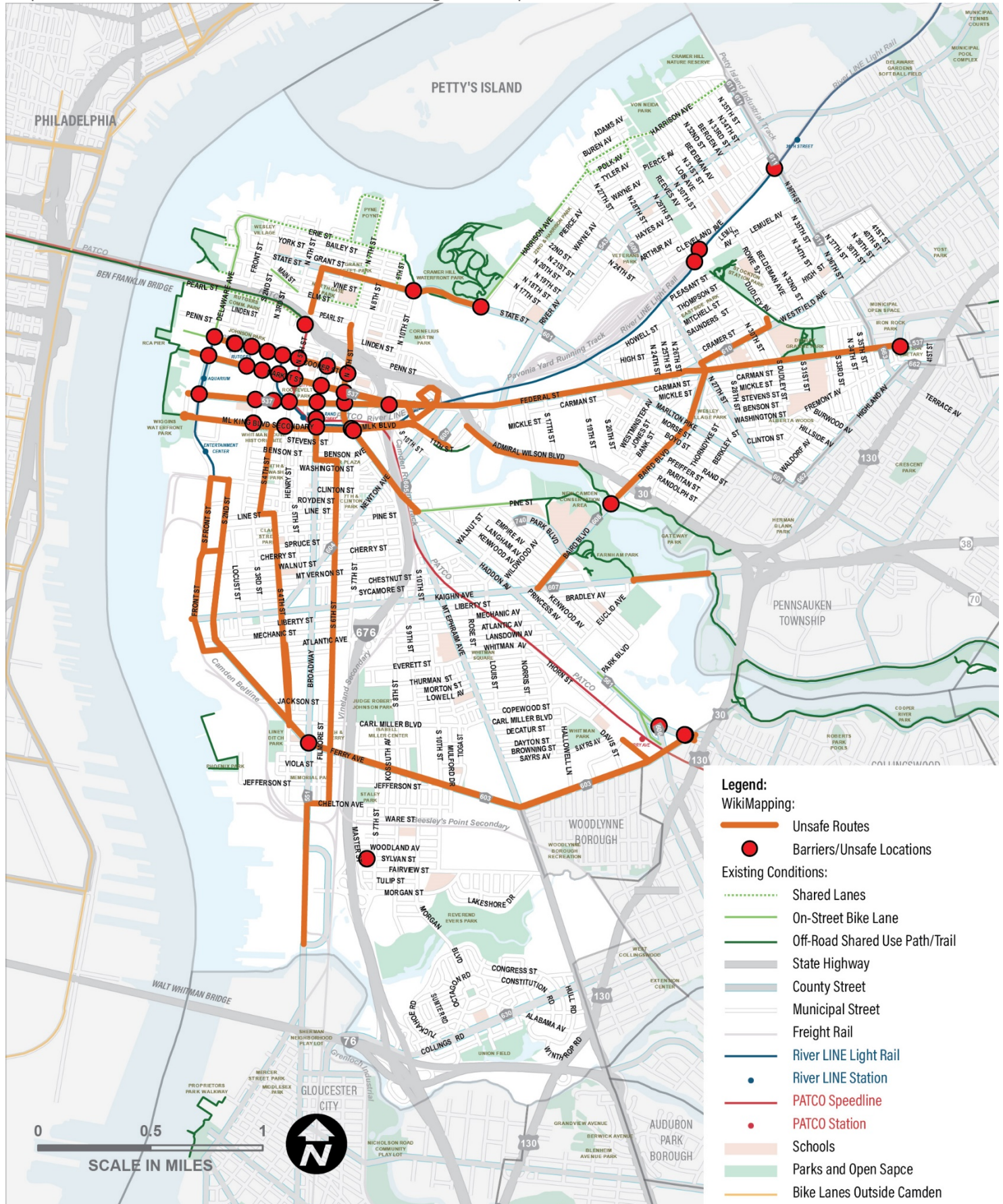
### Online Map

Information on walking and bicycling routes was collected via an online mapping tool (WikiMap). Residents could use this tool to identify key walking and bicycling destinations, pinpoint specific locations that are especially difficult to walk or bike, and mark currently unsafe routes and/or future desired routes.

The **Walk & Bike Camden** WikiMapping site was visited by 44 unique users and collected 110 comments identifying key destinations and network connections to consider, along with barriers, unsafe locations, and unsafe routes. This input, displayed on Maps B-1 and B-2, is being used to inform development of the **Walk & Bike Camden** Bicycle Network Concept Map.

<sup>1</sup> US Census Bureau Population Estimates, July 1 2021, (V2021)

Map B-1. Barriers and Unsafe Routes Identified through Wikimap



Map B-2. Key Destinations and Connections to Consider Identified through Wikimap



## Steering Advisory Committee

A Steering Advisory Committee (SAC) made up of community stakeholders was responsible for guiding plan development and overseeing the outreach process. Members represent Camden Community Partnership (CCP), Delaware Valley Regional Planning Commission (DVRPC), Cross County Connection TMA, Tri-State Transportation Campaign, Trust for Public Land, and the Bicycle Coalition of Greater Philadelphia. All six organizations have strong local knowledge and contacts with community and social service organizations, schools, businesses, and local neighborhood associations, as well as knowledge of planned and proposed trails and paths.

The SAC met two times during the planning process. The first meeting held on June 30, 2021 and was focused on forming the Community Engagement and Inclusion Plan. The second took place on May 3, 2022 and was used as a forum to review the conceptual network and draft plan.

## Neighborhood Events

The project team participated in three neighborhood meetings to garner input from across the city, and to build support from community organizations to help implement recommendations. All three meetings were virtual and two occurred during regularly scheduled meetings of the neighborhood associations.

Piggybacking on existing events provided an opportunity to reach people who may not typically attend a meeting focused on bicycling and walking.

At each event the project team presented an overview of existing conditions and then facilitated feedback on vision, barriers, and opportunities. As part of visioning, attendees were asked:

1. For their thoughts on a draft vision statement: - “Walking and biking from home to routine destinations in every neighborhood in Camden is safe, comfortable, and convenient, with easy access to transit and neighboring communities.”
2. To finish this sentence: “In the future, it will be easy to walk or bike to routine destinations from my neighborhood because \_\_\_\_\_.”

## East Camden Advisory Committee Meeting

On October 28, 2021, the project team attended the regularly scheduled East Camden Advisory Meeting hosted by the St. Joseph’s Carpenter Society. The meeting was conducted via Zoom and there were 18 participants in the discussion. Some of the barriers to walking and biking identified by the group included:

- Maintenance issues: poor sidewalk conditions, missing curb ramps, faded paint
- Motorist behavior: speeding, aggressive driving, not stopping for pedestrians in crosswalks, rolling through stop signs
- Infrequent enforcement of traffic laws
- Poor lighting
- Stray animals
- Intersections and streets that prioritize moving cars over people
- Balancing the needs of on-street parking in commercial areas with bicycle lanes

The Committee noted that it is important for the vision statement to include everyone and suggested adding “for all residents.” There was also a recommendation to include partners (community development corporations and anchor institutions) in the statement. Other thoughts included adding play/recreation and encouraging exploration of other neighborhoods.

## Parkside Business & Community in Partnership Community Meeting

The project team was invited to present **Walk & Bike Camden** at the November 10, 2021, virtual meeting of the Parkside Business & Community in Partnership (PBCIP) organization. Overall, the 15 participants in attendance felt that their neighborhood is already fairly walkable and safe. The existing trail network and park system in the neighborhood is an asset to the community, but it can be hard to get to. It was noted by the project team that the County is working on a trail connection to Cooper River Park and there is a new crossing at Baird Blvd. between the parks in design.

Some of the needs and issues discussed in the neighborhood included:

- Route 130 and Route 30 are barriers
- The roads connecting Farnham Park to Gateway Park can be isolated and dark
- A lot of pedestrians are elderly and need more time to cross streets than what is allotted by traffic signals

## Waterfront South / Heart of Camden Community Meeting

On November 18, 2021, the project team met virtually with ten community members from the Waterfront South neighborhood to discuss walking and bicycling needs and obstacles. Discussion focused on concerns for safety including speeding, lack of lighting, illegal dumping, and high volumes of truck traffic.

Specific locations identified as barriers included:

- The 5-point intersection of Pine Street, 7th Street, and Newton Avenue: the intersection is large and confusing, there is very little in the way of pavement markings, the brick is slippery when wet, and the area is dark
- Broadway: there are a lot of trucks, and no clear markings
- Haddon Avenue underpass of I-676 is long and dark

A designated bicycle route connecting the neighborhood to downtown and the Ben Franklin Bridge was identified as a priority. Many bicyclists use Ferry Avenue to 2<sup>nd</sup> Street. It is the fastest route and is wide but also serves as a truck route. Many of the north-south neighborhood streets don't feel safe because they are narrow and cars often speed.

The group felt that Camden could be a “dream city” for walking and bicycling due to its size and number of destinations. When asked to finish the sentence “In the future, it will be easy to walk or bike to routine destinations from my neighborhood because \_\_\_\_\_.” people responded:

- bike infrastructure exists/there are designated bike lanes
- lighting is clear and the path is designated for me
- the sidewalks are clear of weeds and are even
- there are less angry drivers
- the streets are traffic calmed: there are bump-outs, stop signs, and speed bumps near parks
- roads are designed for residents walking and bicycling and not as highways for people to get in and out of town quickly



## Focus Group Discussions

Small group discussions were an opportunity to collect input from a variety of stakeholders on walking and bicycling needs and priorities. Meetings were held with:

1. Camden Parks and Open Space Plan Steering Committee Meeting
2. HopeWorks Trainees
3. PowerCorps Camden Members
4. Representatives from businesses and institutions

### Camden Parks and Open Space Plan Steering Committee Meeting

This Steering Committee is coordinated by the Trust for Public Land and comprises Camden leaders, community-based organizations, and entities involved with park and trail development, maintenance, stewardship, and programming in the City of Camden. The Committee's task is to advance recommendations of the *2020 Camden Parks and Open Space Plan*.

The project team attended the November 16, 2021, quarterly meeting of the Steering Committee and presented an overview of **Walk & Bike Camden**. When asked to finish the sentence "In the future, it will be easy to walk or bike to routine destinations from my neighborhood because \_\_\_\_\_." people responded:

- there are bike racks at destinations
- of improved safety (bike lanes, sidewalk improvements, etc.)
- there is respect
- Camden has 100% off-road bike/ped paths
- paths are clear, clean, and well-lit
- there are resting places for those walking

### HopeWorks Trainees

On December 10, 2021, the project team met in-person with 25 trainees at HopeWorks' office in downtown Camden. After giving an overview of the plan, the discussion focused on vision. Some things members of the group would like to see in Camden are:

- More bike lanes to and through parks
- More bike lanes on main streets
- Improved access to bicycles for residents
- More awareness of bicyclists and pedestrians by drivers
- More security, speed, and red-light cameras
- More signs and information on the road
- More education
- Increased bike patrol
- More maintenance, especially of traffic signals - it is difficult for police to enforce the laws when they are manually changing traffic signals

The group felt that the vision statement needs to:

- Be more multi-modal
- Reflect the desire for people to have options when deciding how to travel
- Address security – security is more important than convenience



The Project Team led a discussion on active transportation at HopeWorks



After the discussion, HopeWorks' trainees took the survey

## PowerCorps Camden

The project team met with six PowerCorps members in person on December 15, 2021, at their office in the Morgan Village neighborhood. All of the PowerCorps members in attendance stated that they walk within Camden. None currently ride bicycles, but three indicated that they would like to if they had access to a bike.

When asked to finish the sentence “In the future, it will be easy to walk or bike to routine destinations from my neighborhood because \_\_\_\_\_.” responses included:

- I have a bike / it isn't stolen
- there is a bike share program
- there's more space to ride and walk
- I feel safer
- there is better lighting
- there are no missing sidewalks, trash, or flooding
- there are more trails
- there are more crosswalks and push buttons



PowerCorps members participating in a focus group discussion.

The group discussed the role of traffic enforcement and how it relates to race. The participants felt that more traffic enforcement wouldn't impact safety because people don't pay attention to police and people drive how they are going to “no matter what”.

## Business and Institutions

A focus group discussion with representatives from the city's major businesses and institutions was held. Major employers and community destinations have a stake in improving access to facilities and are uniquely positioned to encourage and facilitate active transportation modes. On December 16, 2021, a virtual meeting was held via Zoom. Attendees included representatives from: Camden County Municipal Utility Authority (CCMUA), Subaru, Campbell's, Latin American Economic Development Association (LAEDA), and Center for Environmental Transformation.

Highlights from the discussion included:

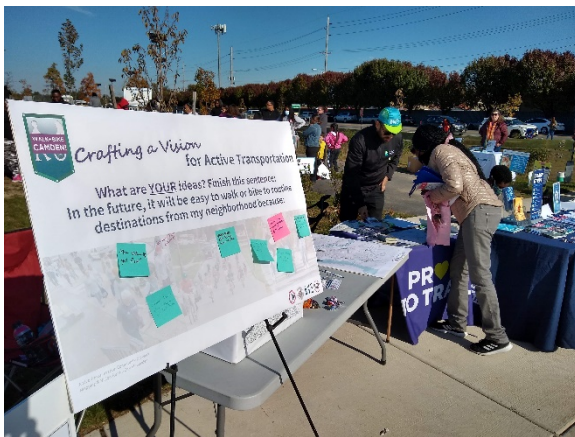
- Support for bike share. Both as a first/last mile solution for employees using transit, as a connection to the Walter Rand Transportation Center, and youth who don't have access to bicycles.
- A need for mapping and wayfinding. Many of the employees don't leave the campus but might if they knew where to go.
- A need to break down the perception of crime.
  - Some employers stated a desire for a program that encourages employees from companies to walk or bike to restaurants on commercial corridors.
  - Potential for businesses and employers to sponsor and organize group bike rides.
- A need for better maintenance. Many of the paths and sidewalks are obstructed by overgrown plants.
- The benefits of maintaining on-street parking along commercial corridors. Parking is critical for small businesses and creates friction that slows traffic. Taking away parking can result in increased speeds.

## Pop-Up Events

The project team attended two in-person pop-up events to meet with a broad cross-section of people who live and work in Camden.

### Cramer Hill Waterfront Park Community Open House

A table was set up at the November 6, 2021 grand opening event. Project team members handed out fliers and discussed the plan with about 75 members of the community. Visitors to the table were able to learn about the plan and provide input on maps and boards. Most visitors to the park were excited about the opening, and expressed a desire for more trails in the city like those in the park, and to be able to walk or bike directly to the park from home.



Visitors provided input on boards and maps.



Project team members were available to provide information about the plan.

## Hope Mobile Food Distribution

Hosted by Camden Promise Neighborhood, the food distribution took place on December 15, 2021 at the Kipp Lanning Square Middle School. The project team handed out surveys and spoke with 75 people about their issues and needs walking and bicycling in Camden. Key takeaways from the event included:

- Lots of people are already walking and bicycling because they do not have cars.
- People would like to bike more but there is nowhere to ride safely.
- Access to bikes is an issue. Bikes are very expensive right now (even used bikes).
- Motor bikes and ATVs are dangerous and should not be on trails with people walking and bicycling.
- Maintenance concerns: street lighting is poor, potholes are dangerous, sidewalks are cracked and there is trash.



*Project team member talking with residents.*

## Interviews

One-on-one and small group conversations helped the project team understand barriers and opportunities for walking and bicycling in Camden and gave stakeholders a chance to provide feedback on the draft network.

## Meeting with Mayor Vic Carstarphen

Mayor Carstarphen met with the project team on December 8, 2021, to discuss walking and bicycling in the city and how development of an active transportation network works with other priorities and initiatives in Camden, especially creating a healthier city. Mayor Carstarphen is supportive of bicycling and walking as ways for residents to get exercise, get outside, and meet neighbors. He also emphasized the importance of providing safe pedestrian access to everyday destinations such as grocery stores, especially for the third of the city's population who don't have access to cars. Mayor Carstarphen is aware of speeding and informed the project team that it is the second biggest issue he hears about from residents after repaving. He also noted that the city receives complaints about ATVs and motorbikes. He spoke of how communication and collaboration are key to successful implementation of an active transportation network.

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*“The City wants to be walk and bike-friendly – it is an old city and I think it has all the dynamics – access to water; history – it has it all.” – Mayor Carstarphen*

---

## Other Stakeholder Groups

The project team met with stakeholders to gain insight into related efforts and discuss outreach strategies. The project team spoke with individuals from the following entities and organization:

- Camden Lutheran Housing Inc.
- Center for Aquatic Sciences
- Morgan Village CDC
- Center for Family Services
- Rowan/Camden Community Partnership Last Mile Project Team
- New Jersey Conservation Foundation

Key findings from the stakeholder interviews include:

- Residents may be wary of new efforts while existing infrastructure needs maintenance and repair now.
- There have been a lot of planning and studies completed recently in Camden. There is survey and input fatigue. Residents want to see implementation.
- It is important to coordinate with community organizations. It takes time to build community trust and the community organizations can help.
- It is important to frame the conversation around issues that are important to residents. Health and safety frequently rank as a top issue for residents. The environment and climate change are often lower priority concerns.
- A bicycle shop in the city would be a good opportunity for business development and could potentially take a lead role in enhancing access to bike classes and training.
- Prioritizing active transportation infrastructure in Camden is a way to make us for some of the transportation related environmental justice issues.
- Implementation should be overseen by a Bicycle and Pedestrian Task Force or Advisory Committee that coordinates with the city on bicycle and pedestrian needs, issues, and opportunities.
- Camden is fortunate to have great regional trail connections. The path on the Ben Franklin Bridge is a great asset.

## Virtual Public Information Center

A virtual public meeting was held on August 23, 2022, via Zoom. The project team presented the draft vision plan and gave an overview of the study vision and goals, key findings from community outreach, the preliminary bicycle network concept map, and recommendations. A Q&A session followed the presentation. A recording of the meeting was posted on the project website ([www.walkbikecamden.com](http://www.walkbikecamden.com)).

## City Council Caucus

The project team presented to the City Council on September 6, 2022 during the regularly scheduled caucus meeting.

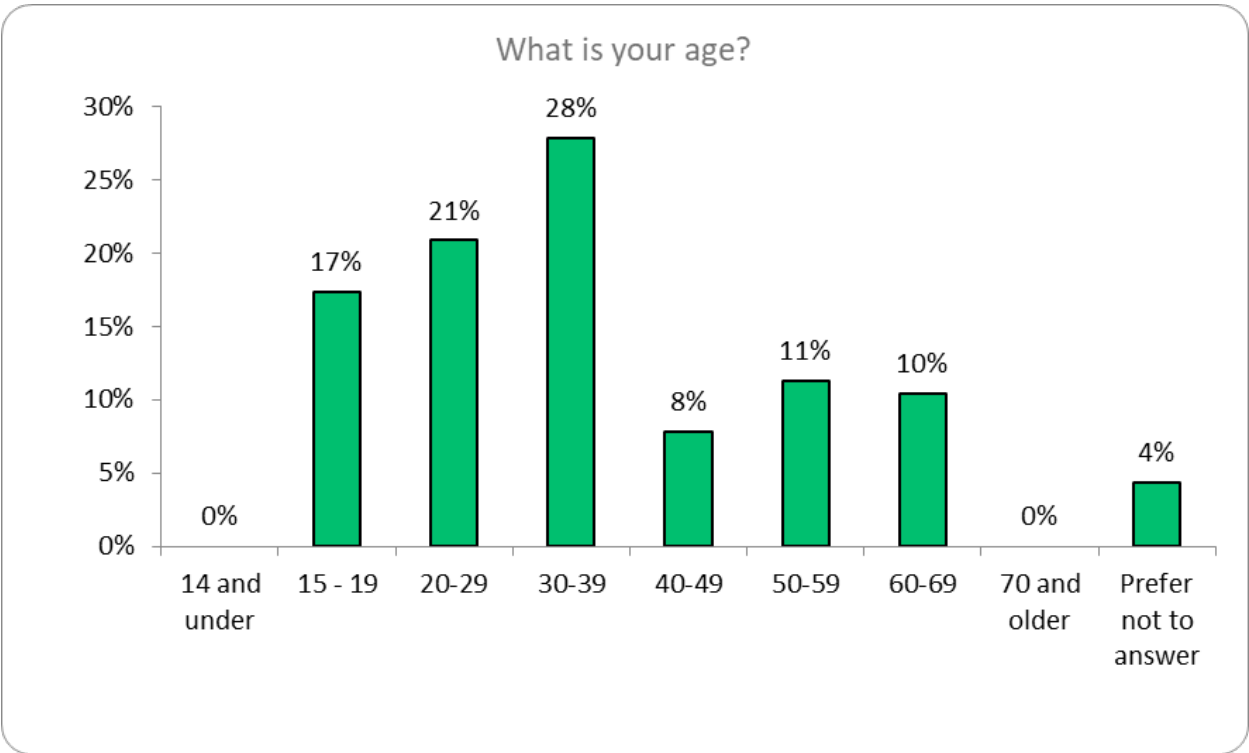
# COMMUNITY SURVEY RESULTS

The **Walk & Bike Camden** survey was available to residents during the fall of 2021. The focus of the survey was to get input on vision for an improved walking and bicycling network in Camden. A total of 121 people took the survey. They provided over 1,850 responses and 250 comments. The survey was available online and in paper in both English and Spanish. The majority of responses were collected online (90%) and almost all were submitted in English (97%).

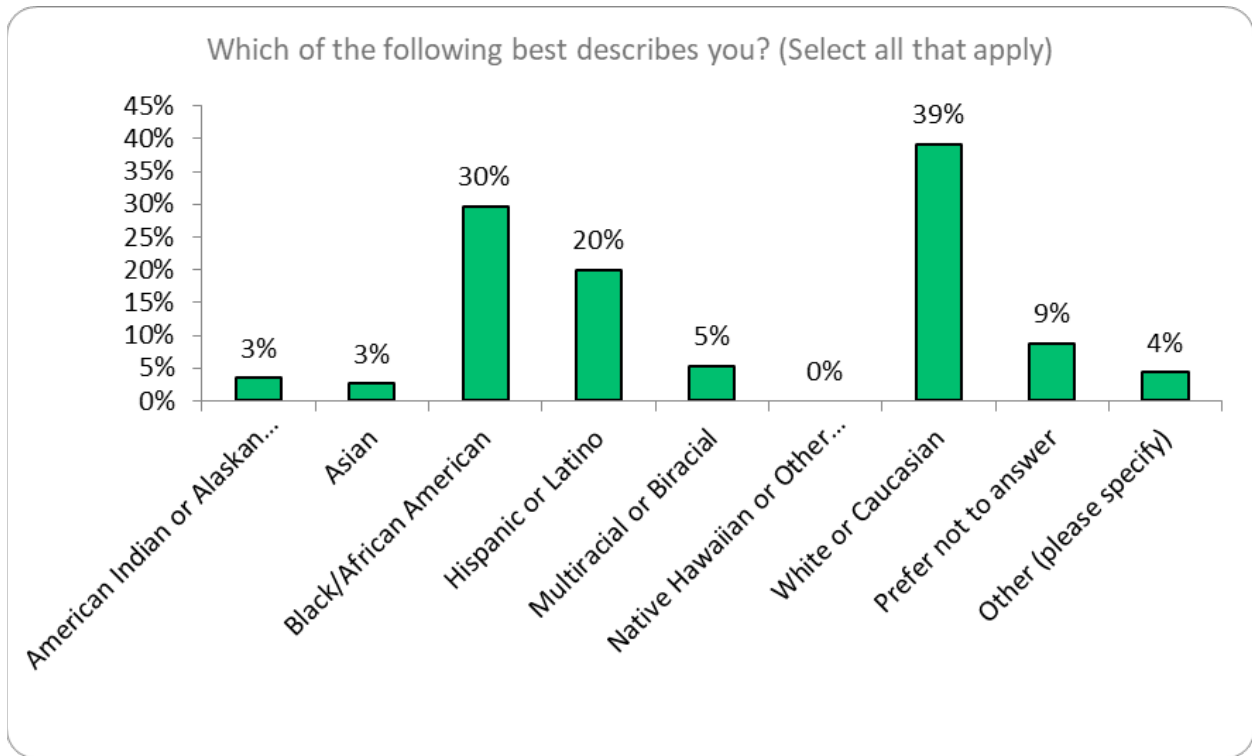
Key findings indicate that people would like to walk and bike more than they do currently and the biggest obstacle to both walking and bicycling are poor sidewalk and road conditions. People would like to see a larger network of sidewalks, bikeways, paths, and trails and better maintenance of sidewalks, roads, bikeways, paths, and trails. There is also strong support for a bike share program in the city.

## Survey Participant Demographics

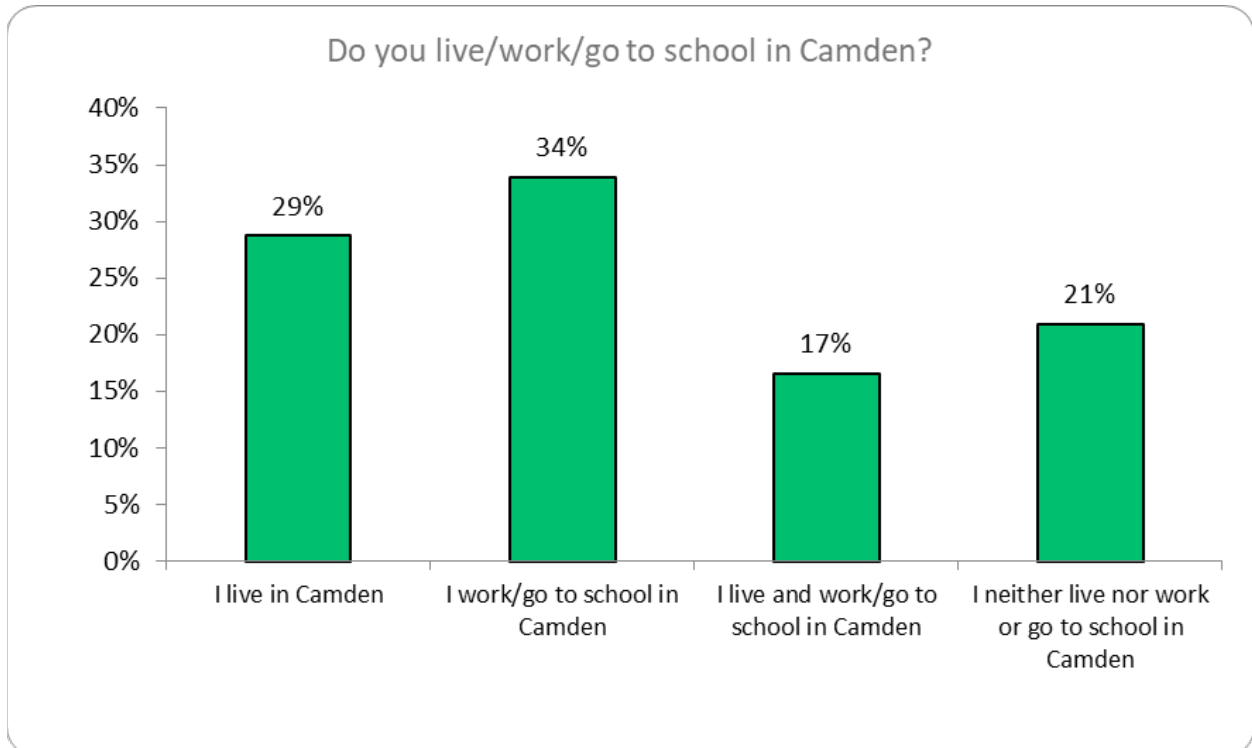
One-half (51%) of survey participants identified themselves as male, 42% identified as female, three percent identified as trans or non-binary, and seven percent chose not to answer. Survey responses were gathered from participants of varying ages, with the top three age cohorts between ages 30 to 39 (28%), 20 to 29 (21%), and 15 to 19 (17%).



In addition, just over one-third (39%) of respondents identified themselves as white or caucasian, followed by Black or African American (30%), multiracial or biracial (5%), American Indian or Alaskan Native (3%), and Asian (3%). Twenty percent identified as Hispanic or Latino.

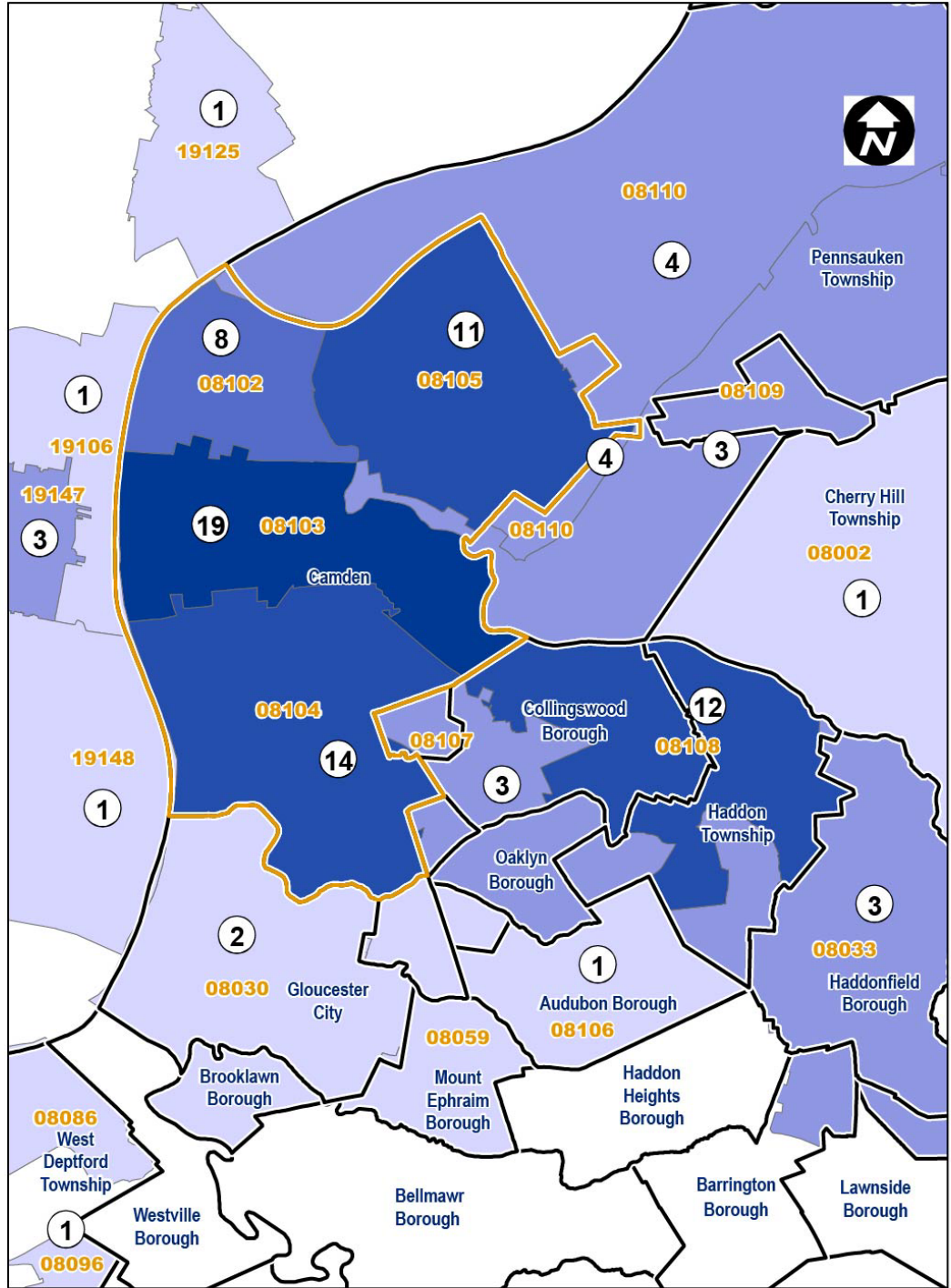


29% of survey participants live in Camden and 34% work or go to school in Camden. 17% of participants reported that they both live and work/go to school in Camden.



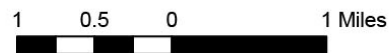
Respondents were asked to provide their zip codes. Map B-3 displays the number of responses by zip code centered around the City of Camden.

Map B-3: Survey Responses by Zip Code



**Legend**

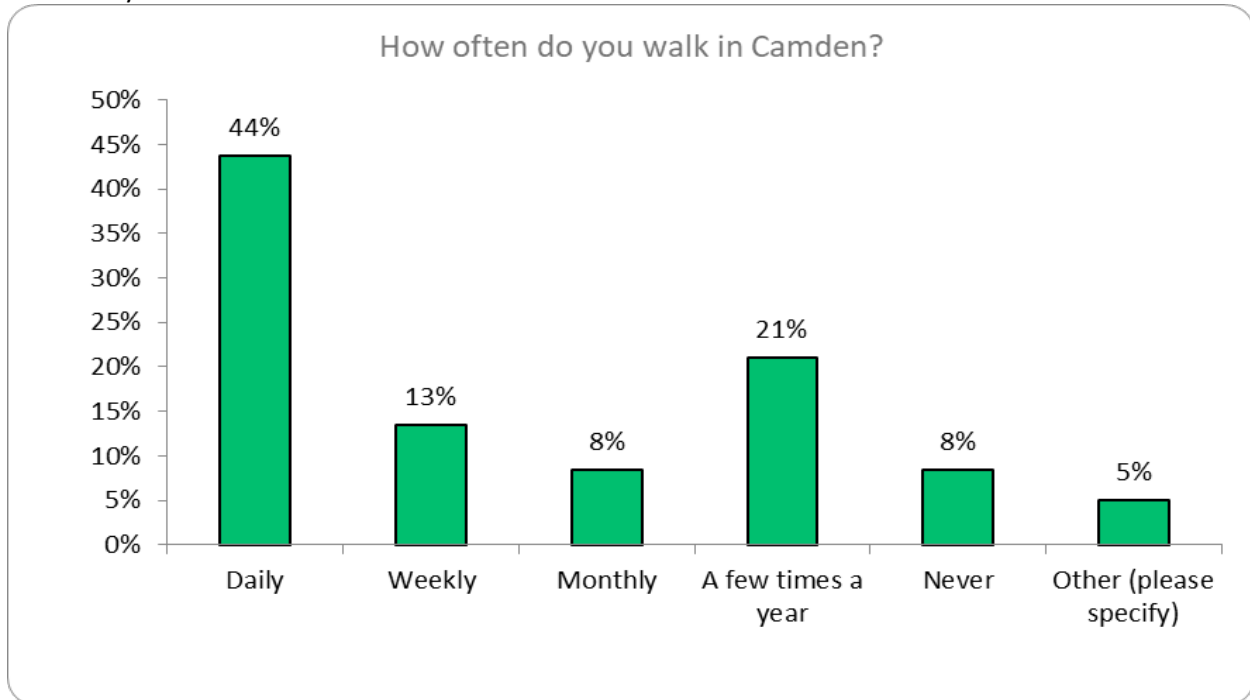
- City of Camden
- # # of Survey Responses





## Walking in Camden

Almost one-half of participants (44%) reported that they walk daily in Camden, followed by those who walk a few times a year (21%), weekly (13%), monthly (8%), and never (8%). Only 3% reported using a wheelchair or mobility device.



The majority (81%) of participants indicated that they would like to walk more than they do now—54% strongly agreed that they would like to walk more and 27% somewhat agreed.

The top five factors that participants indicated were barriers to walking in Camden were: poor sidewalk conditions (53%), concern for personal safety (51%), unsafe street crossings (45%), aggressive motorist behavior (44%), and lack of sidewalks, paths, or trails (38%). High-speed, high-volume roads, time or distance to destinations, and fear of being stopped by police were less of a concern.

Table B-4: What are the biggest obstacles you face when trying to walk in Camden?

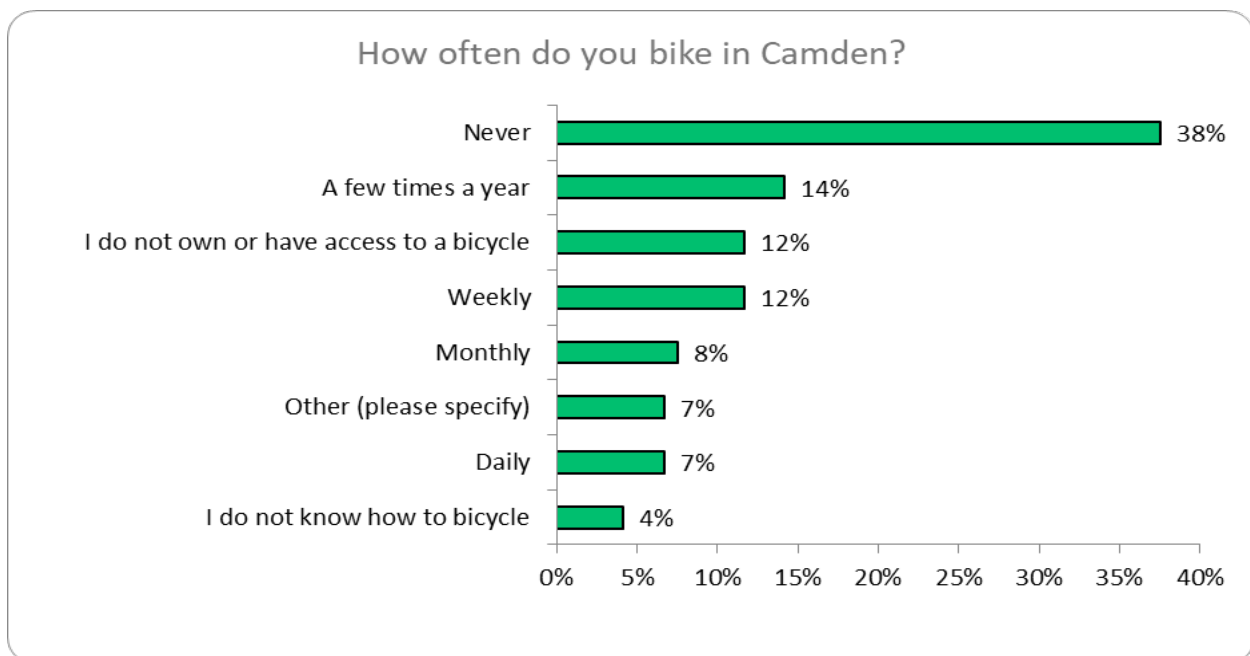
Poor sidewalk conditions (litter, obstructions, uneven surface)	53%
Concern for personal safety (fear of crime or harassment)	51%
Unsafe street crossings	45%
Aggressive motorist behavior (speeding, not stopping)	44%
Lack of sidewalks, paths, or trails	38%
High-speed, high-volume roads	31%
Time or distance to destinations	17%
Other	8%
Fear of being stopped by police	8%

For individuals who selected “other” some of the obstacles to walking include:

- “Mugged, bike stolen, robbed -Speaking from experience.”
- “Cat calling”
- “Poor signage”
- “overall poor conditions of neighborhoods”
- “Little to no street lights”
- “Very nervous about the groups on ATVs and dirt bikes, which has been a problem for years, although it seems to be getting worse because there are more of them in groups now and they seem to be immune to any laws.”

## Bicycling in Camden

Participants overall reported low levels of bicycling in Camden – over one-third (38%) of participants reported that they never bicycle in Camden, followed by those who bicycle a few times a year (14%), weekly (12%), monthly (8%), and daily (7%). 12% reported that they do not own or have access to a bicycle, and four percent do not know how to bicycle.



Participants who have children under the age of 18 in their household, over one-half (55%) reported that the children in their household never bicycle, followed by those whose children bicycle weekly (16%), a few times a year (16%), daily (seven percent), and monthly (seven percent).

The top five factors that participants indicated were barriers to bicycling in Camden were: poor road conditions (57%), lack of safe bikeways (57%), aggressive motorist behavior or fear of being hit by a car (49%), lack of amenities, including bicycle parking and wayfinding signs (26%), and concern for personal safety (25%). In addition, over a quarter of individuals do not bike because they either do not have access to a bike (23%) or do not know how to ride a bicycle (5%).

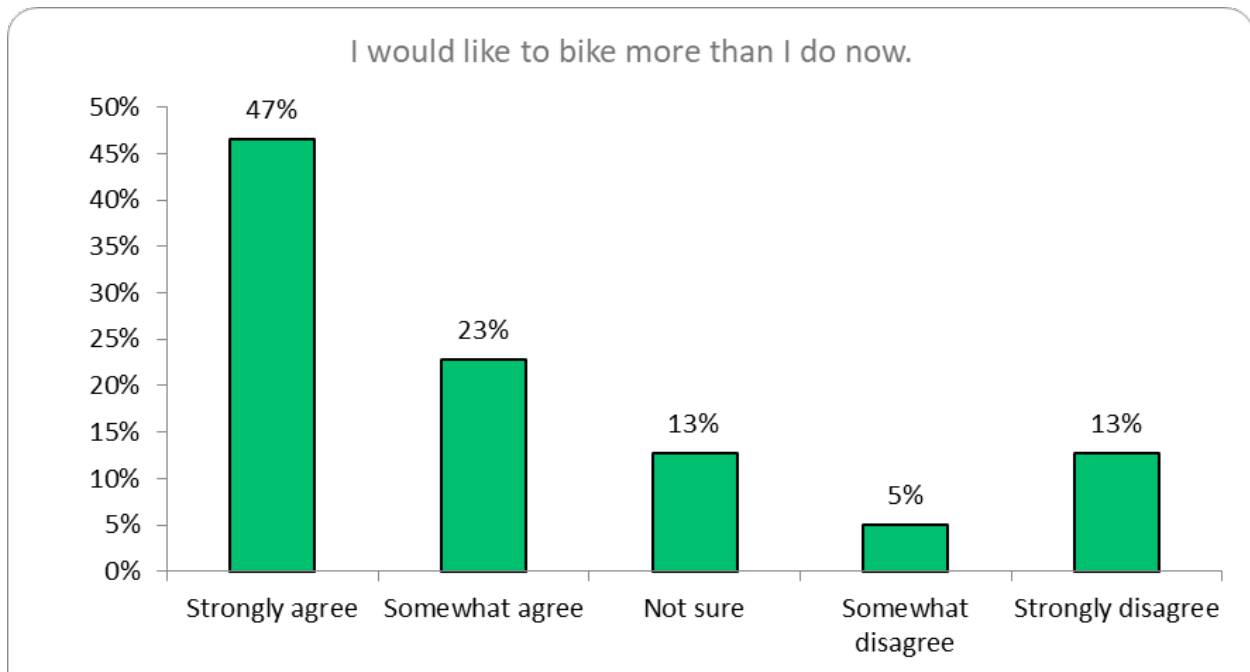
Table B-5: What are the biggest obstacles you face when trying to bike in Camden?

Poor road conditions (potholes, poor street lighting)	57%
Lack of safe bikeways (bicycle routes, bicycle lanes, paths, and trails)	57%
Aggressive motorist behavior (fear of being hit by a car)	49%
Lack of amenities (bicycle parking, wayfinding signs)	26%
Concern for personal safety (fear of crime or harassment)	25%
I do not own or have access to a bike	23%
Need to transport other people or carry too many things	8%
Other (please specify)	6%
Fear of being stopped by police	5%
I do not know how to ride a bicycle or am physically unable to ride a bicycle	5%

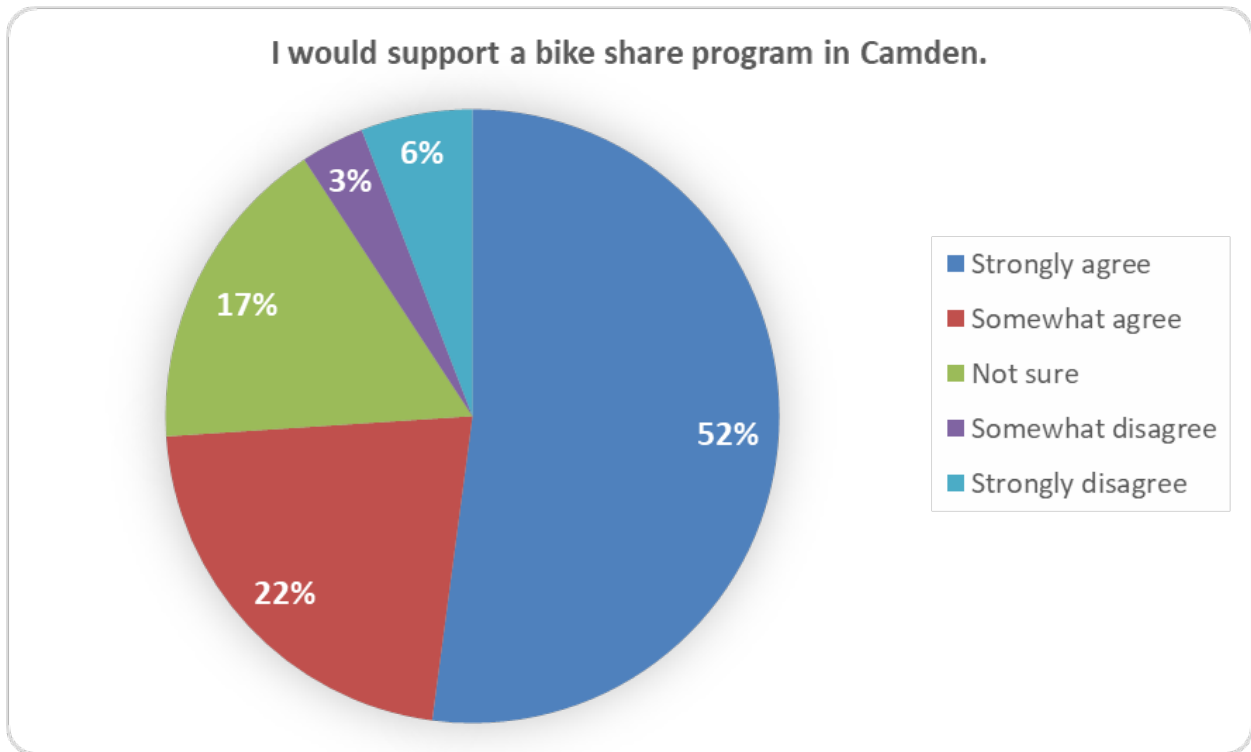
For individuals who selected “other” some of the obstacles include:

- “Wide arterial roads with high volumes of fast moving traffic are a major obstacle”
- “Sit at any intersection- Look for cars with totally blacked out windows, drive through red lights like they are not even there.”
- “I have a broken e-bike I would love to ride but it is out of commission atm. I have never ridden a bike in Camden before but I can ride”
- “Roads are bumpy and mess up my tires”
- “I will not bike in Camden for fear of my bike being stolen.”

Almost three-quarters (70%) of participants indicated that they would like to bike more than they do now— 47% strongly agreed that they would like to bike more and 23% somewhat agreed.



Nearly three-quarters (74%) of participants indicated that they would support a bike share program in Camden. Less than 10% of individuals would not support a bike share program.



### Perception of Bicyclists in Camden

Participants were prompted to complete the sentence, “people who ride bicycles to get around Camden are...” The most common responses can be categorized as positive, negative, or neutral.

Table B-6. Responses to “People who ride bicycles in Camden are ...”

Positive	Negative	Neutral
<ul style="list-style-type: none"> <li>● Brave</li> <li>● Adventurous</li> <li>● Healthy</li> <li>● Exercising</li> <li>● Smart</li> <li>● Doing good</li> <li>● Important</li> <li>● Strong</li> <li>● Cool</li> </ul>	<ul style="list-style-type: none"> <li>● Crazy</li> <li>● Clueless to safety</li> <li>● Not knowledgeable about rules</li> <li>● Poor/ don’t have a car</li> <li>● Running drugs</li> <li>● Young white liberals that live downtown</li> </ul>	<ul style="list-style-type: none"> <li>● Doing it out of necessity</li> <li>● Just trying to get somewhere</li> <li>● Rare</li> <li>● Taking a risk</li> <li>● Disrespected</li> <li>● Disenfranchised</li> <li>● Not considered in planning</li> </ul>

## Improvements to Walking & Bicycling in Camden

Survey participants indicated that the following improvements would make it easier and more convenient for them to walk or bike more in Camden: a larger network of sidewalks, bikeways, paths, and trails (65%), better maintenance of sidewalks, roads, bikeways, paths, and trails (48%), improved lighting along sidewalks, bikeways, paths, and trails (46%), greater distance/separation between people walking/bicycling and cars (44%), and safer crossings at intersections (36%).

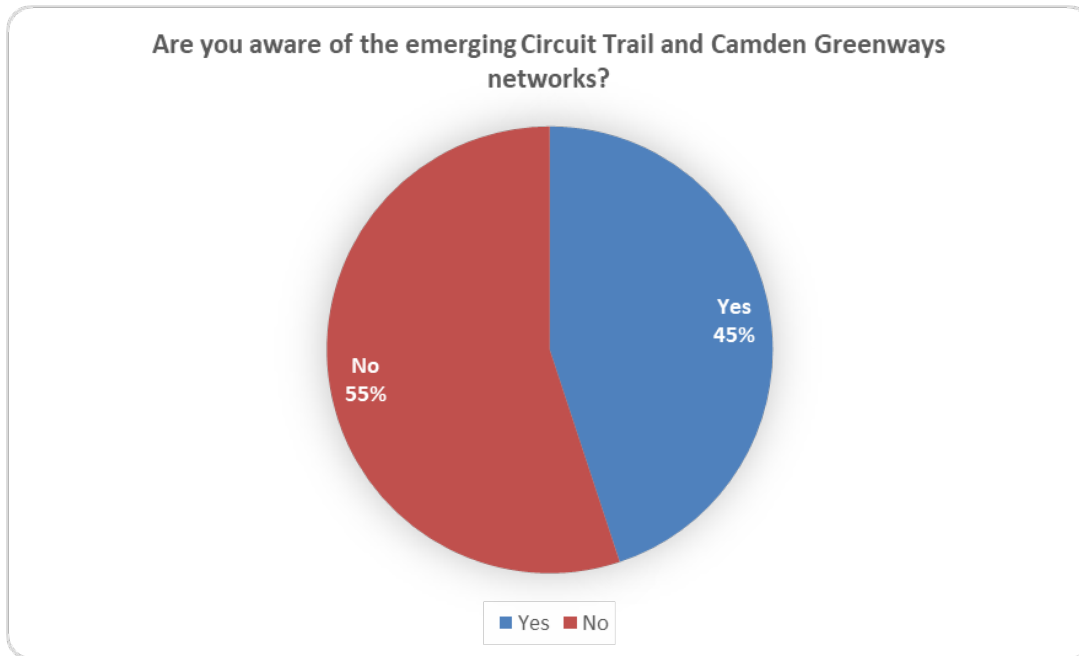
Table B-7: What would make it easier and more convenient for you to walk or bike more often in Camden? (select the top 3)

Growing the network of sidewalks, bikeways, paths, and trails	65%
Better maintenance of sidewalks, roads, bikeways, paths, and trails	48%
Improved lighting along sidewalks, bikeways, paths, and trails	46%
Providing more distance/separation between people walking/bicycling and cars	44%
Safer crossings at intersections	36%
Slowing down vehicle traffic	33%
More benches, trees, and shade along sidewalks, paths, and trails	32%
Providing maps and signs to destinations	24%
Other (please specify)	13%

Other responses specified included:

- “Public restrooms and other amenities along routes”
- “More police”
- “Protected bike lanes and (especially) intersections”
- “Make the maps in Camden similar to Philly's grid system so people will be able to navigate really well.”
- “Always more green space!”
- “Paving the streets”
- “A city bikeshare program that actually works and has docking stations”
- “Acknowledgement and reduction of just how car-biased our roadways and mentalities are. This can be manifested through more equitable roadway design when projects come up.”
- “Less crime”

A slight majority of respondents (55%) are unaware of the emerging Circuit Trail and Camden Greenway networks.



When asked what one thing they would like to see to improve walking and bicycling in Camden, the most common responses included a desire for more dedicated bicycle lanes/trails and pedestrian paths. Following this, respondents expressed that safety was a priority, along with improved road and sidewalk conditions and greater connectivity between bicycle/pedestrian paths, particularly extending outside of the downtown area.

Some of the comments are highlighted below:

- "People would respect each other concerning safety issues."
- "Bike racks and chains. It makes a way for people to safely secure their bikes."
- "Better street lighting"
- "Fund acquisition of land/right-of-way to completed Camden Greenway"
- "Remove urban highways, and arterial roads, and excessive parking lots, and replace them with mixed-use development and affordable housing along boulevards that are more walkable and encourage biking, walking, and transit use."
- "Expanded trail routes and inter connectivity with surrounding towns"
- "Give Everyone A Bike So Feins Won't Steal Them"
- "Protected bike lanes as standard infrastructure on all city streets"
- "The attention of drivers / Make people aware."
- "I would make the cars come at slower speeds and add safer areas for walkers"
- "Fix that roads and sidewalks and to fix all the traffic lights"
- "getting vehicles off of the sidewalks"
- "Build more housing to build up the population."
- "Connect to transit"
- "Make the environment look more pleasing... trash free, more trees and flowers, abandoned lots turned into pleasant parks"

- “more amenities and things to actually walk TO!”
- “Safe connections to the Ben Franklin Bridge.”
- “Remove the large/high speed streets from downtown and other areas of the city.”
- “More free space, parks and benches. Remove business that negatively impact our public health. Camden ranks as one of the worst cities for air quality/pollution.”
- “No magic is needed. Just the will for policymakers & developers to invest in improving the existing infrastructure in the neighborhoods beyond downtown.”
- “Getting decision makers to understand that what is safe for walkers/cyclists is also safe for drivers.”
- “Change the pervasive car culture that dominates the city, especially downtown. Redesign streets to be less biased towards vehicle travel and be more amenable to ped/bike/scooter/etc.”

## Open-ended Survey Comments

45 participants left open-ended comments at the end of the survey. The following summarizes the most frequently noted types of comments:

- 11 respondents noted concerns about safety. These comments touched both on general safety/crime in Camden and the safety of bicyclists and pedestrians specifically. Many respondents noted that feeling unsafe along roads and bike paths limited their comfort and ability to walk or ride a bicycle around Camden.
- Many respondents expressed gratitude or support for the project and efforts as a whole to improve bicycling and walking in Camden.
- Many participants reiterated the need for more accessible, connected, and well-maintained bicycle lanes and bicycle/pedestrian paths. Multiple participants also noted the need for road and sidewalk repairs/maintenance, and others asked that city planning include more attentive and extensive road and bicycle infrastructure design.

Some of the comments are highlighted below:

- “I grew up in Camden moved out and came back...I love the idea of this but...REALITY says different. It sucks that crime is a way of life here and if it's a perception issue, not based on facts, no one I know is getting the message.”
- “I believe that trying to give the community another chance at providing bicycles for the people would be great. Like the Ofo bikes and like over Philly just providing better care for the bikes and better tracking of the bikes so that they won't be damaged or stolen.”
- “I feel bikers have to ride in the street especially when there are a good amount of people walking on the sidewalks”
- “Cameras at street lights.”
- “used to walk dogs through almost every neighborhood in Camden but due to trash, drug use and traffic issues it's not enjoyable”
- “Please make sure to still have lots of green around any bike paths. I appreciate all the pocket gardens in Camden downtown.”
- “Accelerate the pace of project completion and create and fund a maintenance program to complete the network.”

- “If we can find a plan that doesn’t remove parking as it can already be a hassle in many areas, that would be great.”
- “More walking and biking will take cars off the road and allow those who do not have cars save money and environmental.”
- “Please find a way to get folks to put their Dogs on a leash so I can walk more”
- “One thing that absolutely must be addressed is the lawlessness of the groups on dirt bikes and ATVs. There is no point making any other improvements unless that problem can be solved first. If people can't feel safe, what's the point?”
- “I walk/bike daily so the question is not one of quantity, but rather I would like to feel less stressed when I engage in these activities.”
- “Access to Camden from the North and South (via State St or Haddon Ave) is good, but more direct connections are lacking. Improving Federal Street or the planned bridge adjacent to Admiral Wilson Blvd would help greatly.”
- “The more access people have to safe biking, the less vehicle emissions and better air quality for residents of Camden.”
- “Many of us have been chipping away at this uphill battle. The issue is advocating for better road designs when they come up: Cooper St, Market & Federal, etc. It is hard to get our voices heard.”
- “I save my trips for when it’s freezing cold in the winter and the crime is lower. I would never bike around Camden, no matter what season because of the lack of bikes and associated parts have made the number of bike thefts rise considerably.”



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