

# Linden Avenue Walkable Community Workshop

Complete Streets Technical Assistance



Verona, NJ  
October 24, 2024

# Agenda

Project Background and Timeline

Introductions

What is a Walkable Community Workshop?

What is a Complete Street?

What is pedestrian friendly design?

Learn how to conduct a walk audit

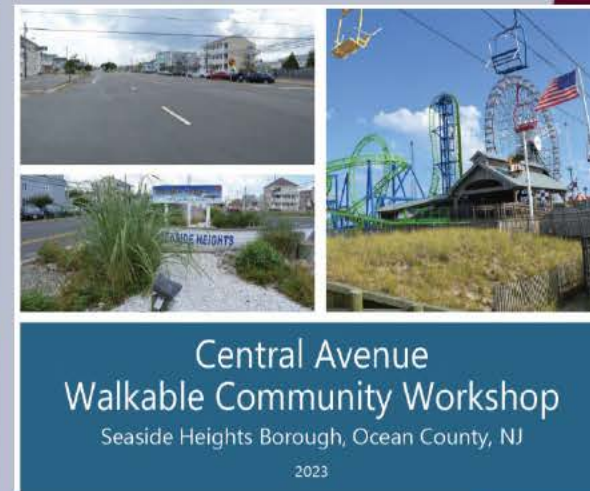
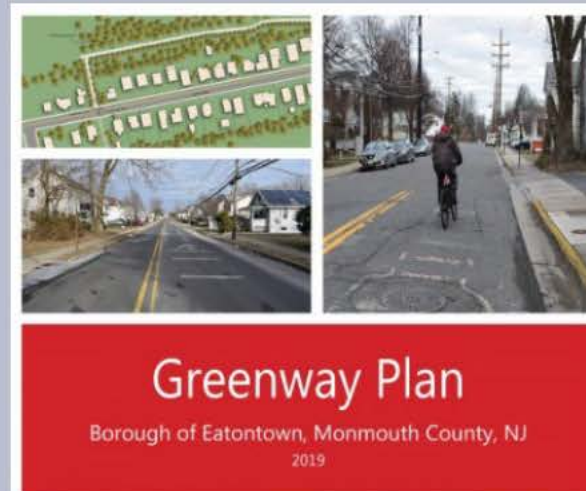
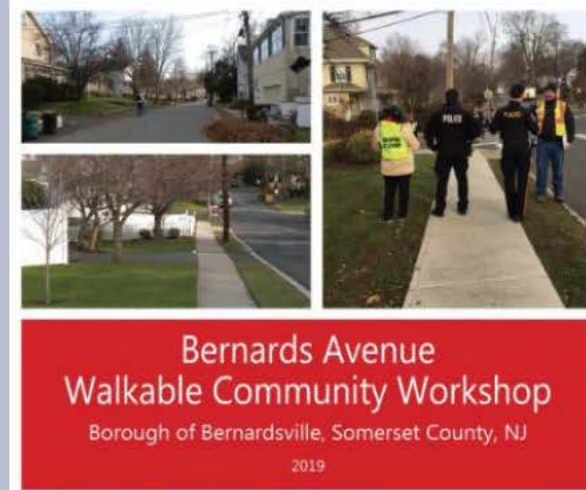
Conduct the virtual walk audit

Report back and next steps



# Complete Streets Tech. Assistance

- Assistance to advance a Complete Streets Initiative
- Competitive program for **municipalities**
- 24 studies completed
- Five recipients selected for 2024-2025



# NJTPA Region

**Bergen**

**Essex**

**Hudson**

**Hunterdon**

**Jersey City**

**Middlesex**

**Monmouth**

**Morris**

**Newark**

**Ocean**

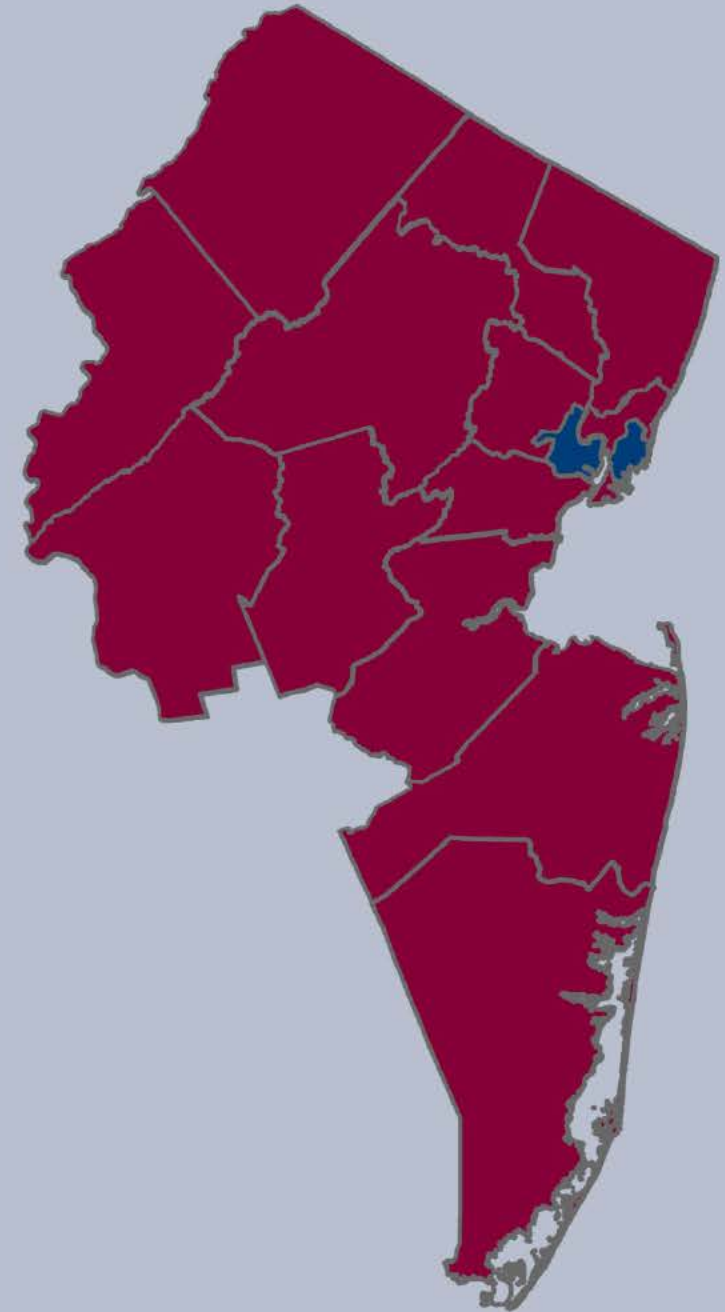
**Passaic**

**Somerset**

**Sussex**

**Union**

**Warren**





# Project Components and Timeline

Internal Kick-off Meeting

April 2024

Project Team Site Visit

May 2024



# Project Components and Timeline

Temporary Demo Design

July – September 2024

Temporary Demo Start

October 2024

1. Address speeding and safety issues now.
2. Build municipal capacity.
3. Get real-world feedback from residents.





# Complete Streets Demonstration Library

Materials available to **municipalities** and counties to test **creative traffic solutions**

**Durable** materials like bollards and signs and **consumable** materials like paint and chalk

Partnership of the NJTPA and **Transportation Management Associations**

Twelve projects supported to-date



DELINEATORS  
TRAFFIC CONES



Photos: Cross County Connection TMA



# Project Components and Timeline

Walkability Workshop

TODAY

Corridor Walk Audit

TODAY

Final Report

Early 2025

1. Learn about complete streets and walkability
2. Learn how to conduct a walk audit
3. Take an in-depth look at a corridor
4. Write what is working and what needs improvement
5. Share vision for a safer and healthier community
6. Organize, summarize, and share community priorities



# Central Avenue Redesign Plan Poised for 2024 Construction in Seaside Heights, Including Bike Lanes

by Daniel Nee October 6, 2023



The northernmost point of Central Avenue in Seaside Heights, N.J., Oct. 2023. (Photo: Shorebeat)

A plan that has spent years in its design stage will remake Central Avenue in Seaside Heights into a picturesque thoroughfare with bicycle lanes, trees, safety features for drivers, and a cohesive aesthetic look.

ADVERTISEMENT

HEADLINES TRENDING VIDEOS

UNCATEGORIZED  
**Talks to Bring Noted Developer's 'Beachfront Oasis' Hotel to Seaside Heights Progress**

POLICE, FIRE & COURTS  
**Island Police Chiefs Meet With N.J. Legislators on Bills to Address Boardwalk 'Chaos,' Crime**

GOVERNMENT  
**First Phase of Seaside Heights Boardwalk Replacement to Start As Soon As Summer Ends**

# Gopal, Houghtaling & Downey Announce \$275,000 Eatontown Greenway Grant

EATONTOWN, NJ—Senator Vin Gopal, Assemblyman Eric Houghtaling and Assemblywoman Joann Downey today announced that the Borough of Eatontown has received a \$275,000 grant from the New Jersey Department of Transportation (NJDOT) Local Aid Infrastructure Fund Program to create a walkable, undeveloped Eatontown Greenway from Wampum Park to Wolcott Park.

## Pallone Secures More than \$1.4 Million to Improve Main Street in Bradley Beach



# One Million Dollars in Grant Funding Awarded to Dunellen

December 22, 2023, 4:05 pm | in

Ocean County	Seaside Heights	Seaside Heights	Central Avenue Safety Improvements	\$824,000.00
Passaic County	Passaic	Passaic	Hamilton Avenue and State Street Improvements Project	\$454,000.00

# Introductions



State your name and affiliation

How long have you lived or worked in Verona?

How often do you walk or bike around Verona?



# Complete Streets

# What is a Complete Street?

Ensures the safe and adequate accommodation of all users of the transportation system.

- Public transit riders
- Bicyclists
- Pedestrians
- Older adults
- Children
- People with disabilities
- Motorists
- Truck and delivery drivers





# A Complete Street...

Offers many travel choices

Connects to a wider network

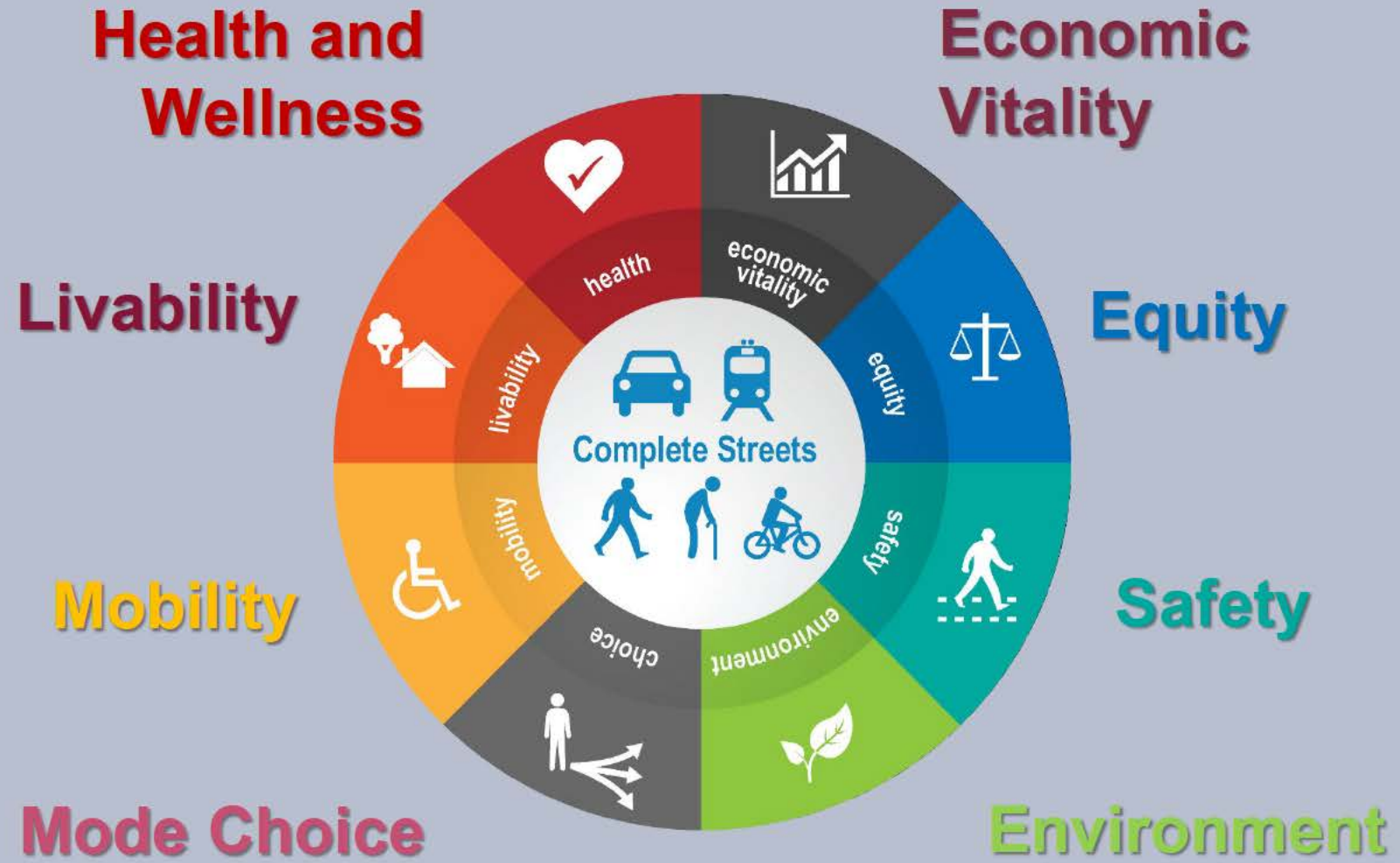
Is fully accessible to all

Varies according to context

Improves safety for all



# Benefits of Complete Streets





# Cost of **incomplete** streets

- Exposure to risk
- Injuries and fatalities due to crashes
- Limited mobility
- Limited access to jobs and education
- Negative health impacts



# New Jersey pedestrian fatalities, 2010-2023





# Building a Place You Want

- Design affects what we do and how we do it (and how happy we are doing it)
- Build for driving...  
.....you get driving
- Build for walking and biking...  
.....you get walking and biking



# Bad Behavior

Why do people speed?

*Because wide roads make it seem safe for the driver to speed.*





# What is the speed limit?



# What is the speed limit?

50 mph



35 mph



40 mph



25 mph





# Pedestrian Friendly Design

# What is pedestrian friendly design?





# Encourage Strolling



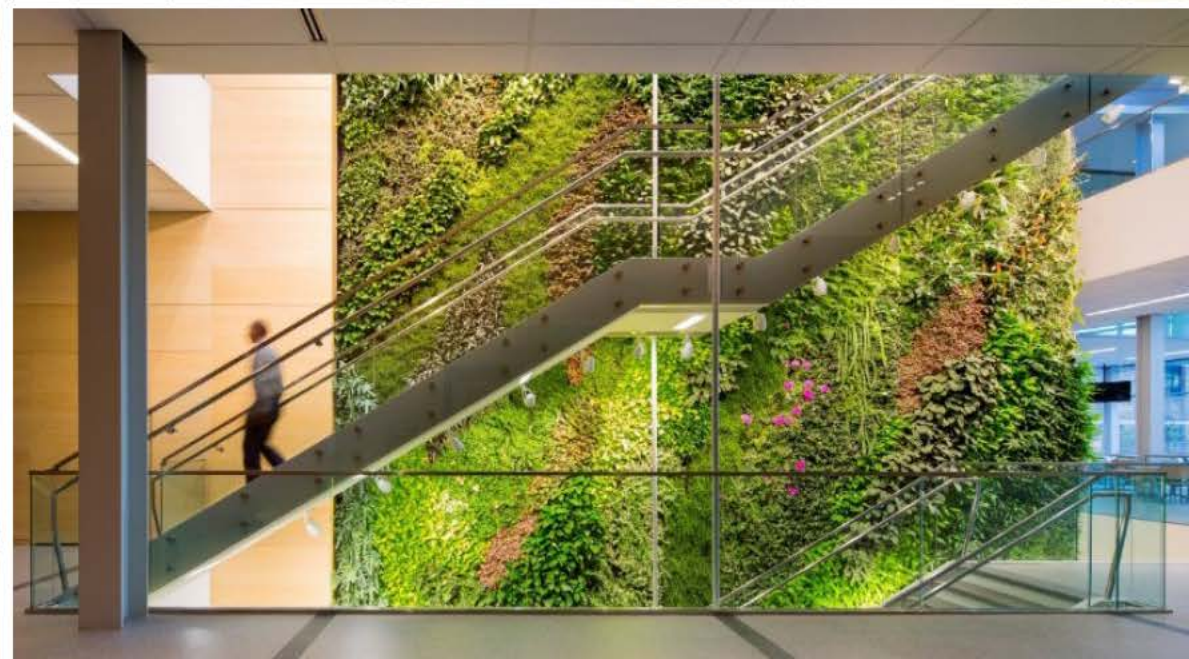
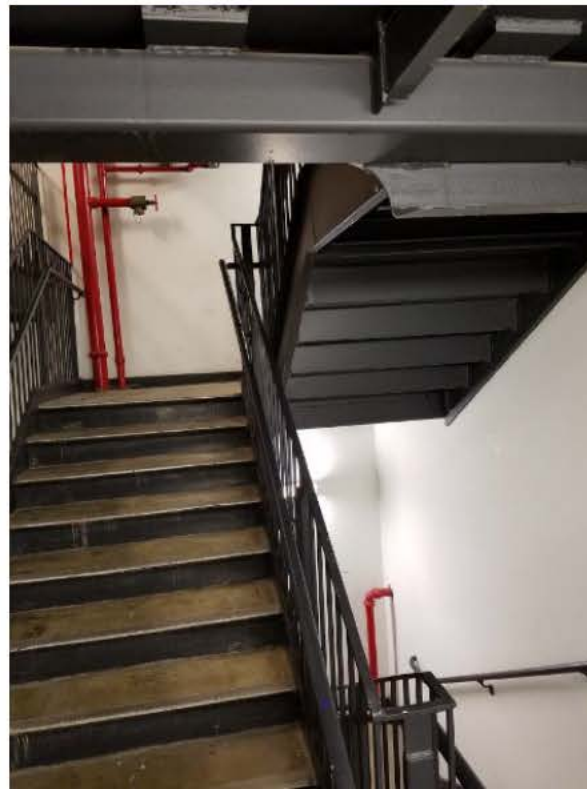


# Engage the Senses





**Remember,  
design  
affects  
behavior!**



# Designing for the Public Right Of Way



# Pedestrian Accessibility

- **Public Right-of-Way Accessibility Guidelines**
  - Width: Federal minimum was 36"
  - NEW – 48" min, exclusive of curb
  - Wider is always better!
- **Be careful with:**
  - Vertical obstructions
  - Protruding objects
  - Slope





# Pedestrian Safety

Is the surface smooth?



Are there any other infrastructure issues?





# Crosswalk Ramps

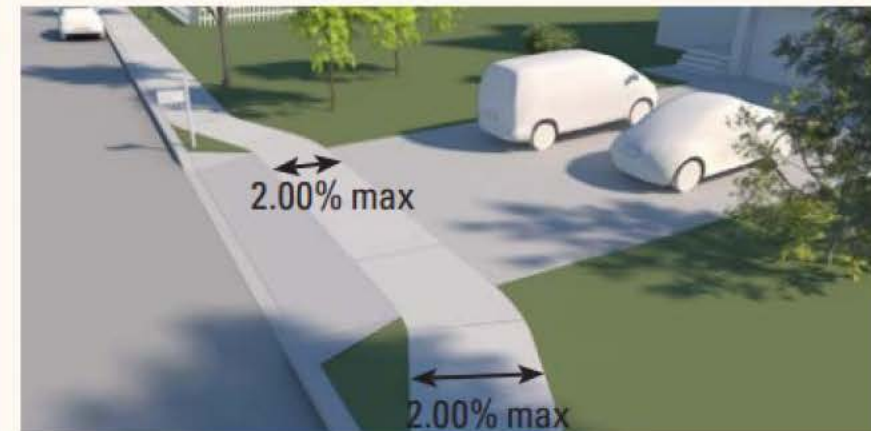
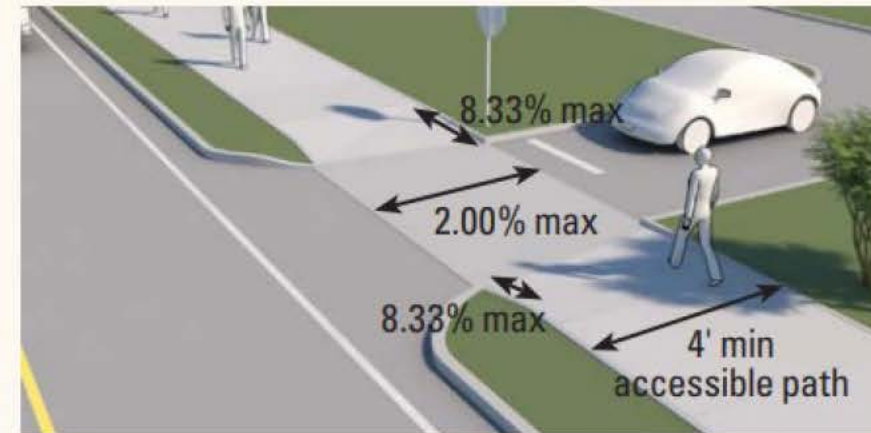
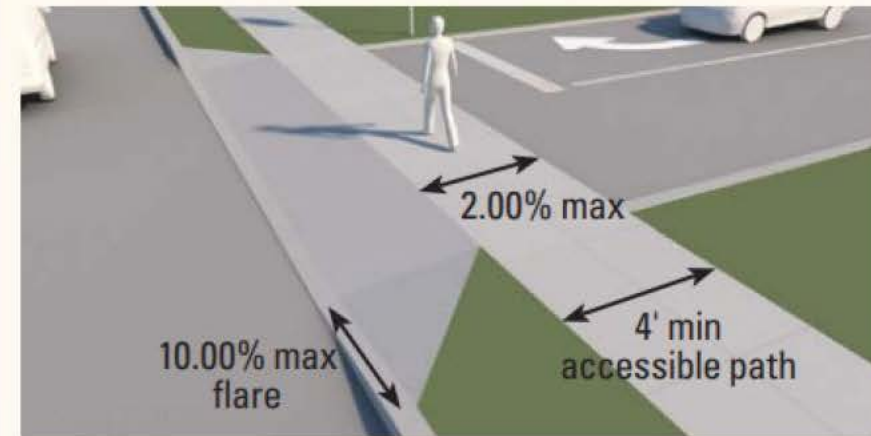
- Should face crosswalk
- Can't be too steep
- Smooth transition at bottom
- Truncated domes for the blind



ADA Curb Ramp Improvement Example  
in Arnada Neighborhood

# Driveways

- Steep grades and cross slopes at driveways are dangerous
- Provide as level a surface as possible
- Sidewalks should NOT stop at driveways





# Pedestrian Amenities

- Shade and shelter
- Seating
- Lighting and signage
- Trash cans
- Bicycle Parking
- Fitness Stations
- Water fountains
- Shops and stands





# Crosswalk Visibility

- High-visibility markings
- Improved lighting
- Parking restrictions on crosswalk approaches
- Curb extensions
- Advanced “Stop” markings and signs
- In-Street “Stop” signs





# Crosswalk Visibility



Low  
Visibility



High  
Visibility

# Crosswalks

- Follow shortest natural path
- Width depends on pedestrian volume
- Lighting above
- Safety islands
- Raised crosswalk
- Signage





# Visibility of Pedestrian in Crosswalk





# Curb Extensions





# Pedestrian Signals and Beacons



**Pedestrian Activated  
HAWK Signal**

*(High-Intensity Activated  
crossWalk beacon)*



**Rectangular Rapid  
Flashing Beacon  
(RRFB)**



**Diagonal Crosswalk**



# Pedestrians



# ANY QUESTIONS?



# Bicycles & Public Transportation



# Bicycles

Design for bicycle should focus on:

## 1. REDUCING CONFLICT



## 2. VISIBILITY



## 3. RIGHT-OF-WAY





# Bicycles

- Where can bicycles travel in New Jersey?





# Micromobility

- Where can e-bikes and e-scooters ride in New Jersey?
- It depends!

VEHICLE TYPES	PROPULSION METHOD	POWER SOURCE	MAX ASSISTED SPEED (MPH)	LICENSE & REGISTRATION	HELMET	PARK ON THE SIDEWALK?	TAKE ON TRANSIT?
<b>LOW-SPEED ELECTRIC SCOOTER</b> 	Kickstart and throttle	Electric	19mph	No	Under 17 years old	If not blocking access	Yes*
<b>LOW-SPEED ELECTRIC BICYCLE</b> 	Pedal and optional throttle	Electric (<750W)	20mph	No	Under 17 years old	If not blocking access	Yes*
<b>MOTORIZED BICYCLE</b> 	Pedal and optional throttle	Gas or Electric (<50cc/<1.5BHP)	28mph	Required	Required	No	No

<http://njbikeped.org/new-law-legalized-e-bikes-and-e-scooters-in-new-jersey/>

\* Restrictions may vary by agency. PATH and NJT restrict non-collapsible vehicles during peak travel times. Bus racks have limited availability and may not fit all bikes.

# Traffic Calming and Bicycle Boulevard



*For quiet residential streets  
use signage and traffic calming*



# Bicycle Lane



*4-foot minimum by curb*

*5-foot standard*

*6-foot preferred*

*7-foot for contra-flow*

*Buffer, even better!*



# Protected Bicycle Lane

- 5' bike lane + 3' buffer
- Not optimal if many driveways
- Consider loading areas, bus stops, and turning vehicles





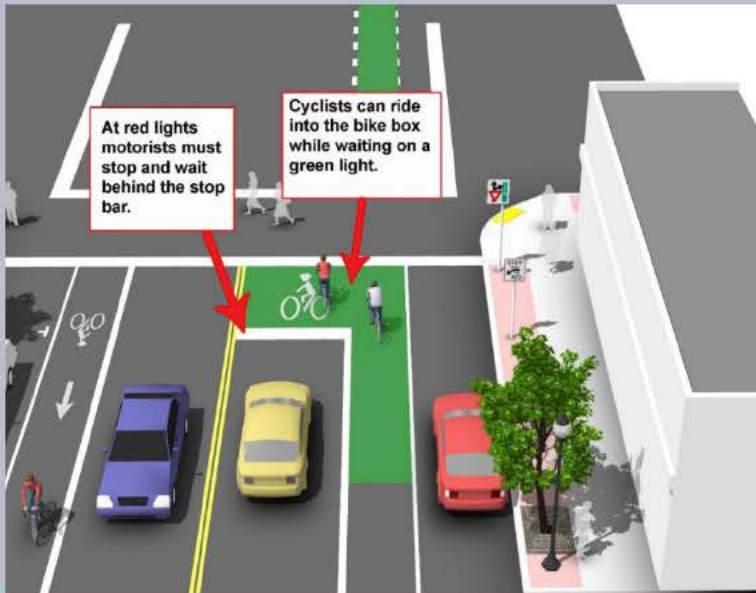
# Bicycle Paths

- Two-way
- Minimum 8-feet, preferred 10-feet, best 12-feet+
- Best with minimal intersections and driveways





# Other Bicycle Options



Bicycle box at intersections



Bike Signal



Bike Parking



# Bicycles

ANY QUESTIONS?





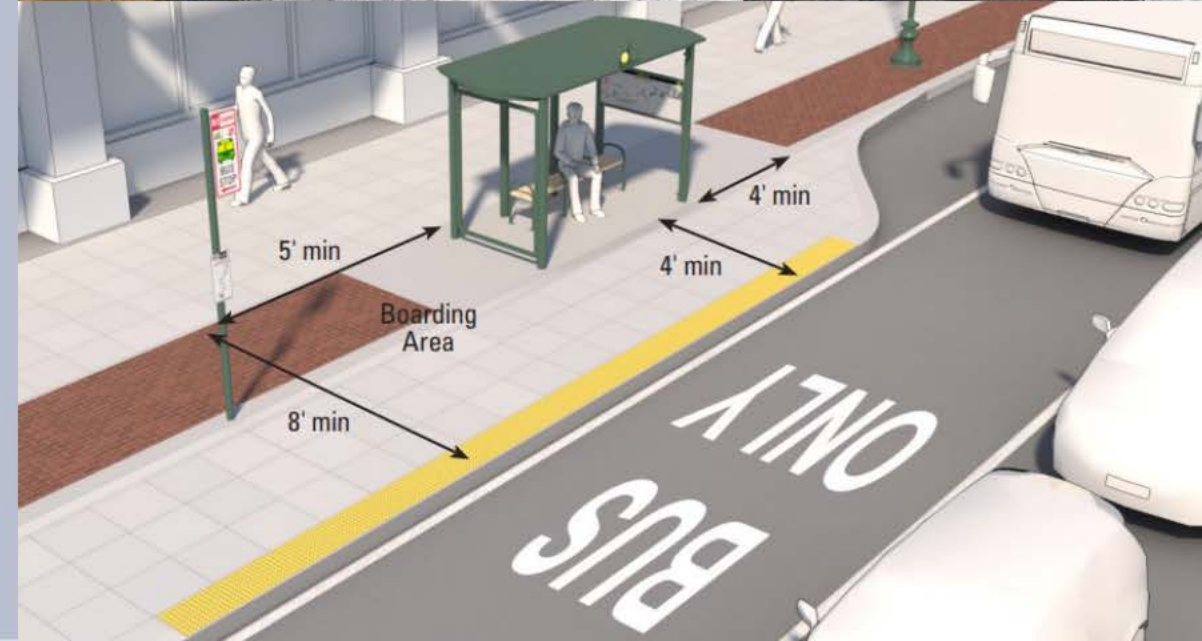
# Public Transportation





# Bus Shelters

- Should include seating, lighting, & travel information
- Should be ADA compliant
- Should not impede pedestrian flow





# Marked Bus Lanes

- Provide a dedicated space for buses in the street







# Public Transportation

**ANY QUESTIONS?**



# Reducing Speeding



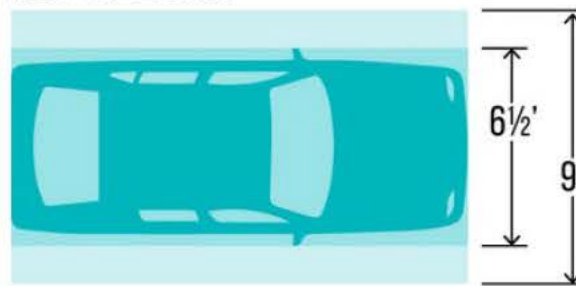
# Reducing Speeding

- Design for lower speeds
- Wide = fast
- Narrow the view

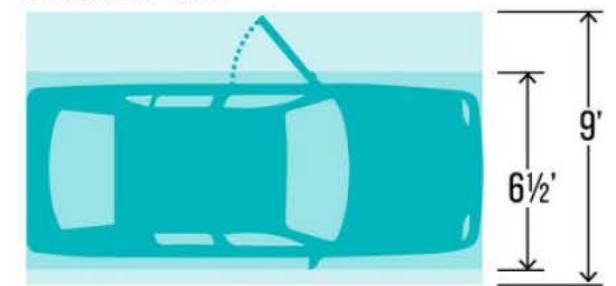
STANDARD 40' BUS



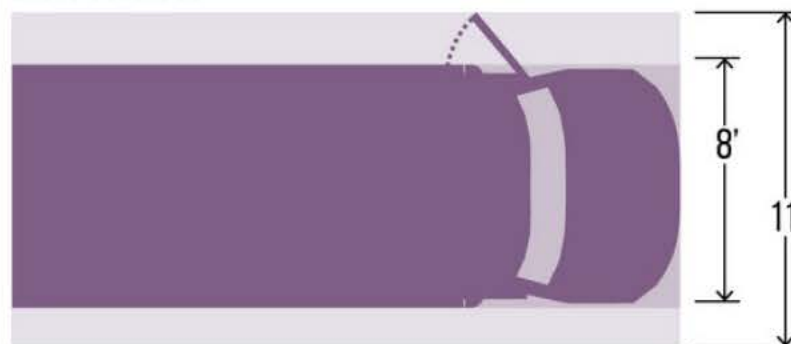
MID-SIZE CAR



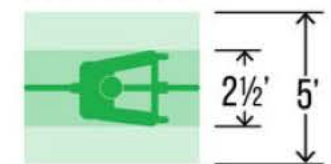
PARKED CAR



BOX TRUCK



BICYCLIST





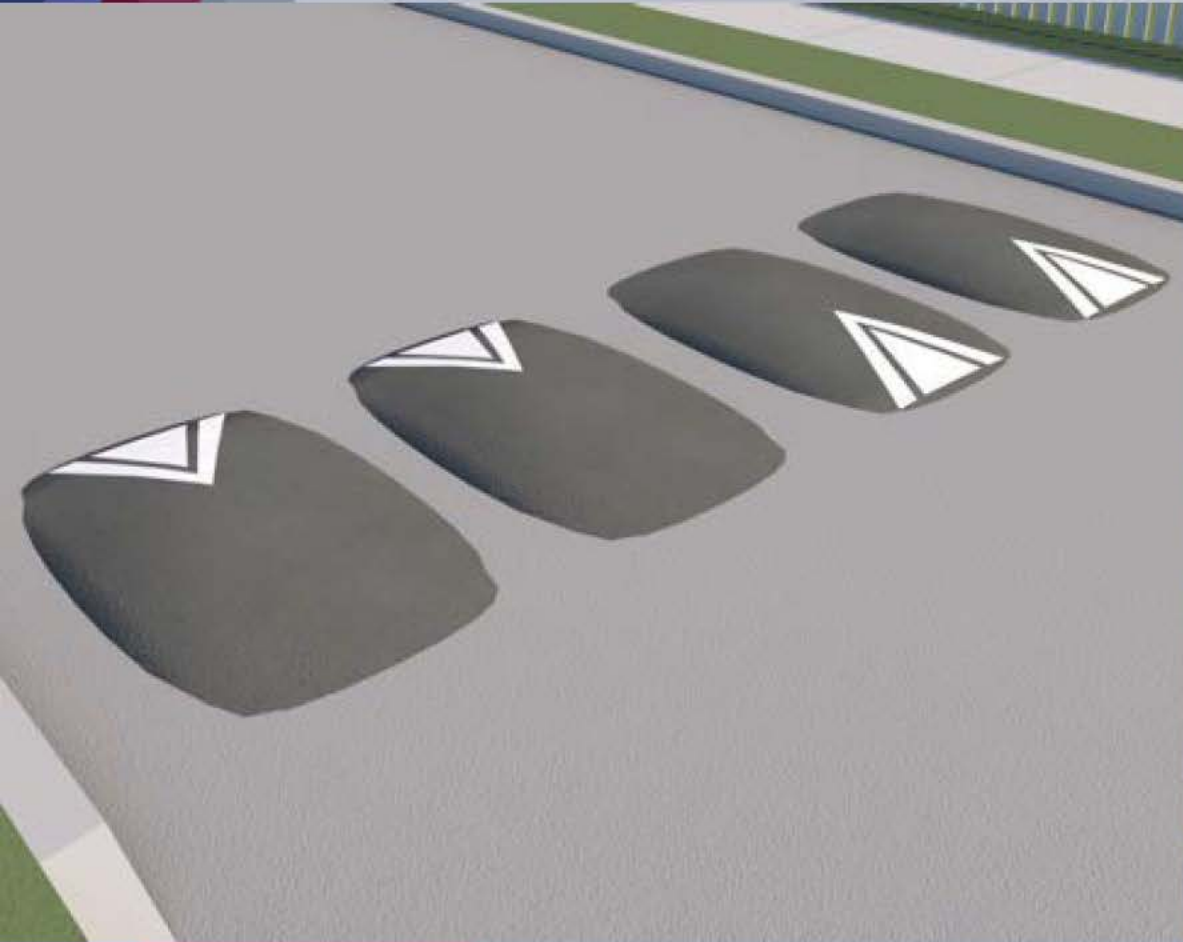
**Narrow View**



*Hopewell Borough, NJ*



# Vertical Speed Control: *Speed Bumps*





# Vertical Speed Control: *Raised Crosswalks*





# Horizontal Speed Control: *Neckdowns / Chicanes*





# Horizontal Speed Control: *Tighter Turns*



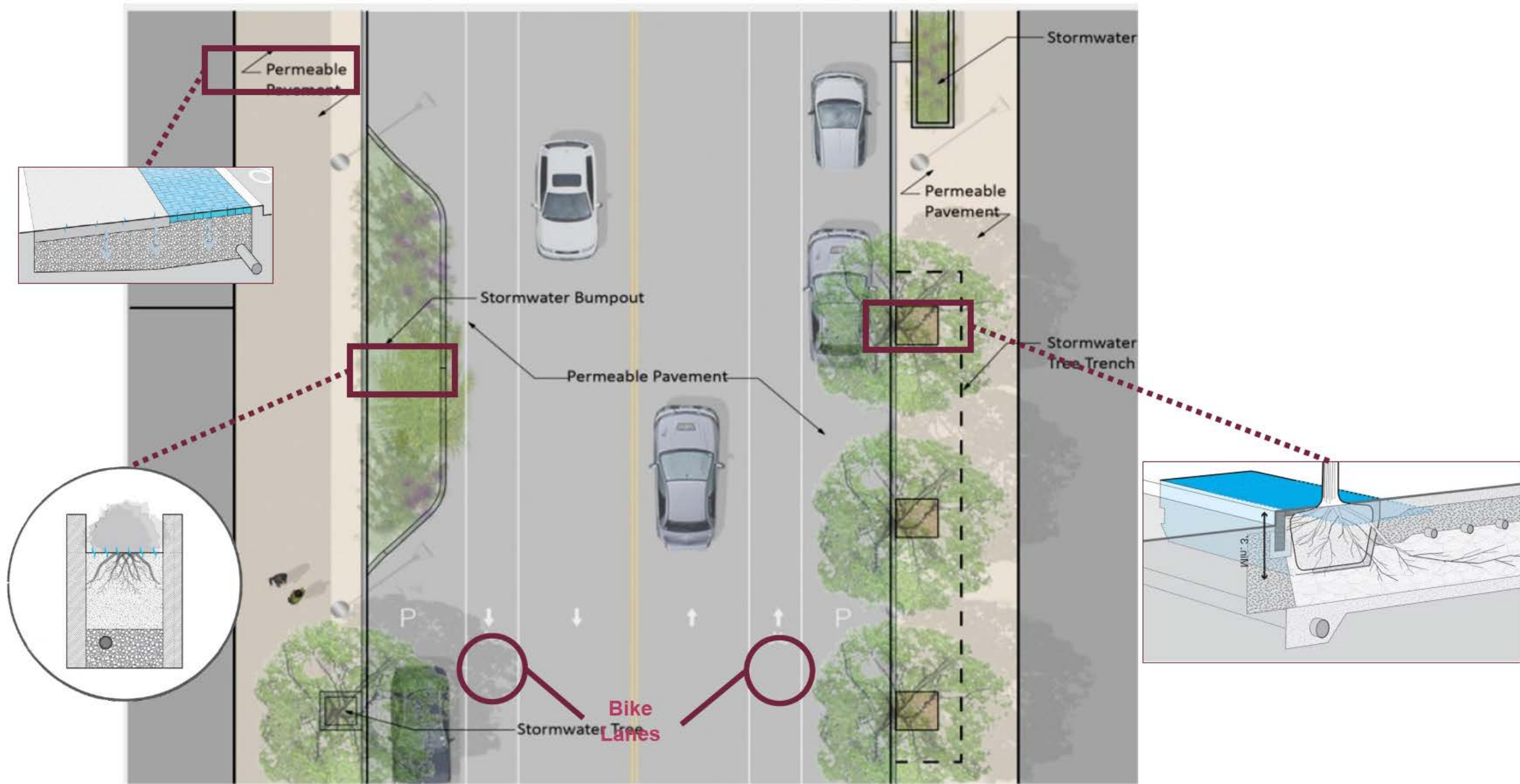


# Horizontal Speed Control: *Traffic Diversions*





# Green Streets







# Street Trees



Lower average speed



Reduced stormwater runoff



Improved air quality and health



Increased property values



Lower crime rates

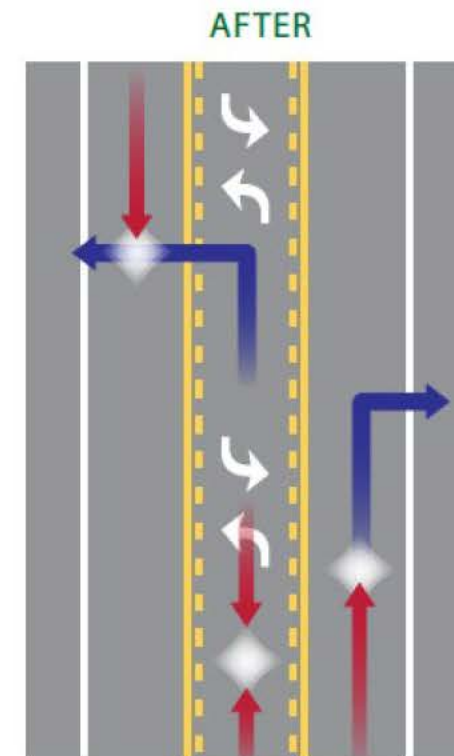
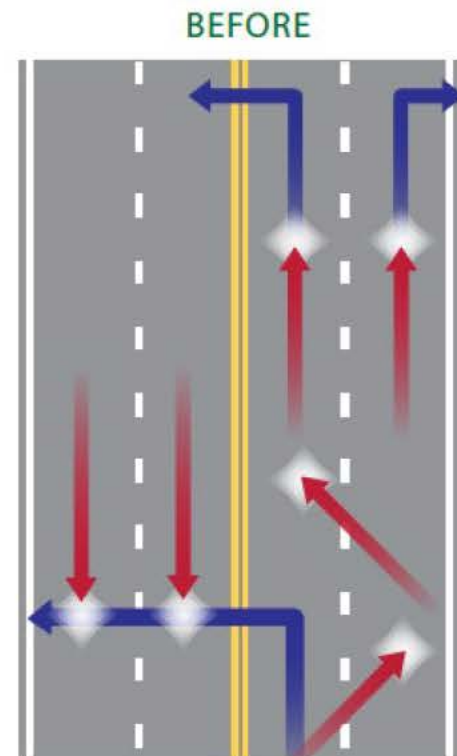
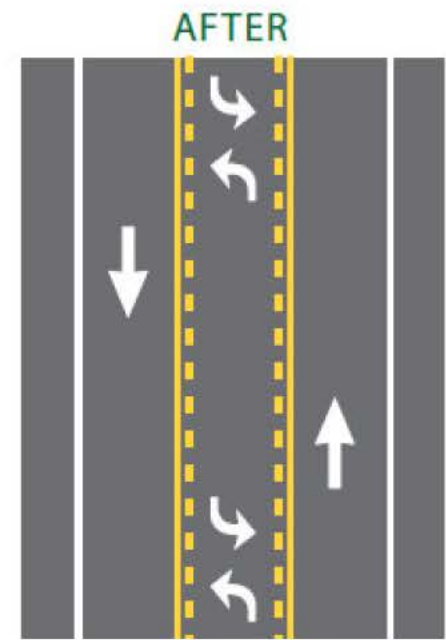
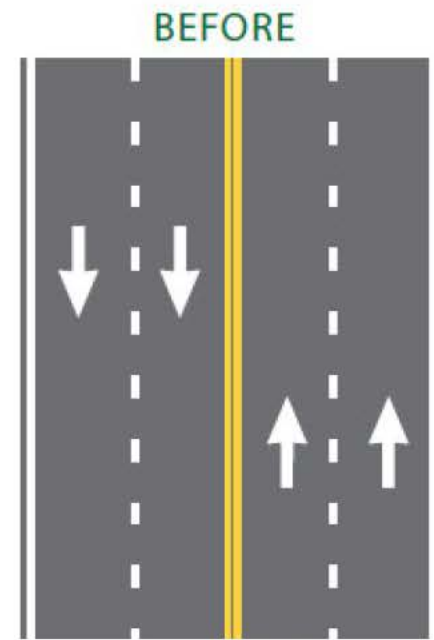


Reduced urban heat island effect



# Speed Strategies

- Road Diet
- Reduce congestion
- Other options:
  - Wider sidewalks
  - Bike paths
  - Diagonal parking
  - Green space





# Speeding



**ANY QUESTIONS?**  
*(Don't forget about aesthetics!)*

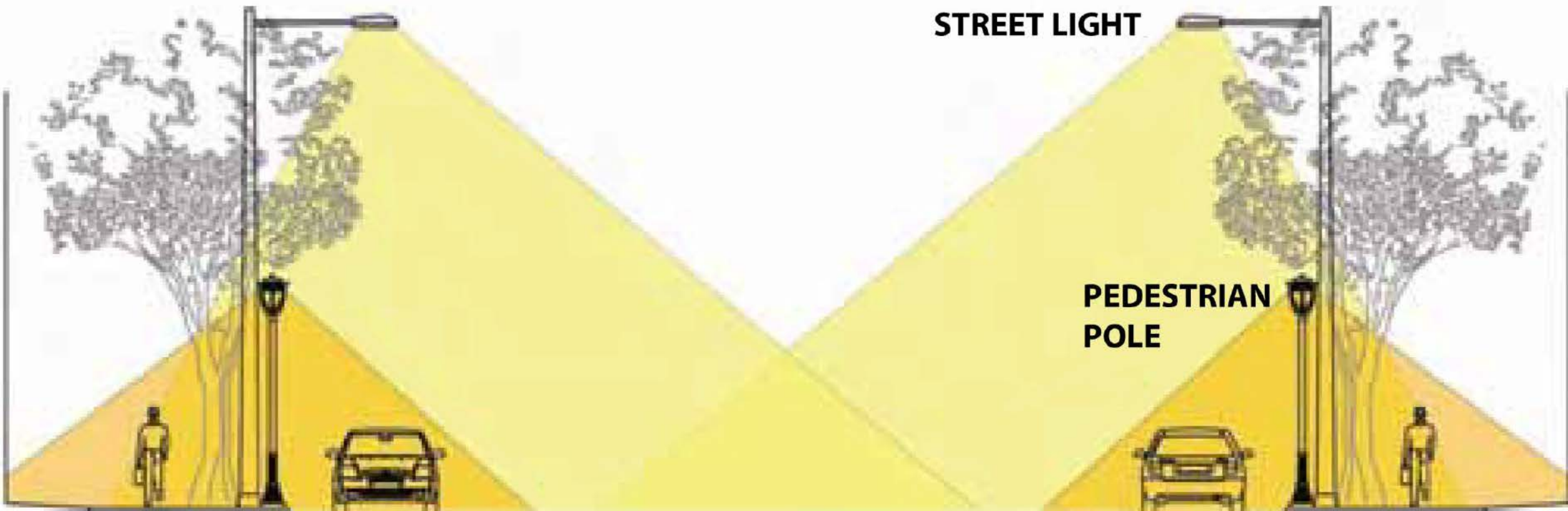


# Lighting



# Street Lighting

- If it's not Complete at night, it is not Complete
- Lighting provides visibility for safety and security
- Pedestrian scale lighting, below the tree line
- Intersections, roundabouts, and crossings require special lighting





**NIGHTTIME**





# Street Lighting



*Light pollution*



*Aesthetics*

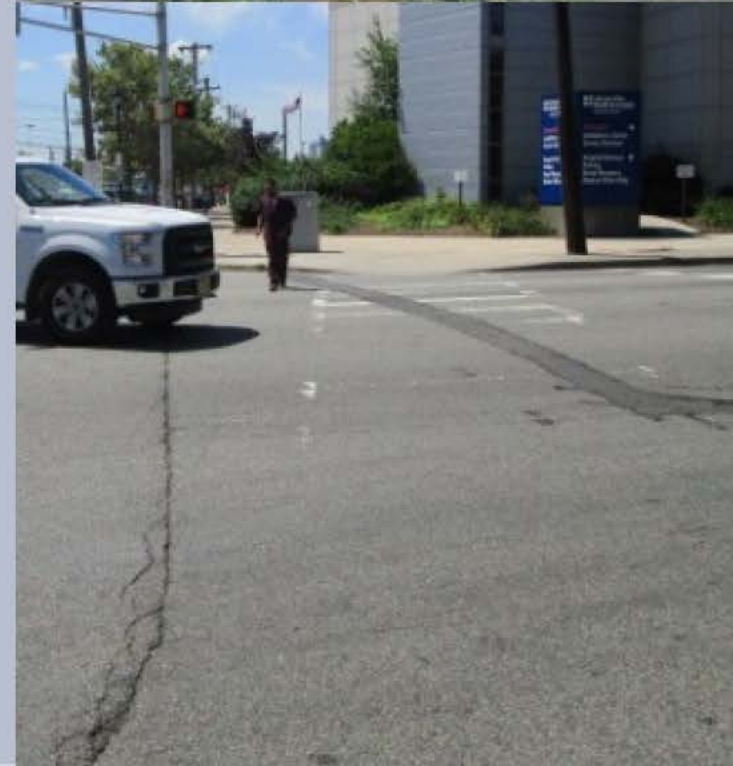


# The Walk Audit



# Conducting the Walk Audit

- Take an in-depth look at corridor
- What is working and what needs improvement?
- Organize, summarize, and share priorities





# Conducting an Audit

- Take photos and notes!
- Talk to people
- Use tools to measure, as needed
- Always be careful with traffic



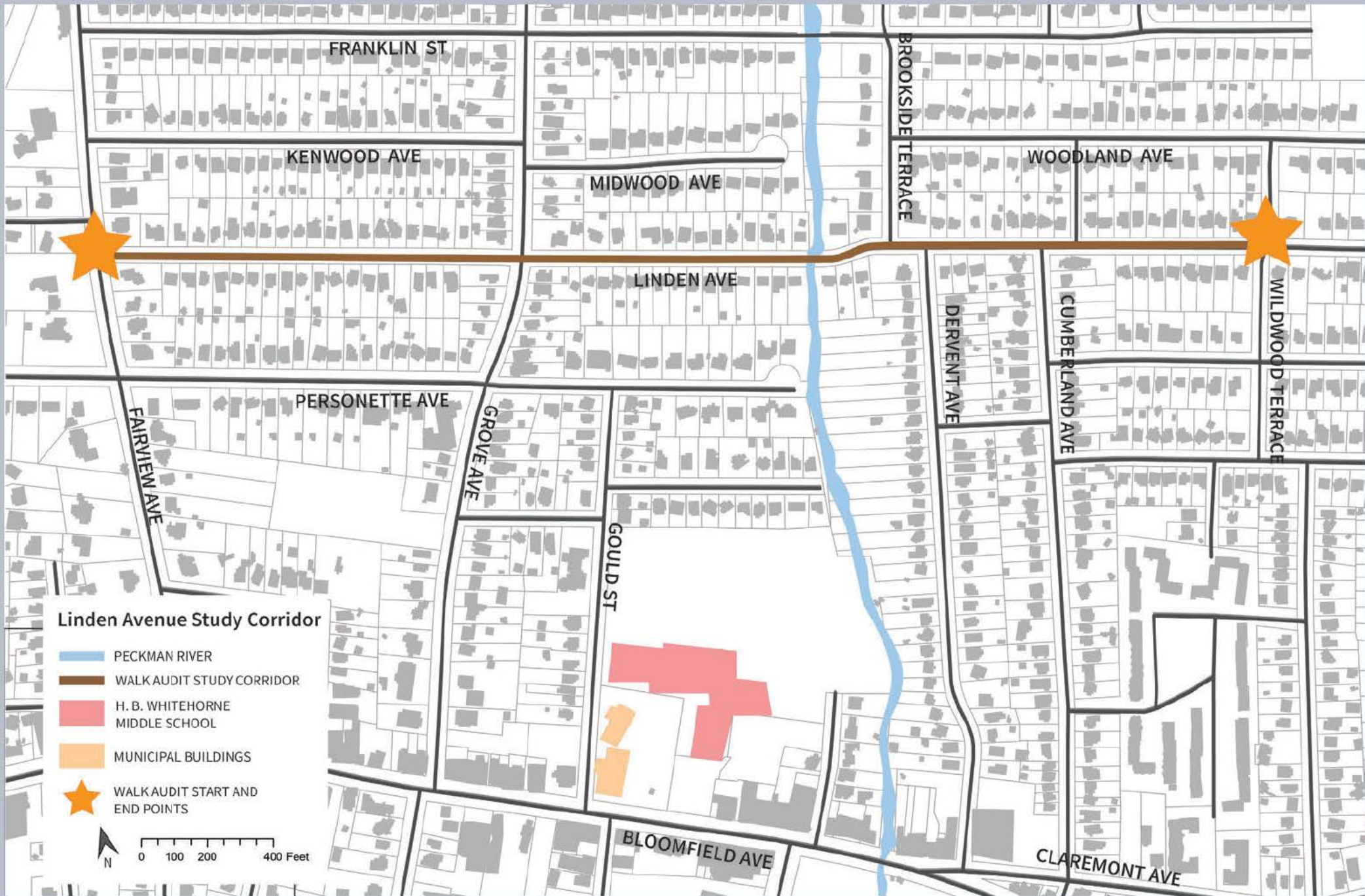


# Taking Good Photos



3 weeks later...where was this?







# Thank you!

