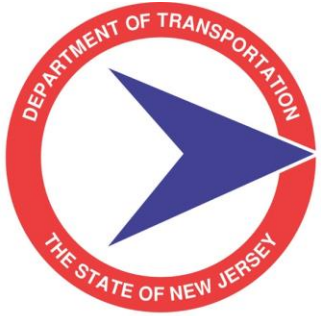


# NJDOT Bicycle and Pedestrian Planning Assistance Program



**NJBPAC May 22, 2024**





Elise Bremer-Nei, AICP/PP  
Bicycle and Pedestrian Coordinator  
New Jersey Department of Transportation  
[elise.bremer-nei@dot.nj.gov](mailto:elise.bremer-nei@dot.nj.gov)



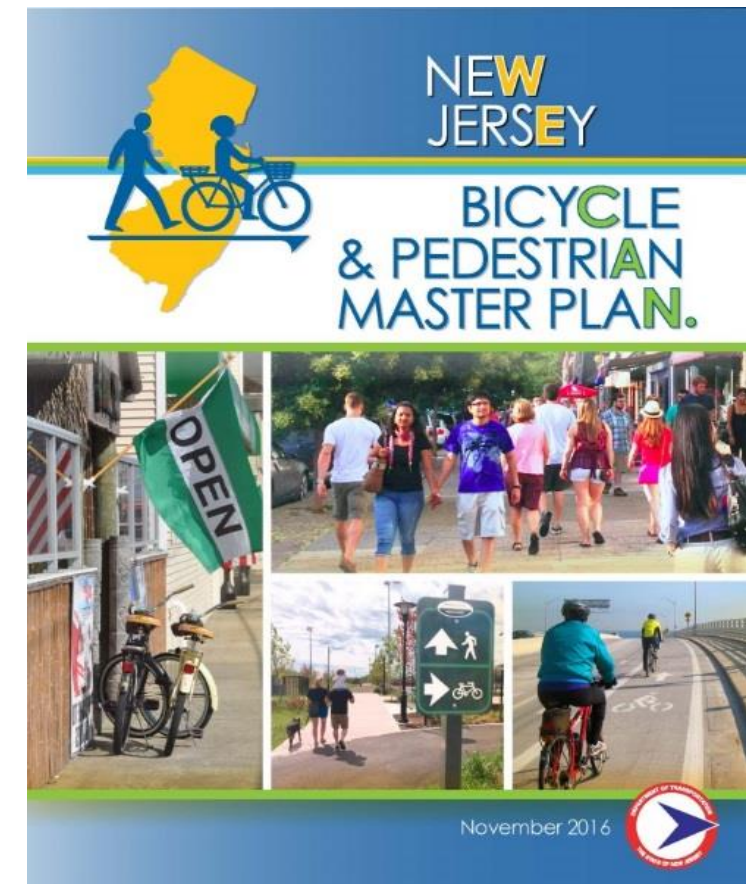
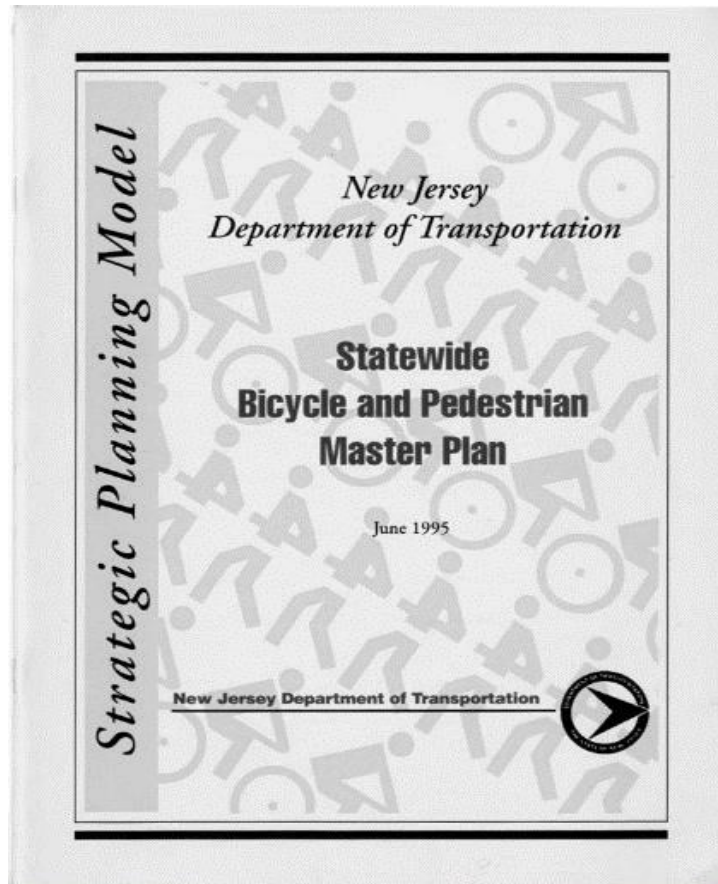


# NJDOT Office of Bicycle and Pedestrian Programs

- Began with the Intermodal Surface Transportation Efficiency Act of 1991
- Interacts with divisions and bureaus across the Department, as well as other agencies and organizations
- Programs funded through the Federal Highway Administration
- Located within the Division of Safety Programs and Transportation Data



# New Jersey Bicycle and Pedestrian Master Plan





# NJ Bicycle and Pedestrian Advisory Council



## Subcommittees

- Design
- Safety
- Policy

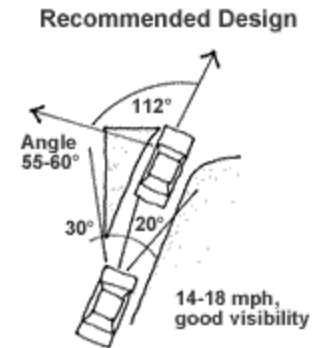


STATE OF NEW JERSEY  
MOTOR VEHICLE COMMISSION



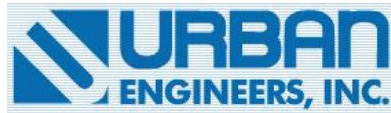
# NJDOT Bicycle and Pedestrian Programs

- NJ Bike/Ped Master Plan
- Pedestrian Safety Management System
- NJ Statewide Bicycle Map
- Local Bike/Ped Planning Assistance
- NJ Safe Routes to School Program
- NJ Safe Routes Resource Center
- NJ Bike/Ped Resource Center
- NJ SHSP Bike/Ped Action Teams
- Complete Streets Trainings
- Legislation/Policy Reviews
- Trail and Greenway Planning





# Consultant Resources



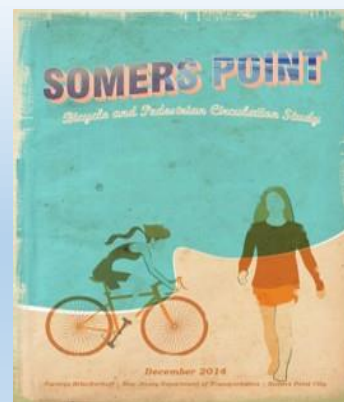
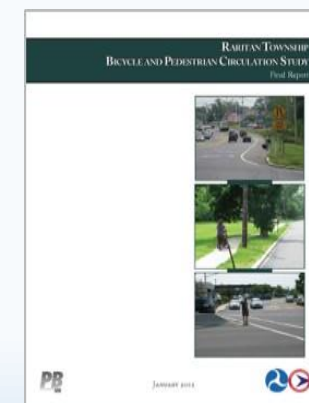
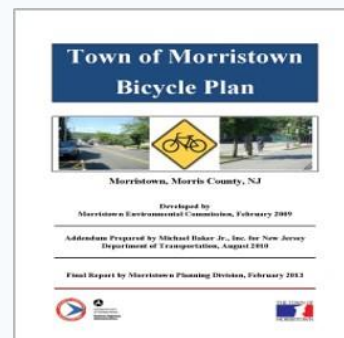
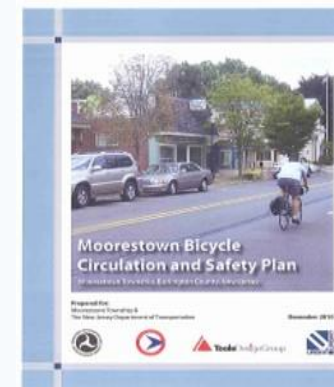


# NJDOT LOCAL BICYCLE & PEDESTRIAN ASSISTANCE PROGRAM

Over 25 years



Over 100 plans



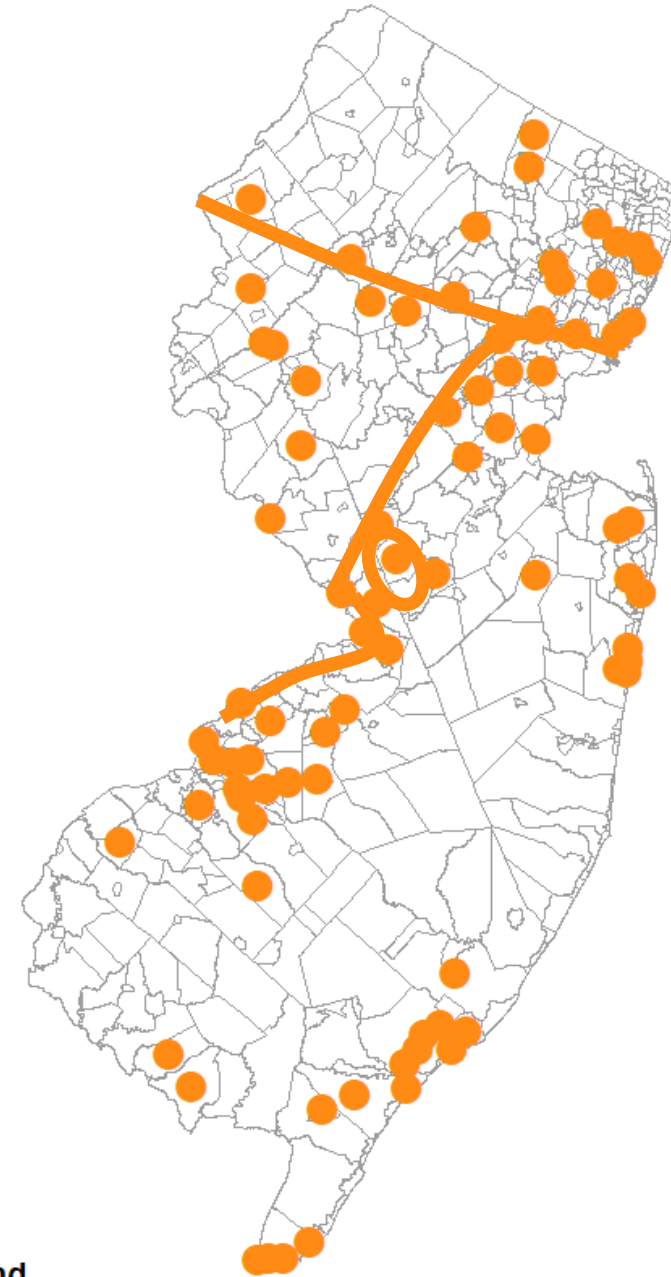


# Local Bicycle and Pedestrian Planning Assistance





# LOCAL PLANNING ASSISTANCE ACROSS THE STATE

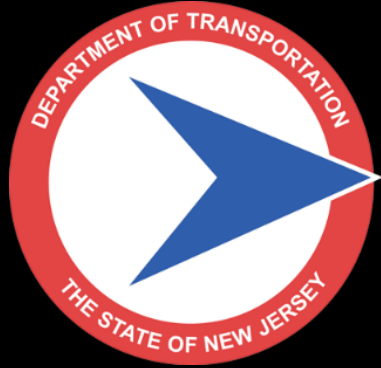


## Legend

● LTA Project

Source: NDOT





# NJDOT Office of Bicycle and Pedestrian Planning

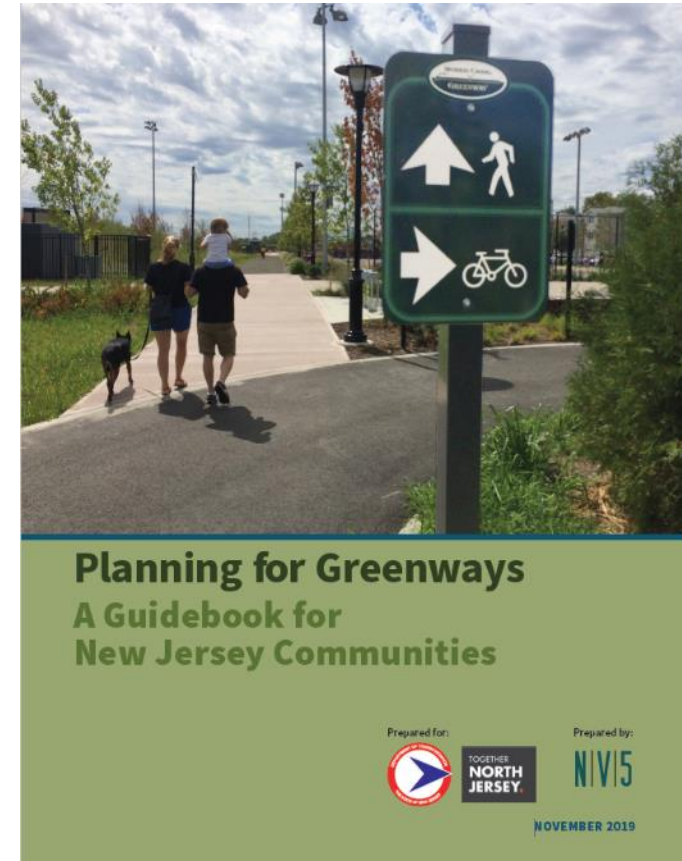


# Range of Local Planning Assistance Projects

NIV5



- Municipal B/P Plans
- Active Transportation Plans
- Corridor Safety Studies
- Vision Zero Plans
- Traffic Calming Studies
- Complete Streets Plans
- Statewide Guides & Maps
- Greenway Routing Studies
- Training



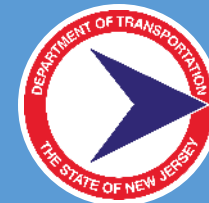
Greenway Guide

<https://togethernorthjersey.com/wp-content/uploads/2019/12/Planning-for-Greenways-Guidebook-2019.pdf>



# VISION ZERO AND SAFETY

N|V|5



## WEST ORANGE VISION ZERO ACTION PLAN



**Vision Zero Action Plan (2023-2030)**  
Strategies and Actions to Reduce Traffic Deaths and  
Serious Injuries to Zero

November 2023 Draft



### What would people accept for safer roads?

The most common tradeoffs to achieve safer roads for West Orange residents were:

- Lower speed limits/zones (66%)
- Increased waiting time at traffic lights (48%)

People were less enthusiastic about longer routes to destinations (29%)



# SAFE STREETS AND ROADS FOR ALL

N|V|5



## WEST ORANGE VISION ZERO ACTION PLAN



### RESOLUTION

138-24  
April 24, 2024

WHEREAS, on September 14, 2021, the Township Council for the Township of West Orange (the "Township") adopted Resolution #238-21 authorizing the establishment of a Vision Zero Task Force to prepare an Action Plan to eliminate all traffic-related deaths and serious injuries, while increasing safety, health and mobility for all; and

WHEREAS, the Vision Zero Task Force has prepared and issued a Vision Zero Action Plan outlining strategies and actions to reduce traffic deaths and serious injuries within the Township (the "Action Plan"), annexed hereto as Exhibit "A;" and

WHEREAS, the Vision Zero Task Force has also prepared and issued a Vision Zero Toolkit, annexed hereto as Exhibit "B," providing information and resources to help engage the community within the Township towards the goals articulated in the Action Plan;

WHEREAS, the Township reiterates its commitment to creating streets, corridors and intersections that safely accommodate all users of all ages and abilities; and

WHEREAS, the Action Plan provides data compiled from 2015 through 2021 which shows that within the Township: (i) more than two fatal motor vehicle crashes occur on an annual basis; (ii) seven pedestrian fatalities occur on an annual basis; (iii) twenty-eight motor vehicle crashes occur with severe injuries; and (iv) three bicyclist and pedestrian accidents occur with severe injuries; and

WHEREAS, the Action Plan provides recommendations and countermeasures aimed at eliminating the number of fatalities and severe injuries for both motorists and pedestrians within the Township.

NOW, BE IT HEREBY RESOLVED, by the Township Council of the Township of West Orange that the Township hereby expresses reiterates its support of the policies and

S | S  
4 | A

County Letter of  
Support for SS4A  
Application ✓

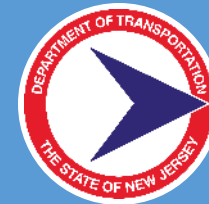


- Top Corridors on the HIN
  - County (10)
  - Municipal (3)
- Systemwide application of measures along the HIN
  - Low-Cost Safety Treatments
  - Speed Management
  - Bike Network Development
  - Safe Routes to School
  - Pedestrian Safety Enhancements
- Education Initiatives



# GOAL OF Local Planning Technical Assistance Program

N|V|5



PLANNING



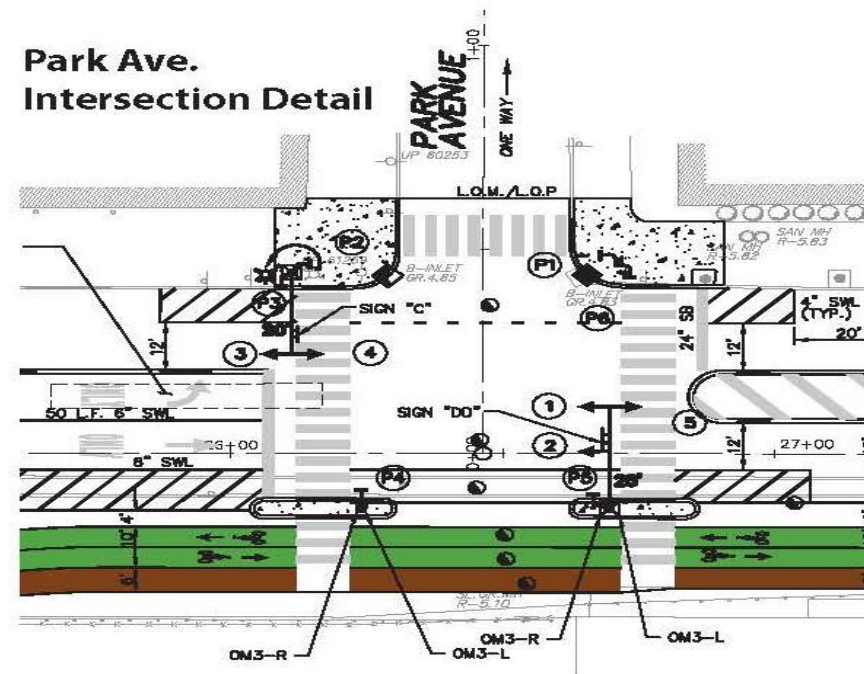
DESIGN & IMPLEMENTATION

Plan

Pedestrian  
& Bicycle  
Planning Study



Blueprint



# Bicycle & Pedestrian Master Plans

N|V|5



## CITY OF HOBOKEN BICYCLE & PEDESTRIAN MASTER PLAN

### Bicycle & Pedestrian Master Plan



Parking Day Demonstration Project

[City of Hoboken  
launches curbside  
planning process  
\(hobokennj.gov\)](http://www.hobokennj.gov/news/mayor-bhalla-delivers-keynote-at-national-association-of-city-transportation-officials-conference)

<https://www.hobokennj.gov/news/mayor-bhalla-delivers-keynote-at-national-association-of-city-transportation-officials-conference>

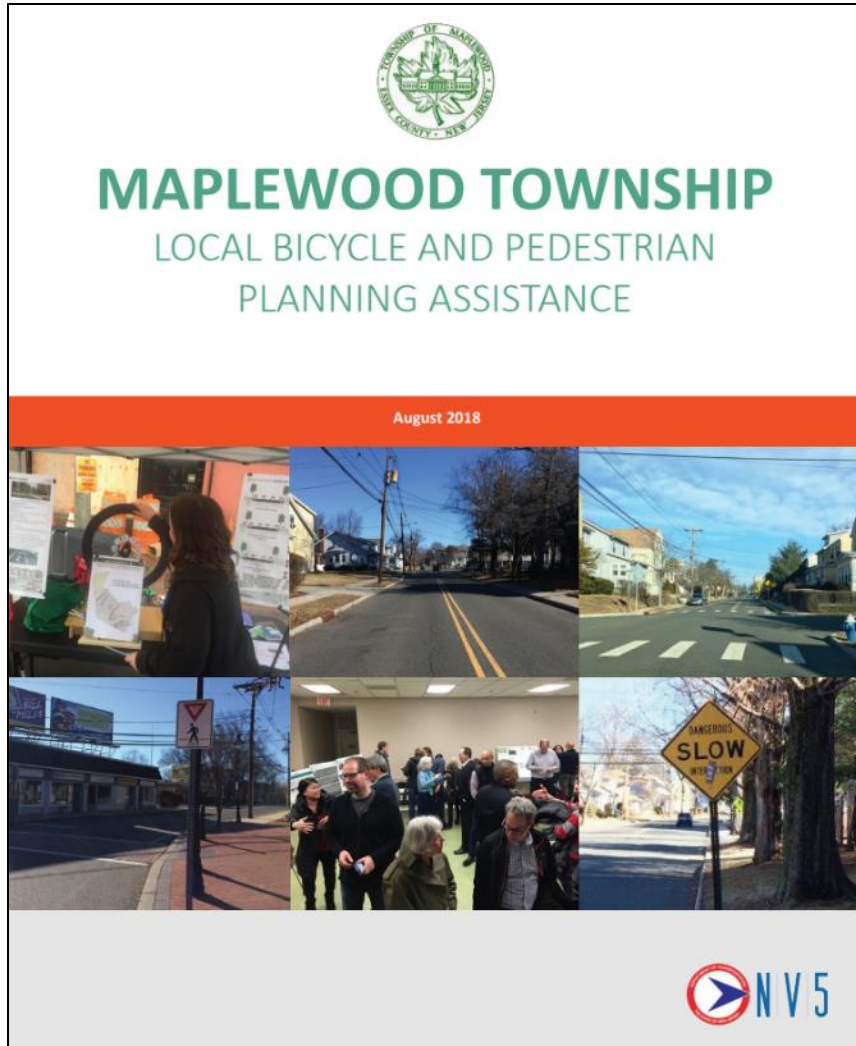


Washington Street – Complete Street Redesign



# Bicycle & Pedestrian Master Plans

N|V|5



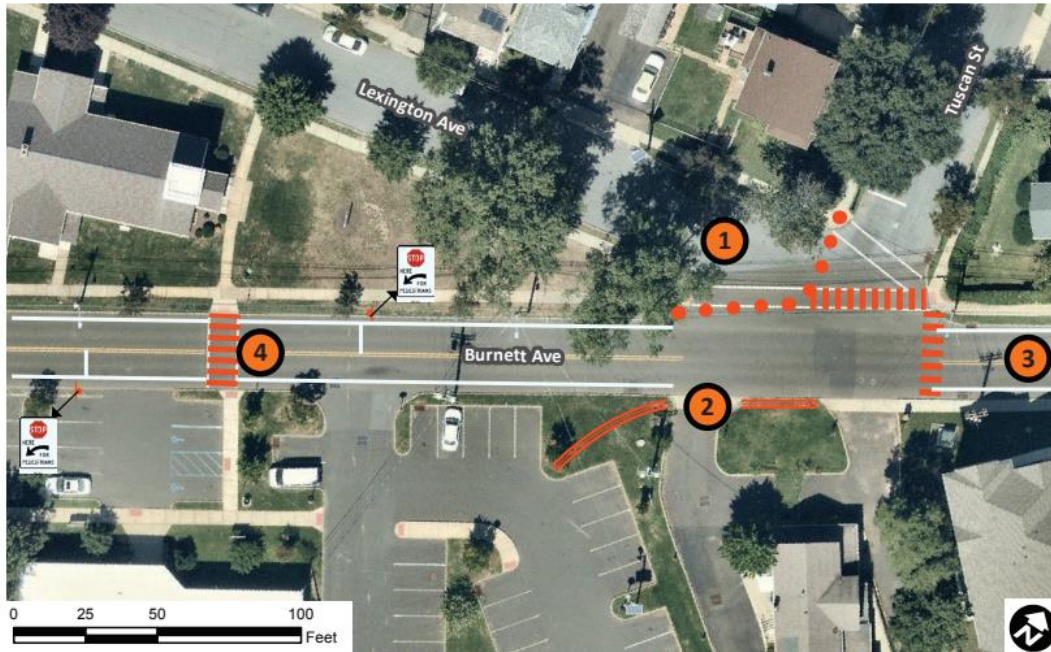
- 4 focus corridors
- Objectives
  - address traffic speeds
  - improve safety
  - reduce crashes
  - evaluate lighting levels
  - examine traffic calming policy
- Outcomes
  - Lighting assessment
  - Intersection design review
  - Planning level concepts with matrix (cost estimate, responsibility, timeline)

# Planning Concept

## Burnett Avenue: Lexington Avenue & Tuscan Street

BURNETT AVENUE: LEXINGTON AVENUE & TUSCAN STREET

06/16/2018



### Lexington Avenue / Tuscan Street

15	Consider a full closure of Lexington Avenue with temporary/permeable barriers to limit conflicts due to inadequate visibility. The permeable closure will allow emergency vehicles to enter the roadway if needed.	Maplewood	1 to 2 years	\$500 - \$150,000
16	Complete the sidewalk network with curb ramps in front of the senior center and connect to DeHart park.	Maplewood	1 to 2 years	\$10,000 - \$15,000
17	Install high visibility crosswalks paired with an advance stop bar and stop for pedestrians sign for the mid-block crosswalk across Burnett Avenue to DeHart park.	Maplewood	6 months - 1 year	\$5,000 - \$7,500



# Burnett Avenue, Lexington Avenue & Tuscan St

Before - 2018



After - 2024



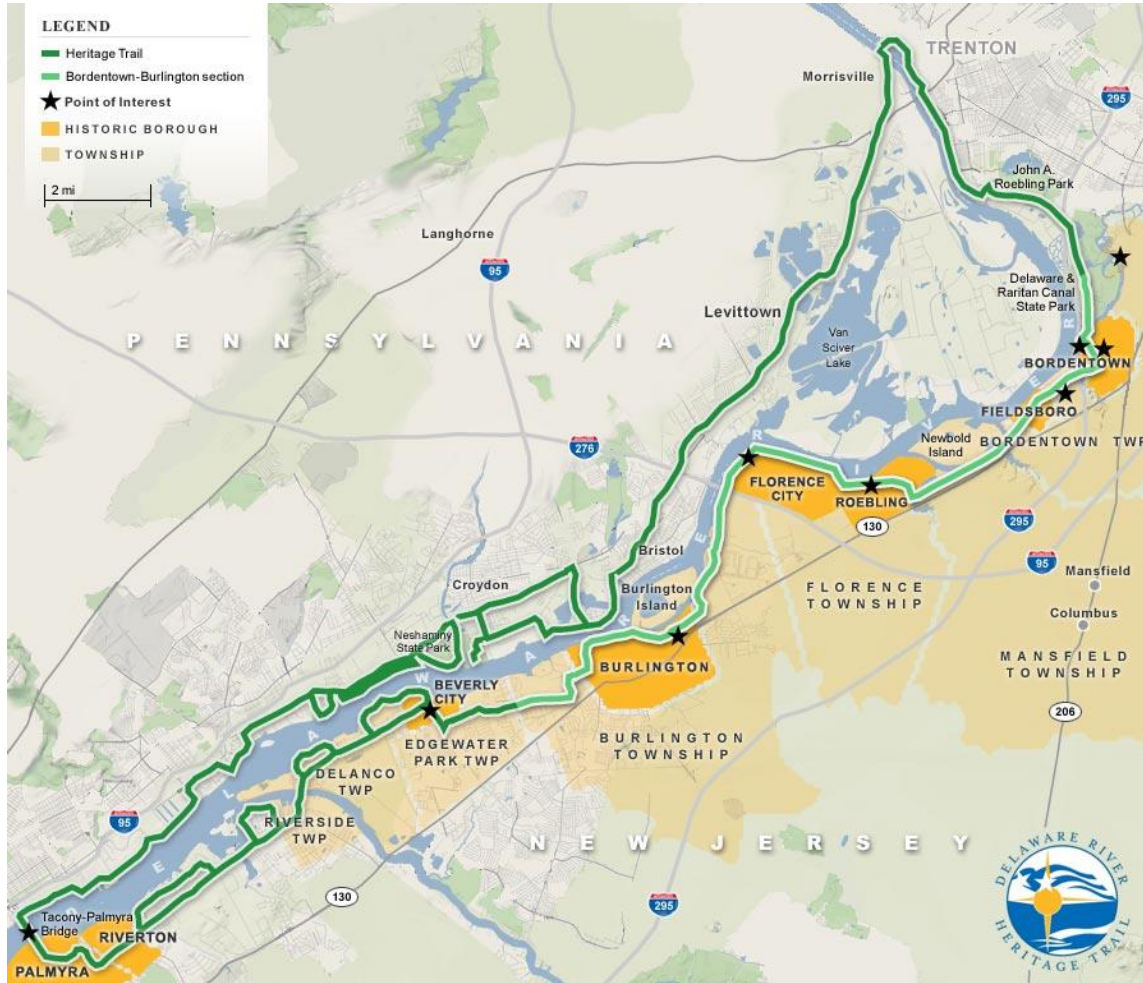


# COMPLETING TRAIL SYSTEMS

N|V|5



## DELAWARE RIVER HERITAGE TRAIL



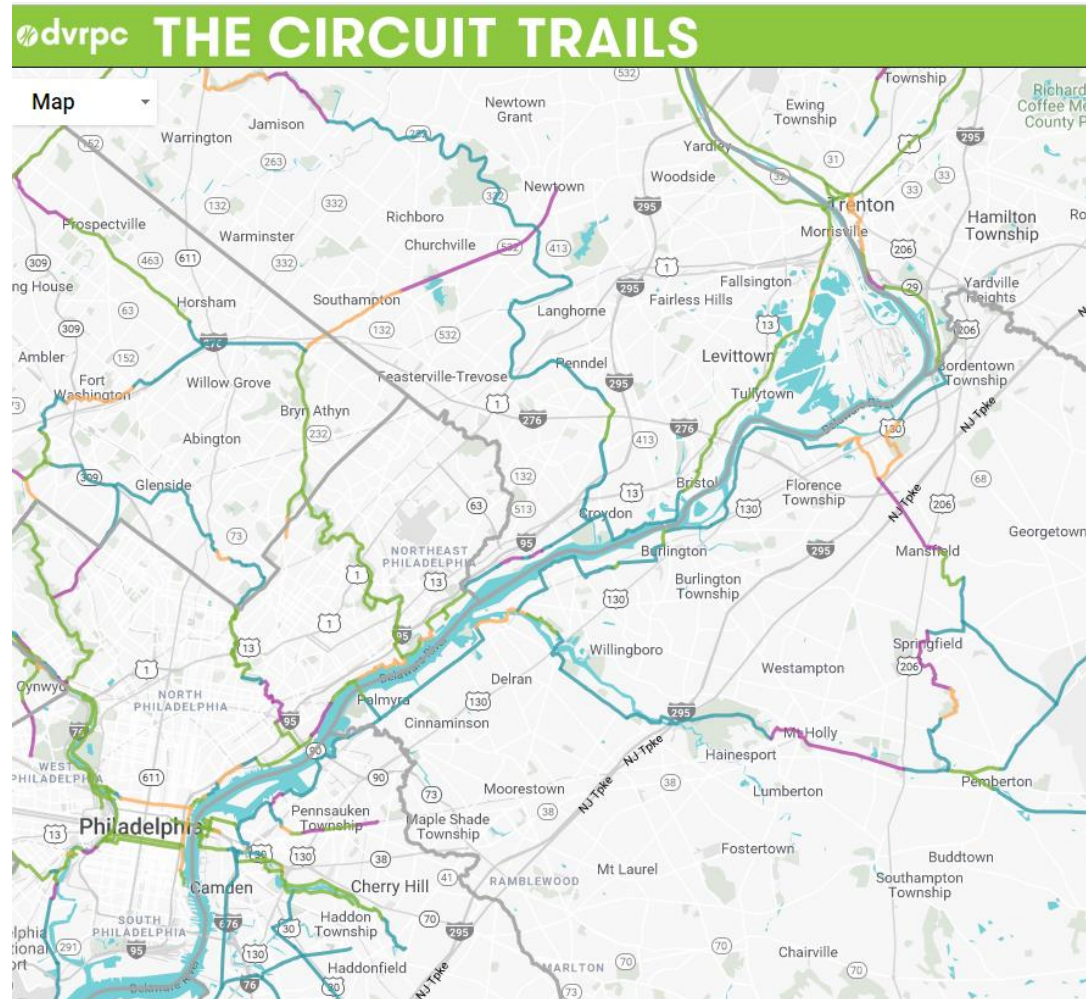


# COMPLETING TRAIL SYSTEMS

N|V|5

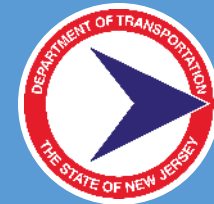


## CIRCUIT TRAILS



# COMPLETING TRAIL SYSTEMS

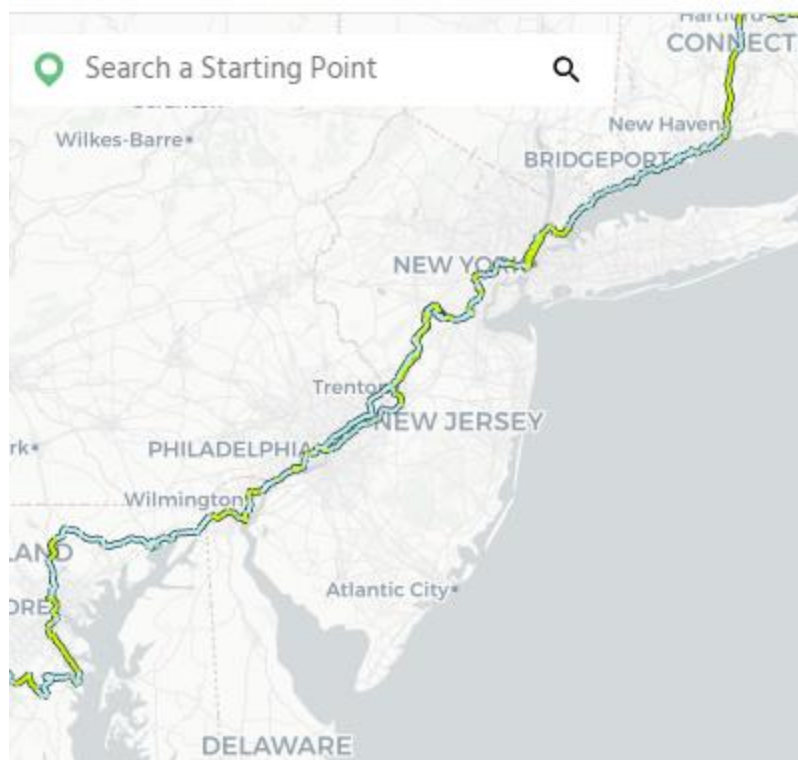
N|V|5



## EAST COAST GREENWAY



East Coast  
Greenway.



Credit: [www.greenway.org/](http://www.greenway.org/)

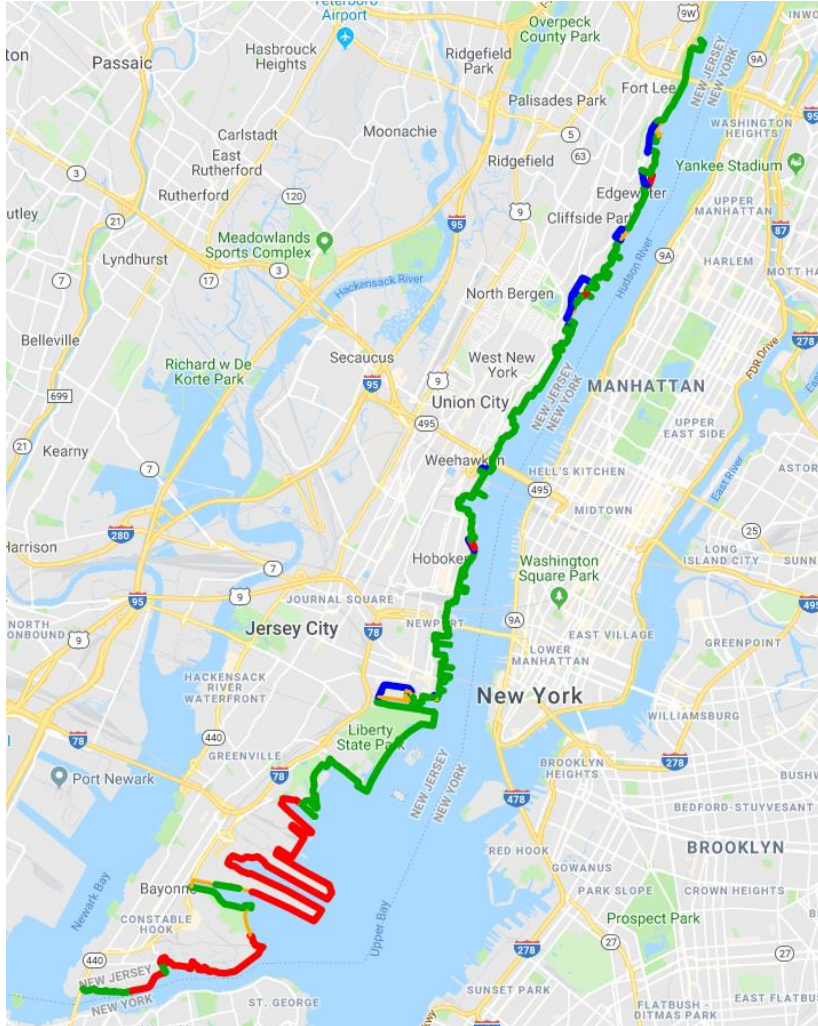


# COMPLETING TRAIL SYSTEMS

N|V|5



## HUDSON RIVER WATERFRONT WALKWAY



Credit: <http://hudsonriverwaterfront.org/map/map4.html>

# Implementation & Funding

N|V|5



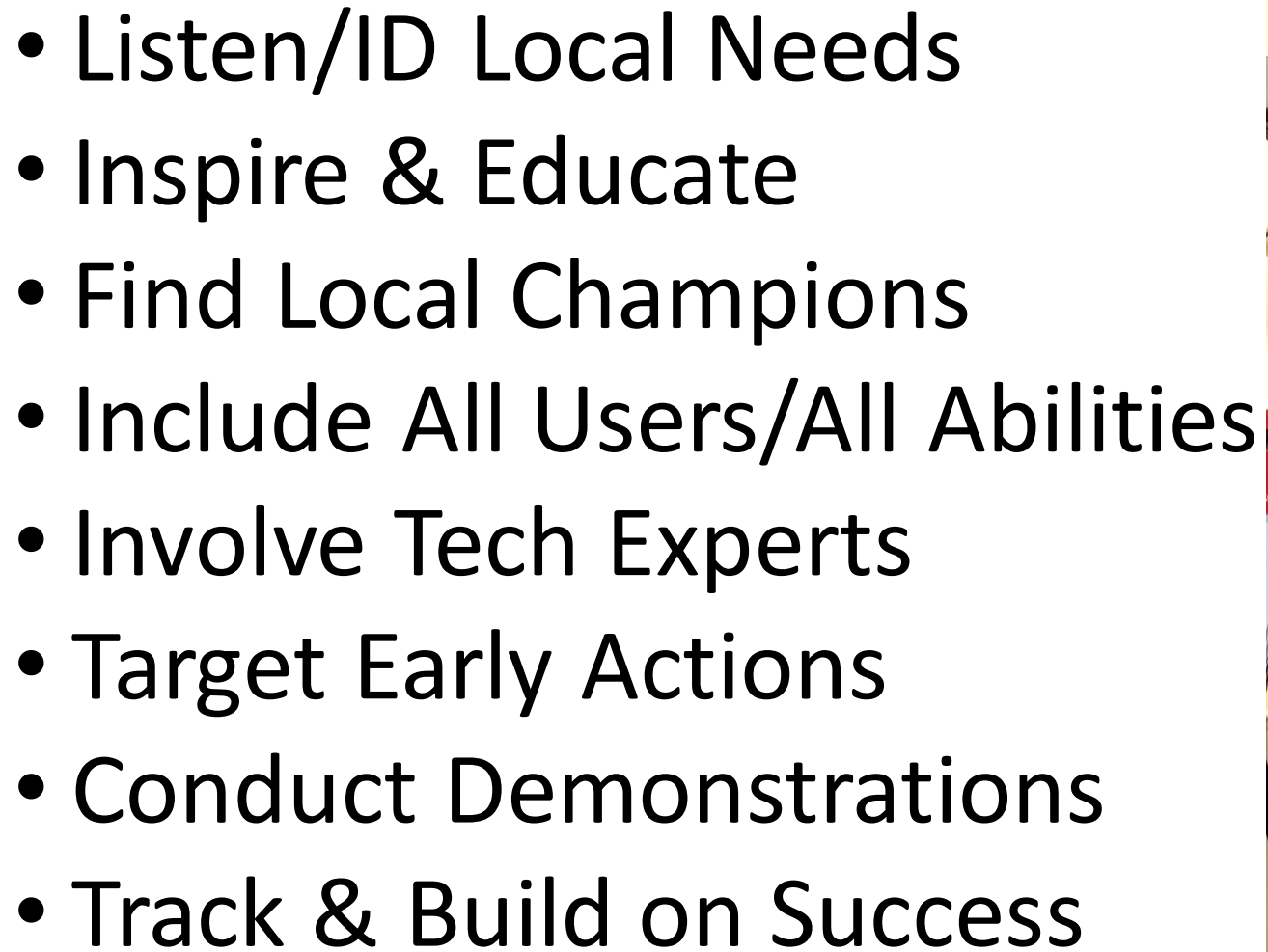
LOCAL PLANNING ASSISTANCE → TAP/SRTS \$\$\$\$

- Maplewood
- Metuchen
- Pemberton
- Clayton
- West Orange
- Montclair
- Elk Township





## N | V | 5





# Lessons Learned

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N|V|5







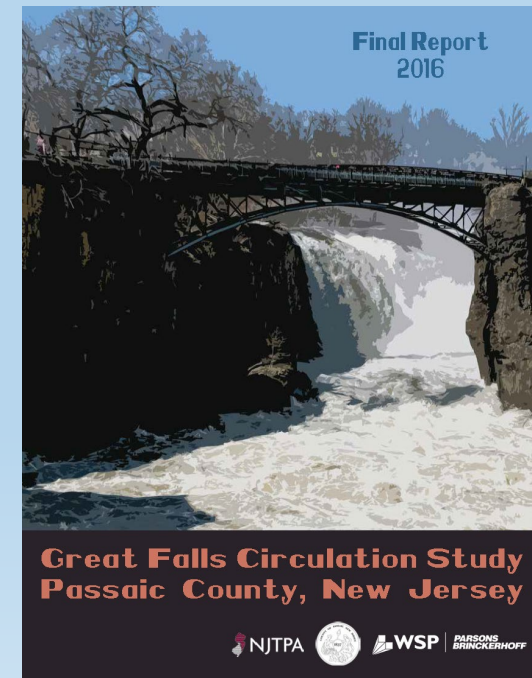
## BIKEPATERSON: BUILDING A BETTER CITY

CITY OF PATERSON, PASSAIC COUNTY, NEW JERSEY

JANUARY 2024



## PERRYSTREETFUTURE



## BIKEIRONBOUND

BICYCLE PLAN FOR THE CITY OF NEWARK



## Infrastructure and Accessibility

34%



Lack of bike lanes and cohesive bike network

3%



Feel unsafe biking/scooting

10%



Desire for more bike/scooter infrastructure

12%



Upkeep and maintenance of existing bike/scooter infrastructure

## Safety and Enforcement

18%



Too much traffic/fear of being hit by a vehicle

3%



Pedestrian/Bike conflict

3%



Motorists don't yield to micromobility devices

3%



Motorists double park in bike lanes

Most Frequently Noted Concerns

1%



Access to bike & safety gear

3%



Riding Inconvenience

## Education & Affordability

4%



Fear of crime

3%



Feel unsafe riding

## Personal Safety



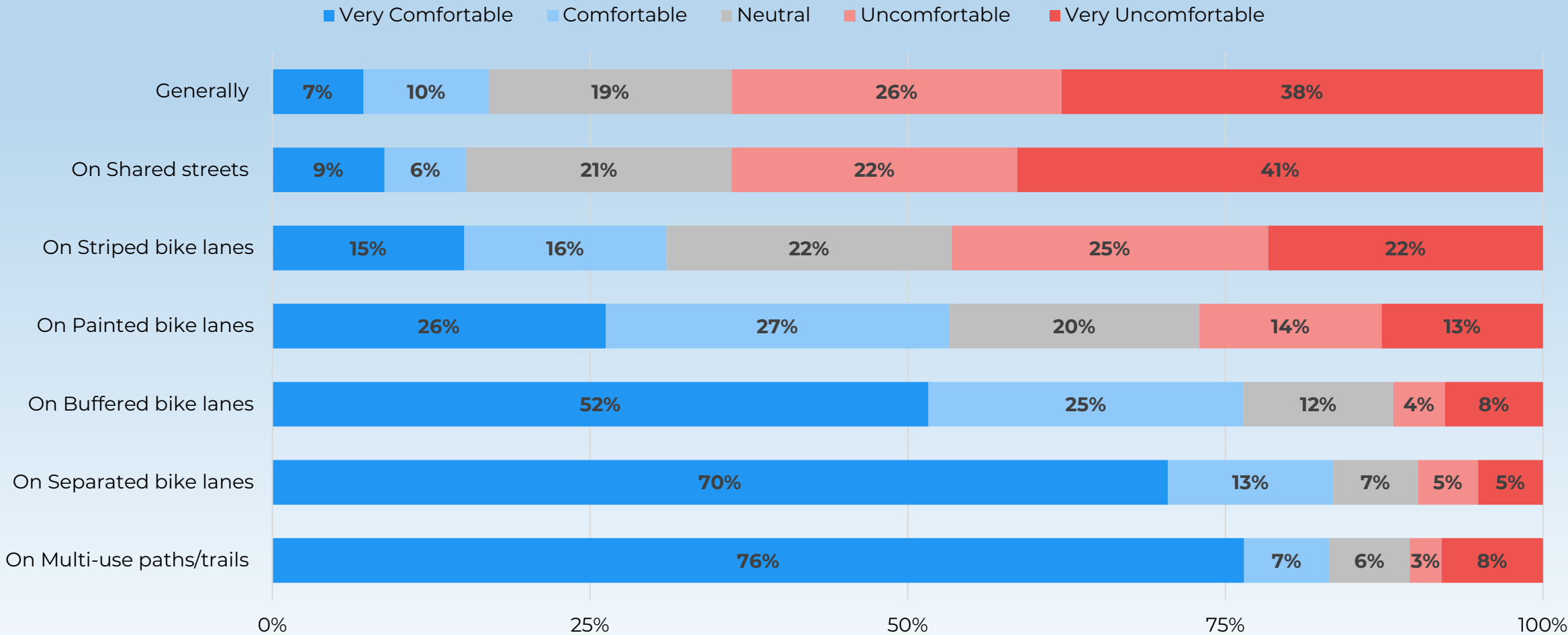
Poor lighting



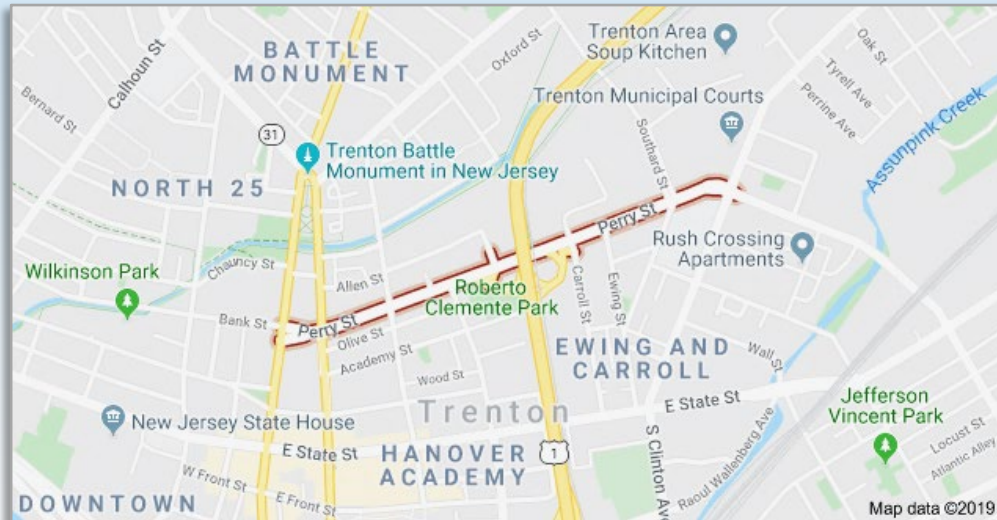
# Safety & Comfort

## HOW SAFE/COMFORTABLE DO YOU FEEL BIKING IN NEWARK?

(ONLINE SURVEY AND POP-UP RESPONSES COMBINED)



# PERRYSTREETFUTURE





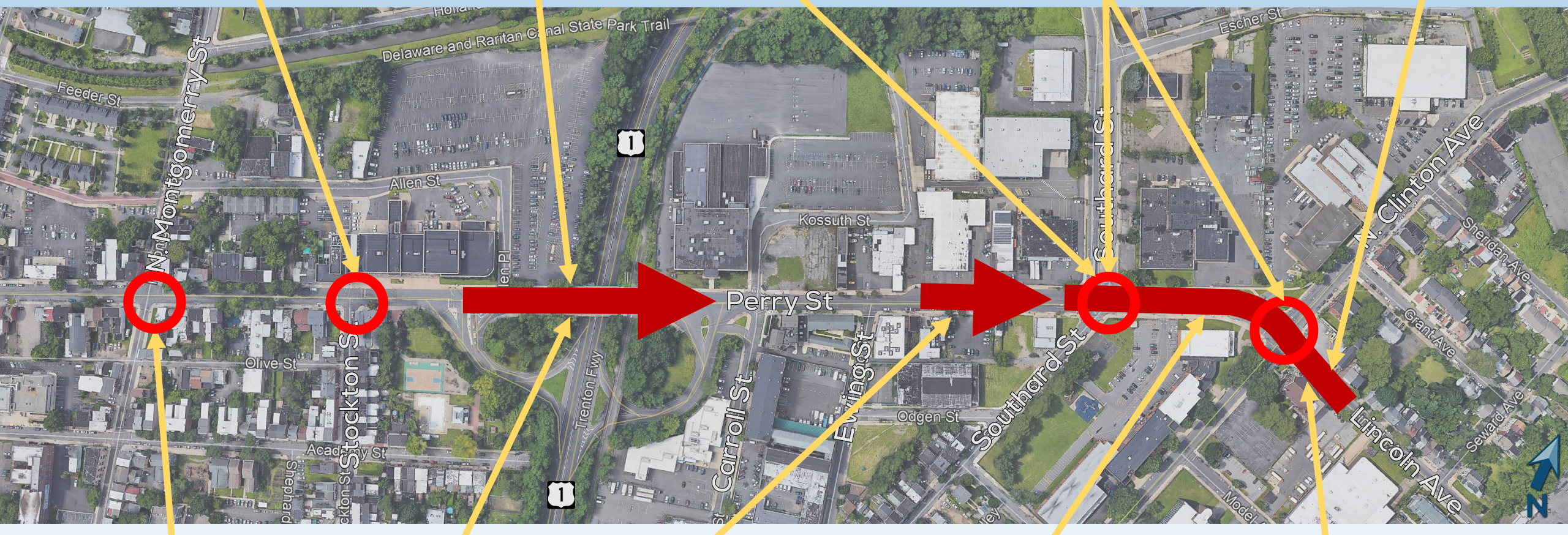
Rear End, Sideswipe,  
Angle crashes above  
Statewide average

Total Traffic  
Volume: 16,600

4 of the 9 total  
Pedestrian crashes  
in study area

Read End, Sideswipe,  
Head On, Left Turn,  
Pedestrian crashes above  
Statewide average

Westbound Travel  
Speeds Excessive:  
11% > 30 MPH



Wet Surface, Sideswipe,  
Head on, Parked vehicle  
crashes above Statewide  
average

Eastbound Travel  
Speeds Excessive:  
26% > 30 MPH

Eastbound Travel  
Speeds Excessive:  
10% > 30 MPH

Highest Traffic Volume: 19,350  
Highest Crash Rate: 21.6 per MVMT  
(Statewide Average = 4.0)

Eastbound Travel  
Speeds Excessive:  
12% > 30 MPH



# I. Listening to the Community

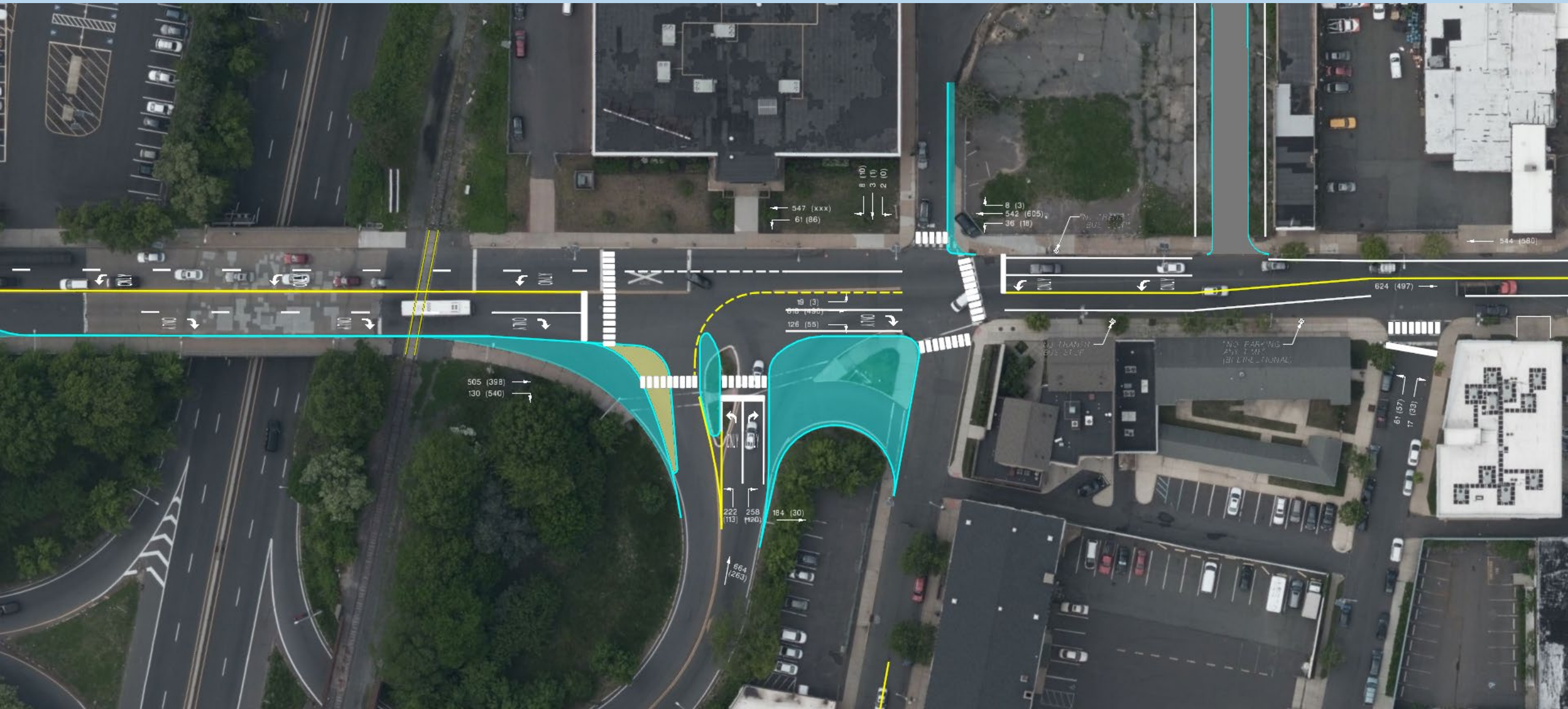
- Trenton Cycling Revolution – February 20, 2020
- Tucker Street Community Garden – July 24
- Summer in the Garden @ Roberto Clemente Park – August 6
- Briefing with Mayor Gusciora – August
- Trenton Cyclovia & Art All Day – September 19
- Capital City Community Coalition Briefing (4-Cs) – January 21, 2021
- General mailing of project fact sheet and purpose
  - Local business, social services, day care, houses of worship, schools





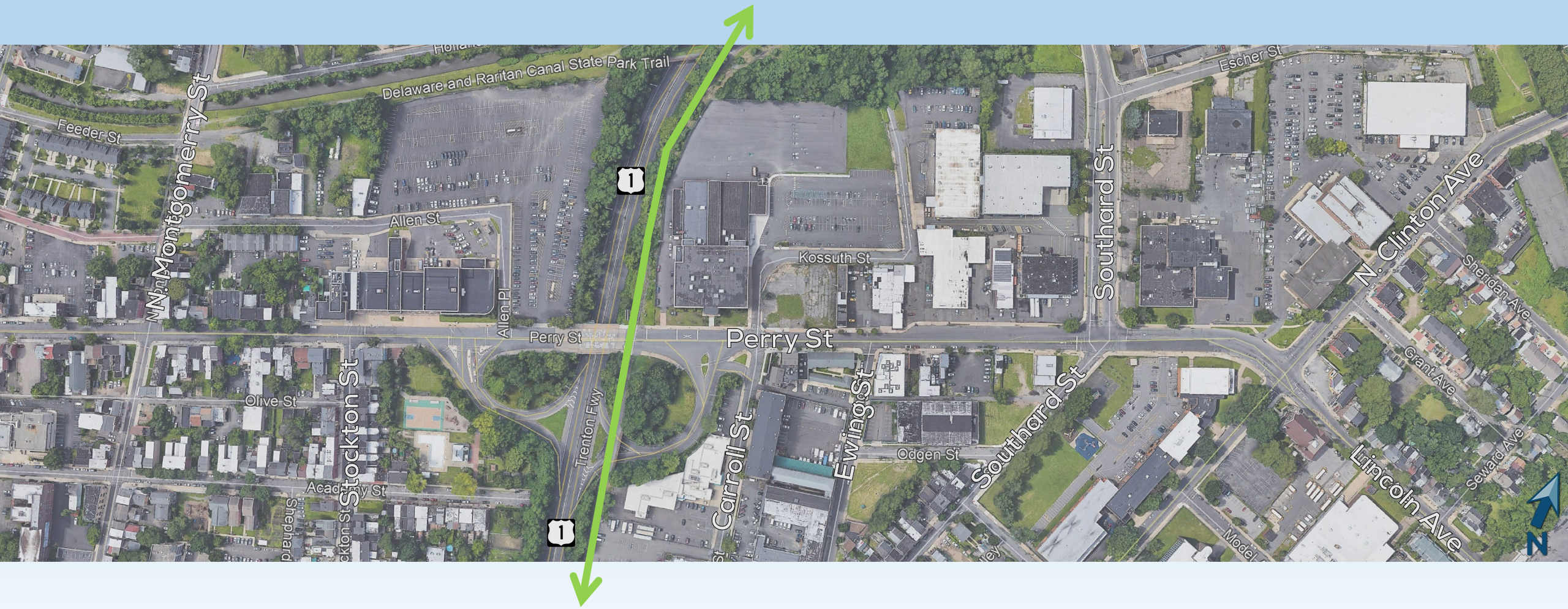


# Close Ramp to Carroll Street, Signalize Intersection

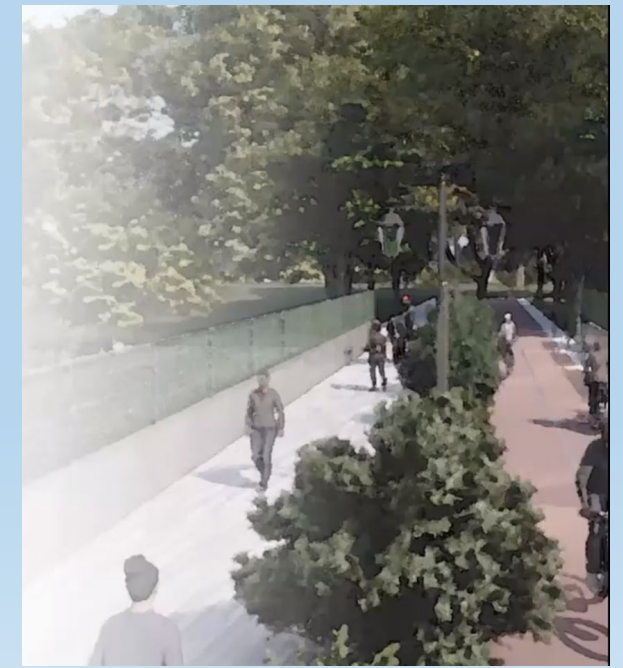
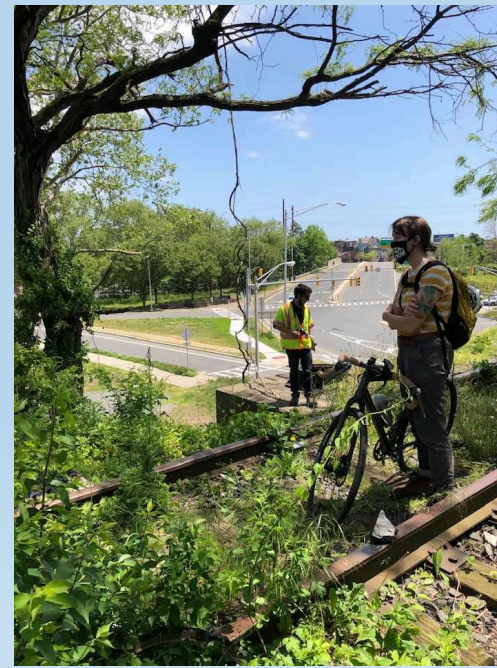




# Rail Corridor - Currently Not in Use







# Off-Road Shared-Use Path D&R Tow Path to Trenton Station

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# BIKE Paterson

**The First Bicycle Master Plan for the City of Paterson, New Jersey**  
**First Look: Proposed On-street Bike Network      October 25, 2021**



**Paterson**  
Great Falls • Great Food • Great Future



**passaic**  
**COUNTY**  
NEW JERSEY

**Michael Baker**  
**INTERNATIONAL**



SUSAN G. BLICKSTEIN, LLC  
PLANNING ♦ POLICY ♦ RESEARCH



# City of Paterson

## National Night Out August 3, 2021





# City of Paterson


## Ride Out for Unity



Paterson Police Community Policing Division, Unity Foundation,  
Wheel Up Inc., Brothers United & Bomb Squad presents

# RIDE OUT FOR UNITY

A FREE COMMUNITY EVENT Calling All Bikers!  
PARENTAL CONSENT REQUIRED IF UNDER 18



Saturday, October 16, 2021 • 11am - 4pm  
Skateboard Park, 99-105 21<sup>st</sup> Ave, Paterson NJ

RAINDATE: OCTOBER 17TH

SPREADING AWARENESS ON SOCIAL ISSUES: ALCOHOL & DRUG ADDICTION • CANCER  
GUN VIOLENCE • MENTAL HEALTH • SUICIDE AWARENESS

*Plus Special Guests*  
DJ SK • SLV Sounds • Teenstobeheard • RespectMyLife • BUDS  
Small Business NJ • Paterson Smiles • Soul Empowered Women

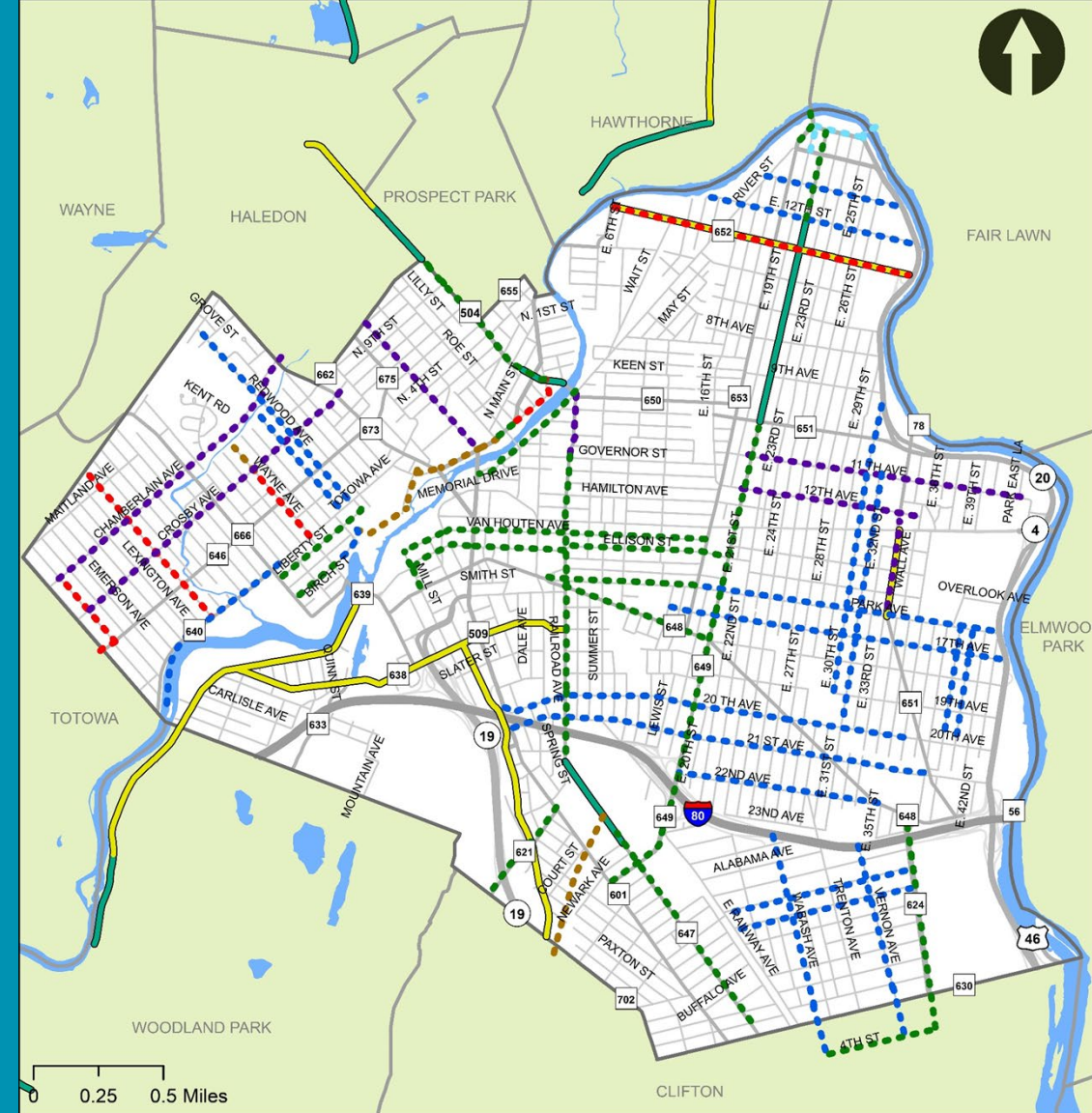
FOR MORE INFO, CALL: (973) 703-2387 OR (862) 571-8577





# Proposed Bicycle Network

- City of Paterson awarded \$500,000 SS4A Grant



## Proposed Bicycle Network Improvements

### Legend

- Existing Bike Lanes
- Existing Sharrows

### Proposed Bicycle Network

- Bike Lanes
- Buffered Bike Lanes
- 2-Way to 1-Way with Bike Lanes
- Hybrid Bike Lanes
- Bike Boulevard or Marked Shared Lane
- Shared Use Path



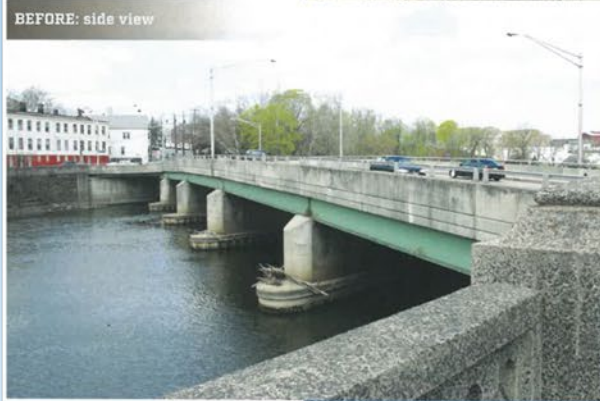


Final Report  
2016

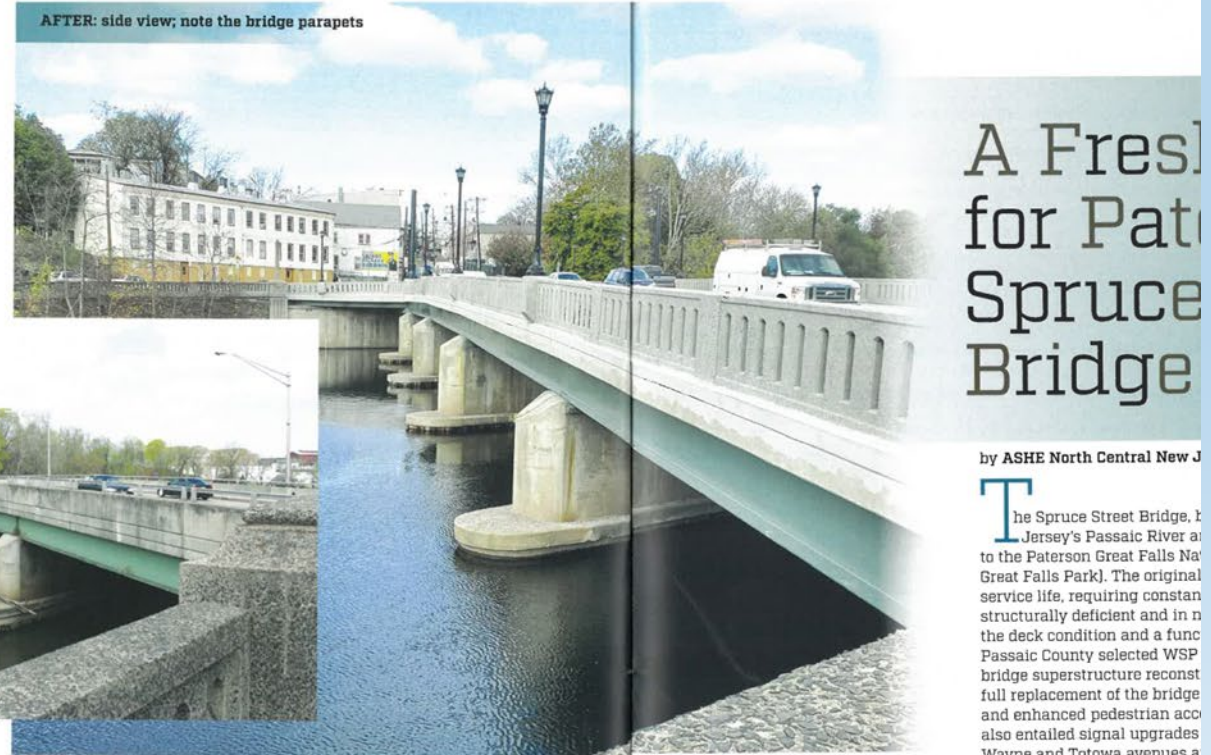
## Great Falls Circulation Study Passaic County, New Jersey



BEFORE: side view



AFTER: side view; note the bridge parapets



## A Fresh Look for Paterson Spruce Street Bridge

by ASHE North Central New Jersey

**T**he Spruce Street Bridge, located in Paterson, New Jersey, spans the Passaic River and connects the city to the Paterson Great Falls National Historic Site (Great Falls Park). The original bridge, built in 1911, had a service life of over 100 years, requiring constant maintenance and repair. The bridge was structurally deficient and in poor condition, with a significant dip in the deck and a functional obsolescence. Passaic County selected WSP as the design-build team for the bridge's reconstruction. The project included the full replacement of the bridge's superstructure, reconstruction of the full deck, and enhanced pedestrian access. The project also entailed signal upgrades at the intersections of Wayne and Totowa avenues at Spruce and Front streets.

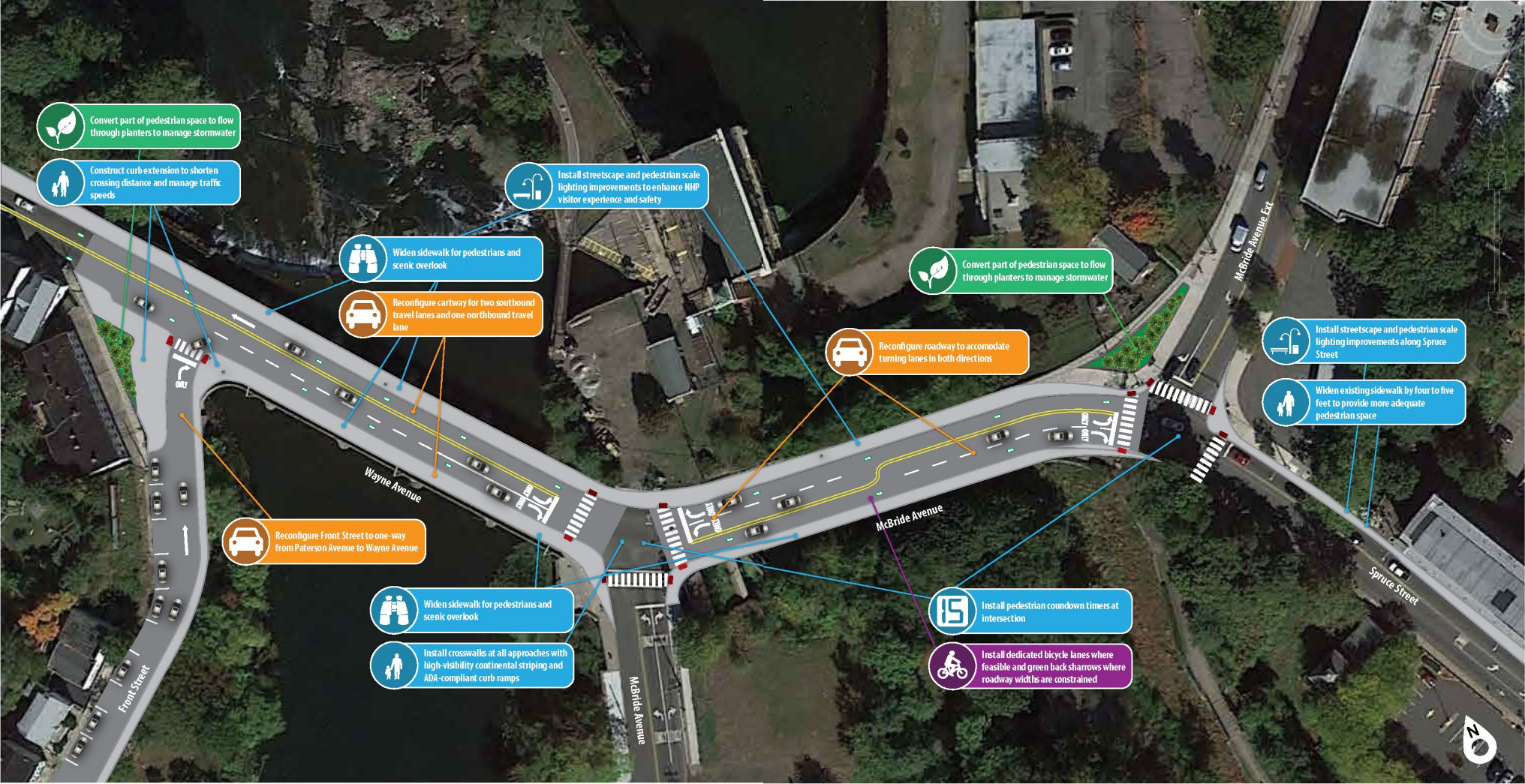
A plan evolved to replace the existing deck with a new concrete deck, detailed to accommodate significant profile changes to smooth out the severe dip at the bridge's north end and to match the existing substructure or stringers. There were uncommonly large concrete stringers. Further complicating this was the design team's desire to create a composite with the new deck. To accomplish this, they developed a mild steel reinforcement to prevent cracking in the deep concrete for shear studs stacked two and three high to properly transfer loads to the existing stringers. Avoiding a full bridge replacement with its associated cost and a lengthy permitting schedule that would not have fit the community's needs was a key goal.

The highly traveled bridge was an important part of the community's infrastructure. The need for quick turnaround. Instead of looking to add lanes, the focus was on serving the community with an improved structure. The design team wanted to design a safe and inviting structure for pedestrians and cyclists. Such a change in direction required vetting by the community. The project included a stakeholder outreach program to ensure the community's input was incorporated into the direction of the project. The community adjacent to the Paterson

Pouring of concrete deck









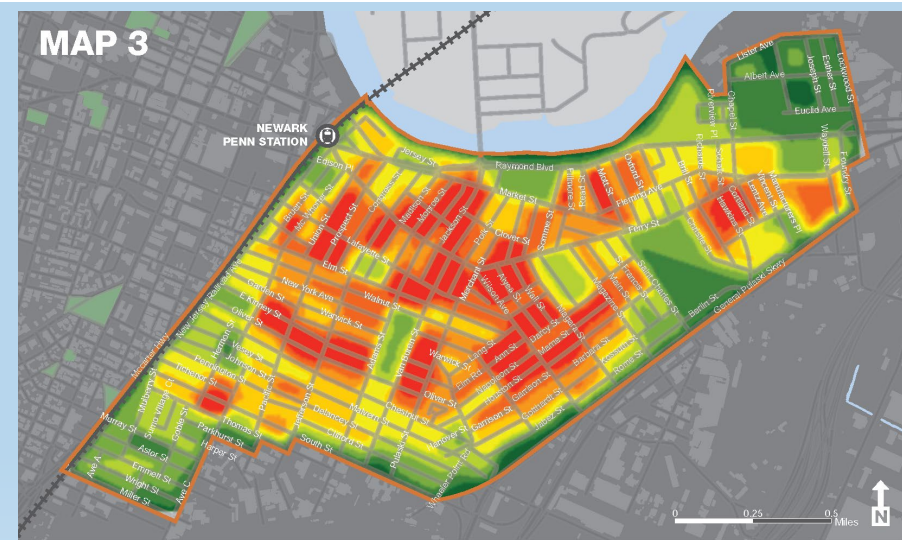


# BIKEIRONBOUND

## BICYCLE PLAN FOR THE CITY OF NEWARK

prepared by WSP | Parsons Brinckerhoff and the New Jersey Department of Transportation

MAP 3



### BIKEIRONBOUND



#### Bicycle Demand



Bicycle demand includes the following factors:

- Population Density
- Employment Density
- Key Destinations
  - Schools, Universities, Parks, Businesses
- Transit
- Demographics and Equity Factors
  - Young people, low income, no access to a car; commute by bike, foot, or transit



MAP 7



### BIKEIRONBOUND



#### Bicycle Level of Traffic Stress with proposed improvements







# 07

## Pilot Projects

---

In order to support its efforts to create a comprehensive bicycle network in the Ironbound neighborhood, the City of Newark has selected five locations to pilot on-road bicycle facilities and two additional locations for bike corrals. The purpose of these pilot projects is to build on the momentum of **BIKEIRONBOUND** by choosing locations where the vision of the plan can be implemented quickly and effectively. The selected projects also create a solid initial network of north-south and east-west routes to build upon, and represent a variety of bicycle facility typologies.

The following locations have been chosen as pilot implementation projects:

- McWhorter Street
- Adams Street
- Van Buren Street
- Ferry Street
- Raymond Boulevard

In the case of Adams Street and Van Buren Street, the pilot recommendations are for buffered bicycle lanes in order to facilitate quick implementation. In the long term, the facilities may be upgraded to separated bicycle lanes, as indicated in the proposed bicycle network in Chapter 6 and Map 6.

Additionally, locations have been chosen for the implementation of bike corrals:

- Ferry Street (near Wilson Avenue)
- Raymond Plaza East (between Ferry Street and Edison Place)

## Three Pilot projects built within months of plan adoption

- Ferry Street
- Adams Street
- McWorther St













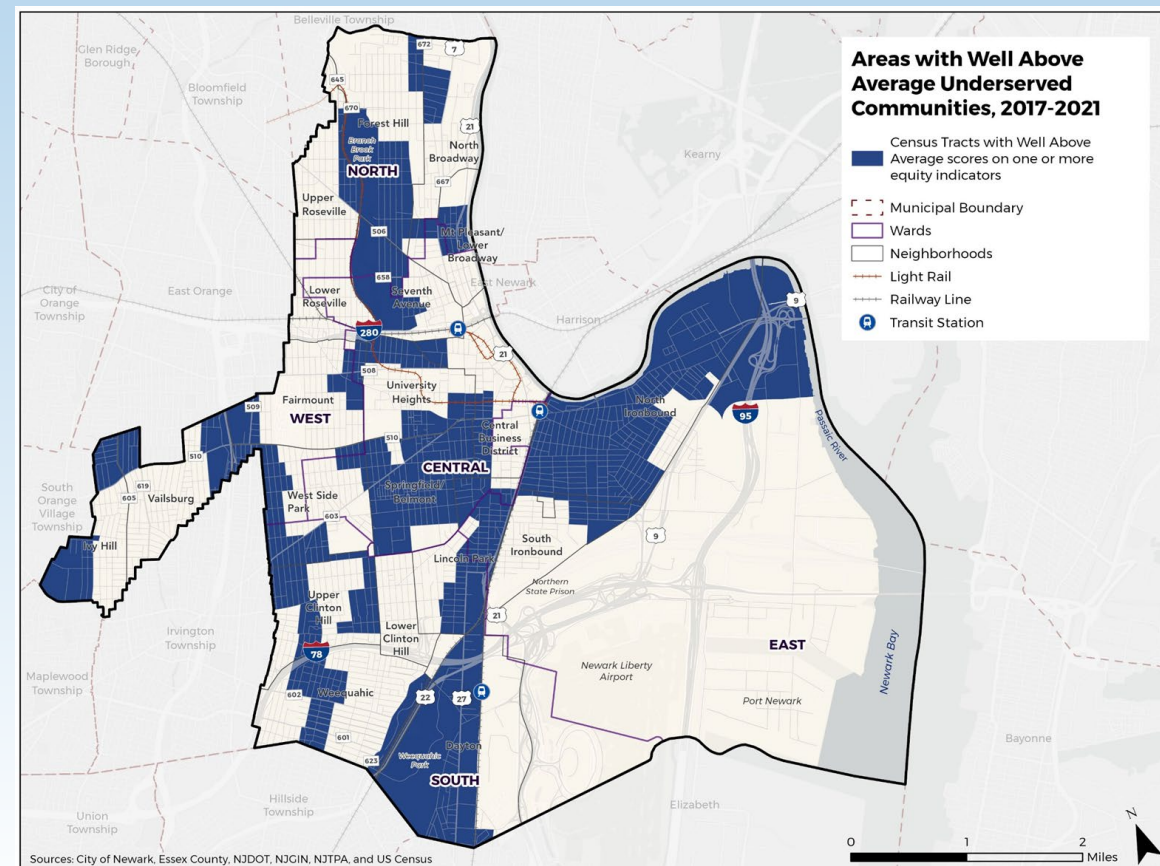
## Pop-Up Outreach

### Recurring Comments:

- Fear of traffic/being hit
- Make biking safer/more accessible for children
- Bike/ped conflicts
- First-mile/last-mile connections
- Access to a bike
- Bike racks and storage
- Education and safety training
- Double-parked vehicles
- Bike/scooter share concerns

### Notable Specific Comments:

- Law enforcement officers support cycling but are concerned about the **safety of riders** (noted night-riding & Frelinghuysen Ave specifically)
- Several students **bought cars** in 1<sup>st</sup> year @NJIT b/c of difficulty getting around Newark w/out one





# Protected Design Preferred

## Preferred Bicycle Facilities

- Protected Two-Way Bicycle Lanes
- Protected One-Way Bicycle Lanes
- Bicycle Boulevard

## Only if No Other Option

- Standard Bicycle Lanes
- Sharrows/Shared Lane



Simulation of potential one-way separated bike lane on Adams Street, Newark, NJ, looking north



# Recurring Themes

- Equity & disproportionate impacts to underserved communities
- Personal safety & separation from traffic
- Municipal capacity
  - Conflicting priorities
  - Staffing
  - Access to grants and funding
  - Proof of Concept
- Project Champions
- Stakeholder and advocates
  - Trenton Cycling Revolution
  - New Jersey's TMAs
- Funding
  - City of Paterson SS4A Grant

