

# The SJTPO Region



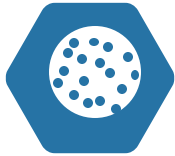
**590K**  
People



**363**  
Density



**1.7M**  
People (Summer)



**978**  
Density (Summer)



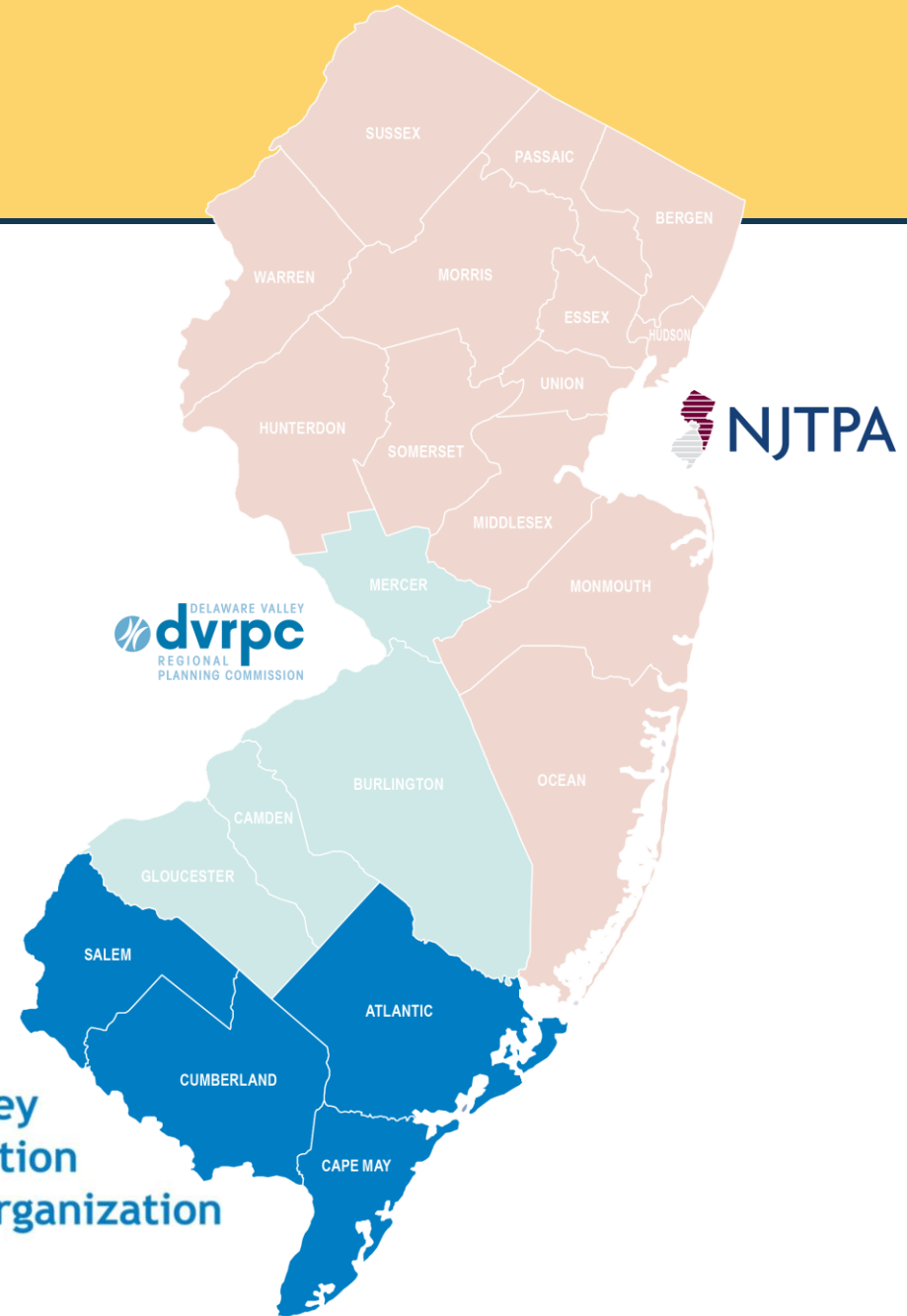
**68**  
Municipalities



**8,700**  
Residents Each



South Jersey  
Transportation  
Planning Organization



# The Local Road Safety Plan Process



- County + Municipal = Countywide
- 5-year actionable plan
- Prioritized list of issues, risks, actions, and improvements
- Safe System Approach
- Locally coordinated and owned by counties and municipalities
- Strategies encompass 5 Es
- Opportunity

# SJTPO Region Emphasis Areas



<b>Atlantic</b>	✓	✓	✓	✓	
<b>Cape May</b>	✓		✓	✓	✓
<b>Cumberland</b>	✓	✓	✓	✓	
<b>Salem</b>		✓	✓	✓	

# Comprehensive Approach to Safety

## Hot Spot Approach

- Reactive
- Mitigates Past Crashes
- Location Specific Countermeasures
- Site Specific BCA



## Systemic Approach

- Proactive
- Mitigates Risk
- Widespread, Low-Cost Countermeasures
- Network View



**Comprehensive  
Safety  
Approach**

# Data Collected

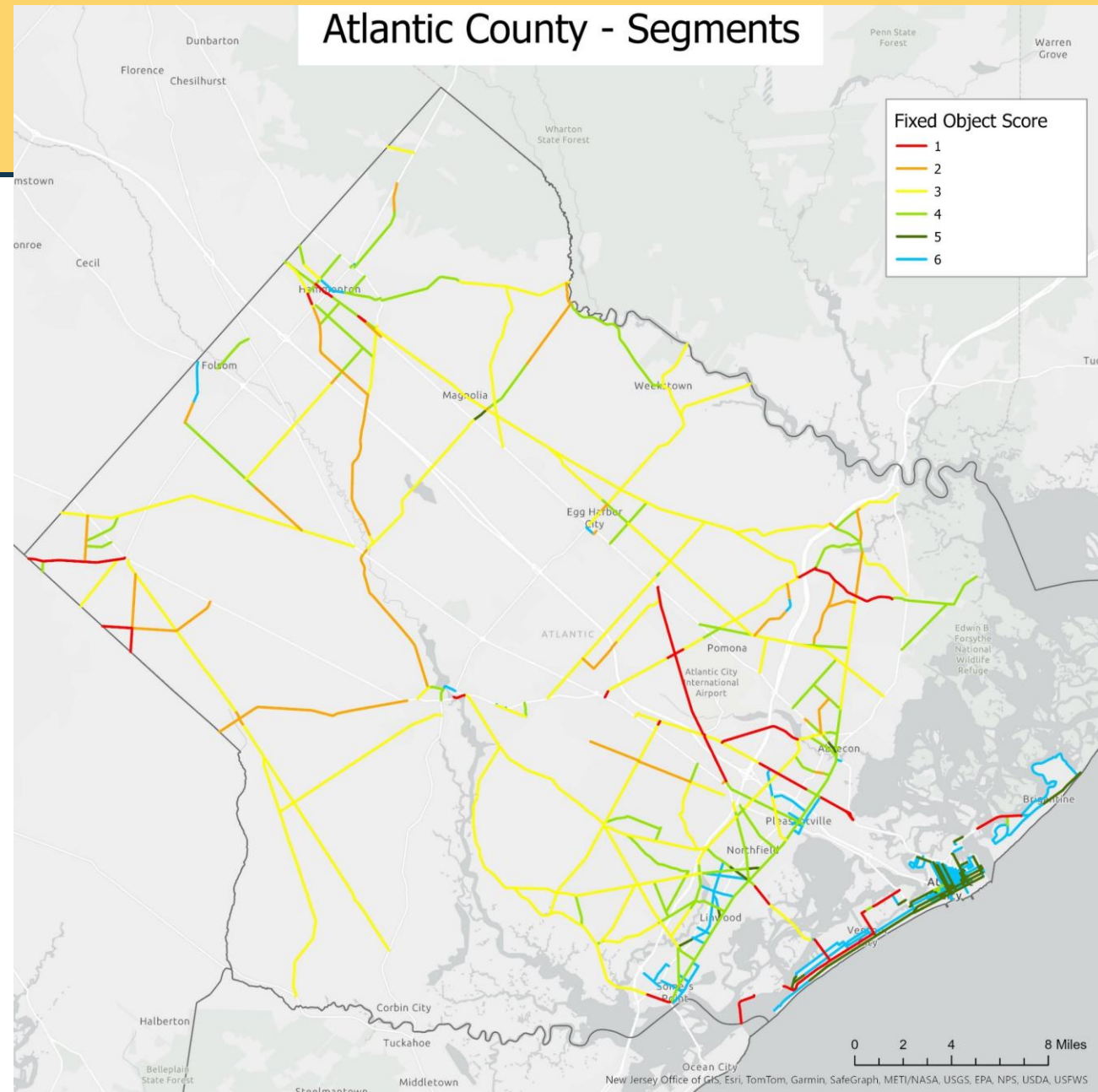
Crashes	Roadway Attributes	Demographics	Plans/Policies
<ul style="list-style-type: none"><li>➔ All crashes</li><li>➔ Fatal and Suspected Serious Injury</li></ul>	<ul style="list-style-type: none"><li>➔ Volume</li><li>➔ Posted Speed</li><li>➔ No. of lanes</li><li>➔ Lane width</li><li>➔ Etc.</li></ul>	<ul style="list-style-type: none"><li>➔ 2021 ACS</li><li>➔ Gender</li><li>➔ Age</li><li>➔ Race</li><li>➔ Etc.</li></ul>	<ul style="list-style-type: none"><li>➔ Strategic Plans</li><li>➔ Complete Street Policies</li><li>➔ Studies</li></ul>

# Systemic Analysis

## Segments

### Target Crash Type: Fixed Object

Score	Recorded Speed	Object Offset	Functional Class	Lane Width	Crash Frequency	% Total Centerline Miles
1	35 MPH or higher	> 10 ft	Minor Arterial or larger	Any/All	0.351	8%
2	35 MPH or higher	> 10 ft	Major or Minor Collector	Any/All	0.208	11%
3	50 MPH or higher	≤ 10 ft	Any/All	Any/All	0.171	43%
4	35 to 45 MPH	≤ 10 ft	Any/All	Any/All	0.1	21%
5	30 MPH or lower	Any/All	Any/All	11.5 ft or less	0.029	5%
6	30 MPH or lower	Any/All	Any/All	12 ft or greater	0.001	12%



# Atlantic County Systemic Treatment Priorities



Install mid-block crossings  
(14 locations)

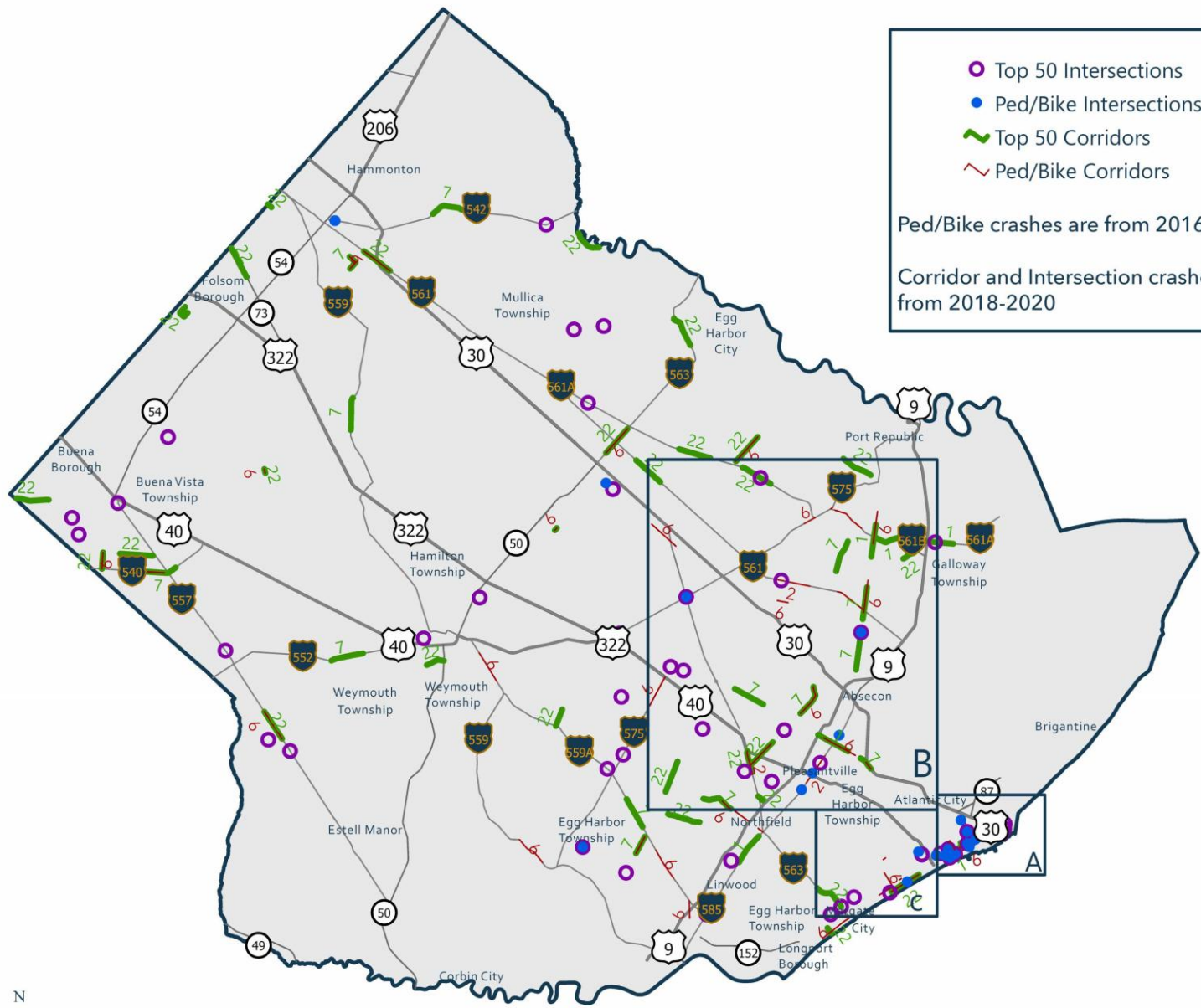


Install new crosswalks  
(4 intersections)



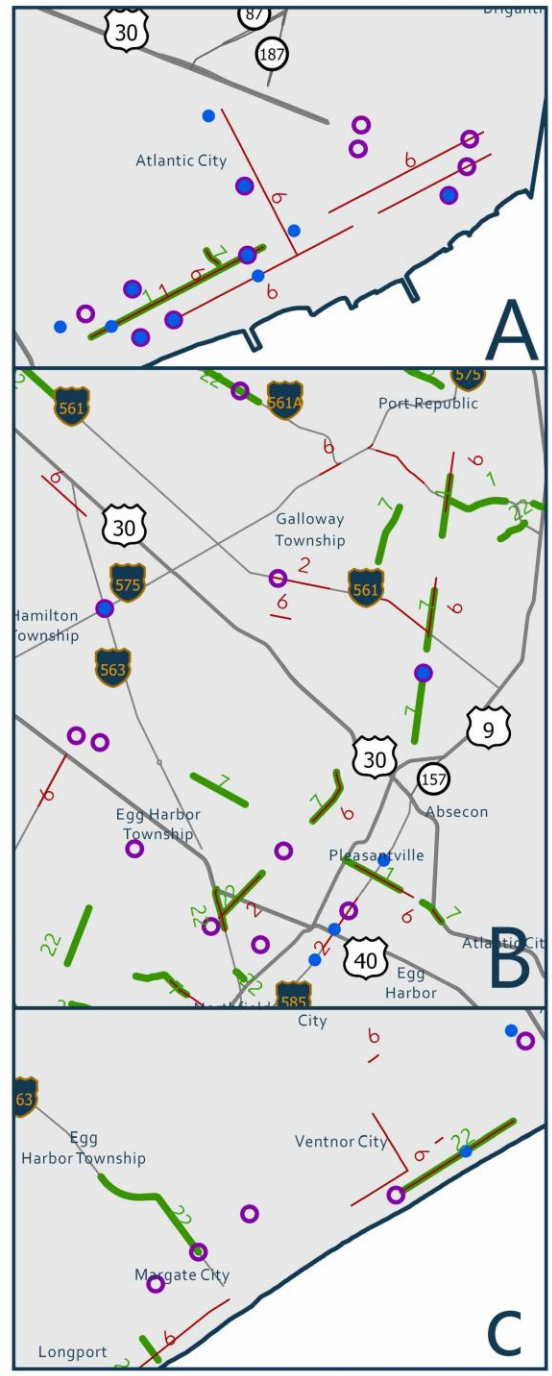
Upgrade existing crosswalks  
(253 locations)

# High Injury Network: Atlantic County



- Top 50 Intersections
- Ped/Bike Intersections
- Top 50 Corridors
- Ped/Bike Corridors

Ped/Bike crashes are from 2016-2020  
 Corridor and Intersection crashes are from 2018-2020



# Infrastructure Priorities

Specific High-Crash Corridors / Intersections

Systemic Treatment Locations

	Specific High-Crash Corridors / Intersections	Systemic Treatment Locations
<b>Atlantic</b>	<b>10</b>	<b>271</b>
<b>Cape May</b>	<b>7</b>	<b>199</b>
<b>Cumberland</b>	<b>6</b>	<b>206</b>
<b>Salem</b>	<b>10</b>	<b>209</b>

Fire Rd

**Proposed Project:** Fire Road (CR 651) from Hingston Road to Roosevelt Avenue (MP 7.55 - 8.61), Egg Harbor Township

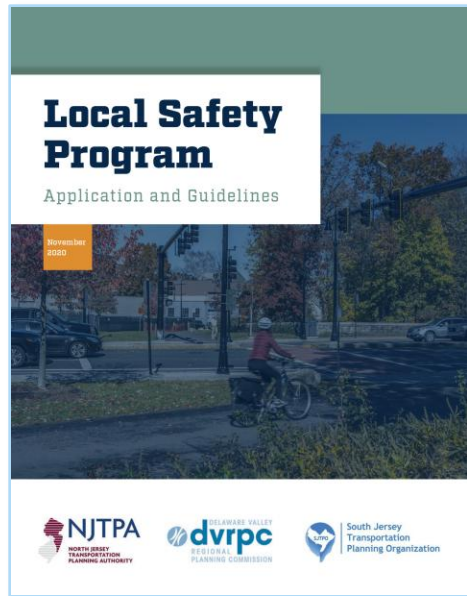
**Estimated Cost:** \$421,000

**Site Score:** 6

# Non-Infrastructure Strategies

Action	Atlantic	Cape May	Cumberland	Salem
Conduct Public Awareness Campaigns	✓	✓	✓	
Education of new drivers, visitors, non-English speakers	✓	✓	✓	✓
Education through schools	✓	✓	✓	✓
Targeted/high-visibility enforcement campaigns		✓	✓	
Agreements when renting bicycles, low-speed vehicles		✓		

# Moving Forward- Year 3



- Support anticipated project applications for HSIP Local Safety Program
- Support anticipated project applications for USDOT SS4A funding
- Support regional partners in implementing behavioral strategies



U.S. Department of Transportation

# Hudson County Vision ZERO



Tanner Thul, AICP, Senior Transportation Planner  
BPAC Meeting  
June 3rd, 2025

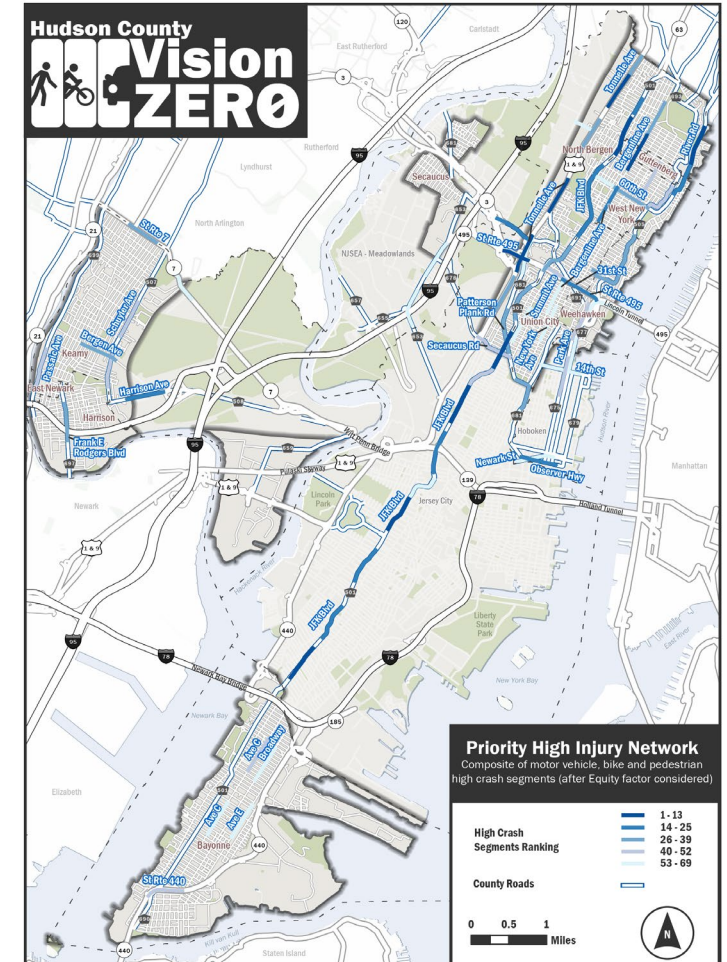


**CRAIG GUY** *Craig Guy*  
COUNTY EXECUTIVE

& The Board of County Commissioners

# Background on Hudson County's Effort

- **Executive Order / Creation of the Task Force – August 2023**
- **Funded by Safe Streets for All (SS4A) grant**
- **Plan Process - 2024**
- **Scope**
  - All County Roads
  - Local Roads – excluding:
    - Jersey City and Hoboken (already have VZ initiatives)
    - Meadowlands District (working on VZ initiative)
    - US Highways & Interstates are excluded – Except Tonnelle Ave
- **The Plan will be the blueprint for the County's approach to Vision Zero moving forward**

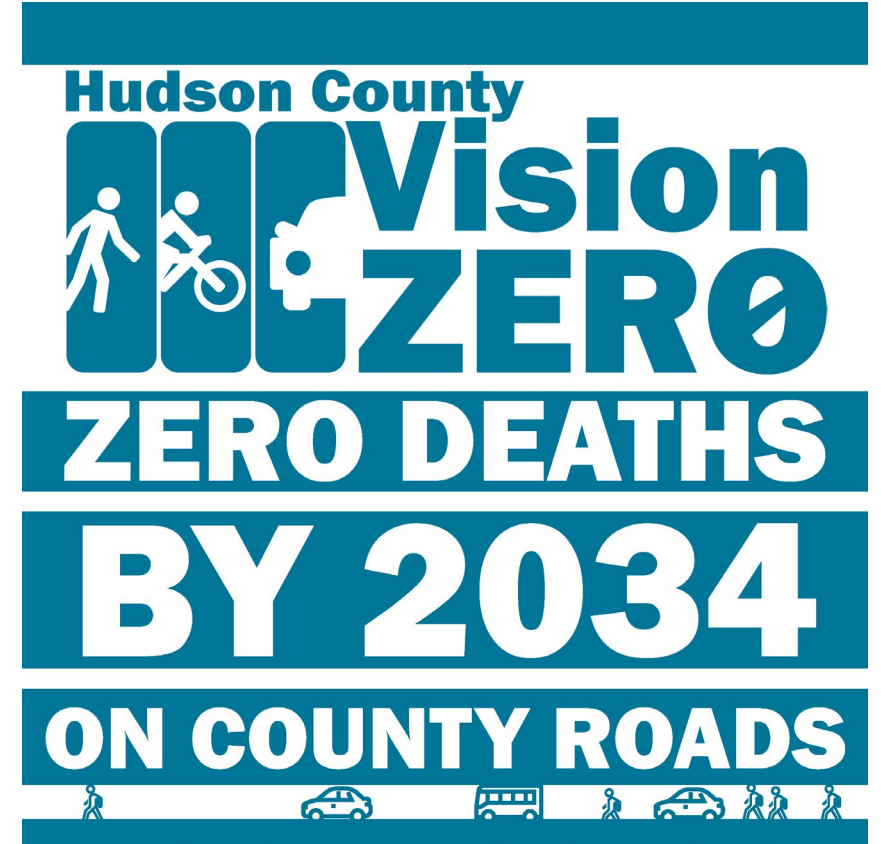


# Plan's Themes and Actions

1. Change the Culture of Traffic Safety
2. Design and Build Streets that are Safe for Everyone
3. Partner and Collaborate
4. Enhance Transit and Active Transportation

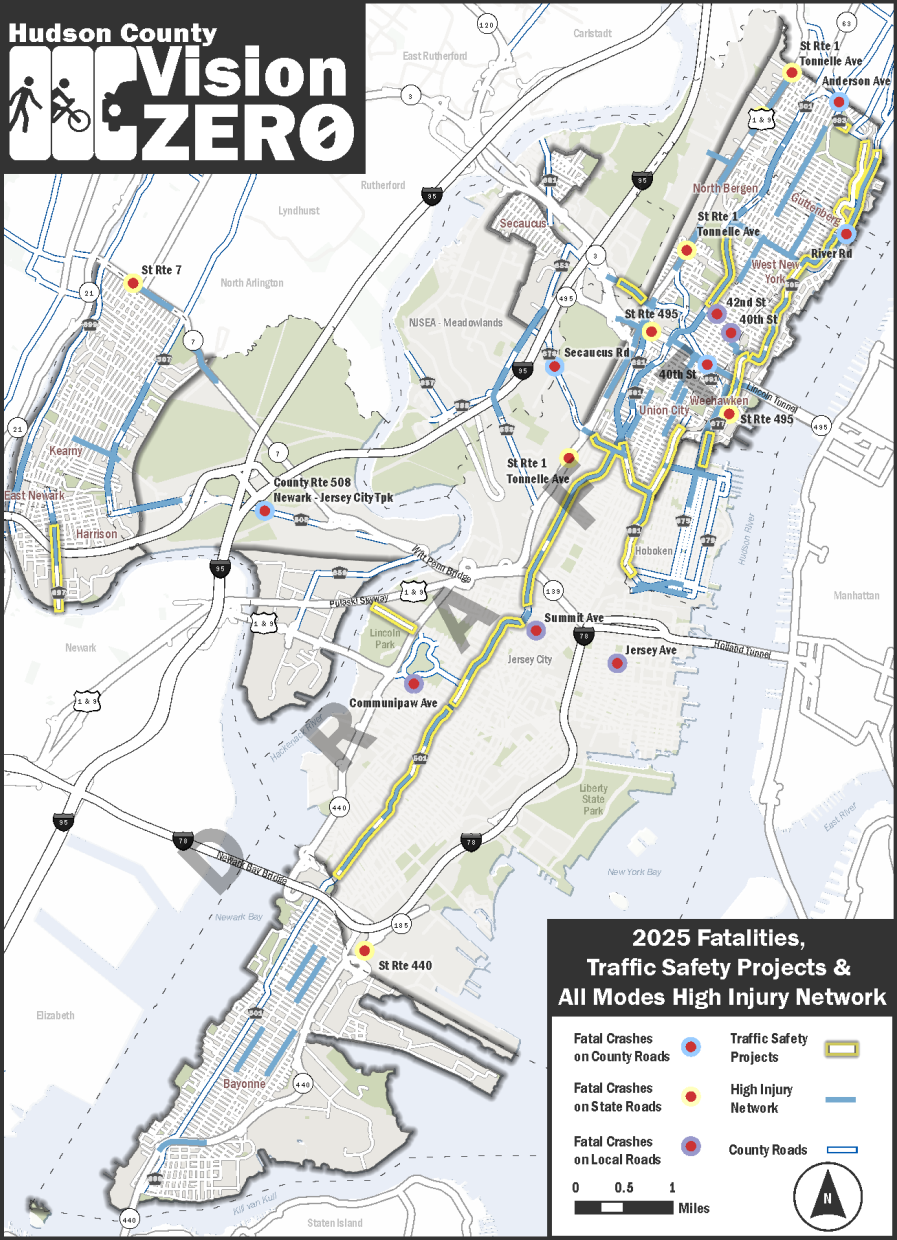
Over 90 actions total with 34 actions proposed for 2025.

Actions focus on **County led** prioritization, policy, and process changes and improvements with **strong support from stakeholders**





# Progress in Year One



# Fatality Crash Data for 2026

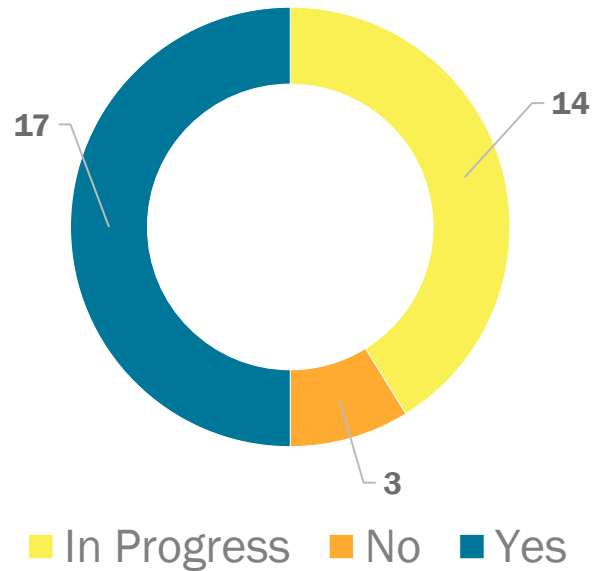
**TOTAL ON ALL STATE ROADS-578**

**TOTAL ON ALL ROADS IN THE COUNTY - 22**

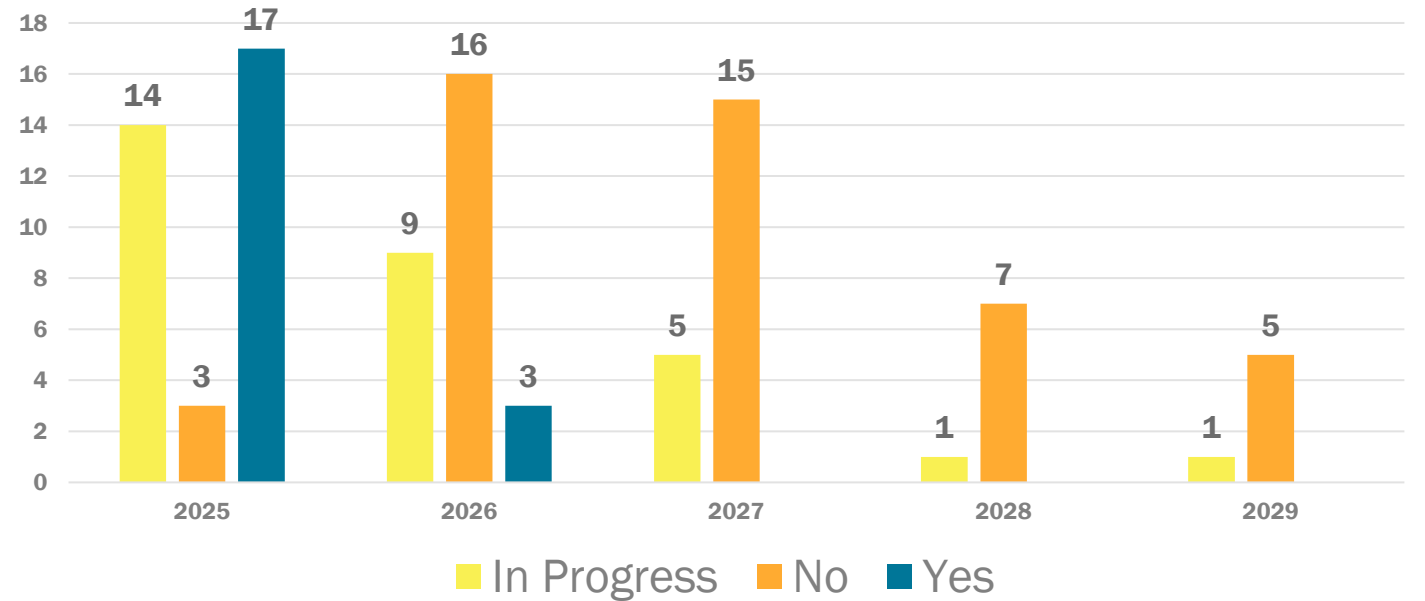
**COUNTY ROADS- 6**

# Progress on Action Items

## 2025 Action Items



## Action Items- 5 Year Horizon





# Highlights from Year One- Capital Projects

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**River Road Bike Lane**

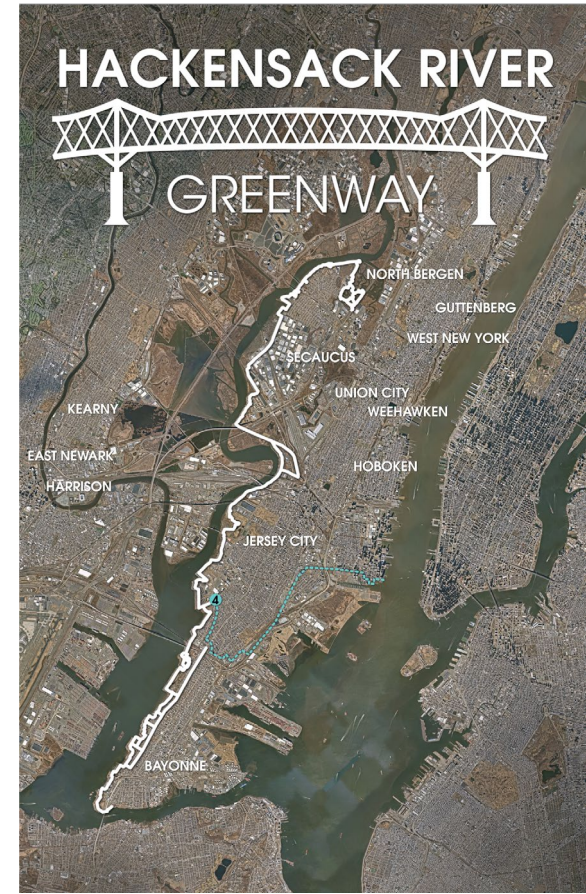
**14<sup>th</sup> Street Viaduct Shared  
Use Path**

# Policy and Grants

Expanding Greenways and green connectivity

NJ DOT Bikeway Grants Throughout County

Land Development Regulation



# Engagement and Projects

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Park(ing) Day

Walkability Audit

Bus Rapid Transit Study

Public Engagement Plan



# Next Steps

Embedding VZ principles into existing processes

Shape and reshape policy

Build collaboration -  
Municipal and advocate

Reset and Refocus



JUNE 2026 BPAC

# Middlesex County Vision Zero Action Plan and Safety Initiatives

**Vijayant Rajvanshi, AICP**  
Director of Planning  
Middlesex County Department of Transportation



# DESTINATION 2040

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MIDDLESEX COUNTY ♦ NJ  
STRATEGIC PLAN

## Our Path Forward

- 20-year vision for Middlesex County
- Roadmap for how to align priorities and advance initiatives
- Five broad focus areas aligned with County Departments and offered services

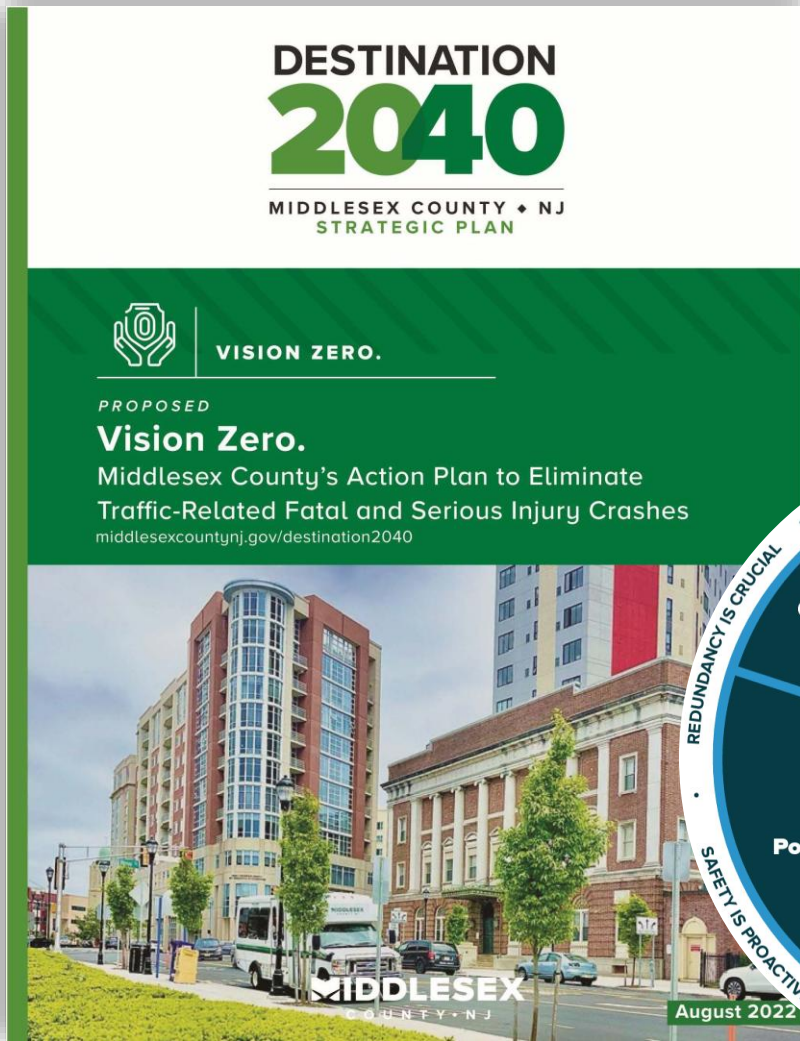
## Targeted Strategies

(Specific to Safety)

- Implement the first countywide **Vision Zero initiative** in New Jersey.
- Adopt a **Complete and Green Streets Policy**.



# Vision Zero



## Middlesex County Vision Zero Action Plan

JULY 21, 2022

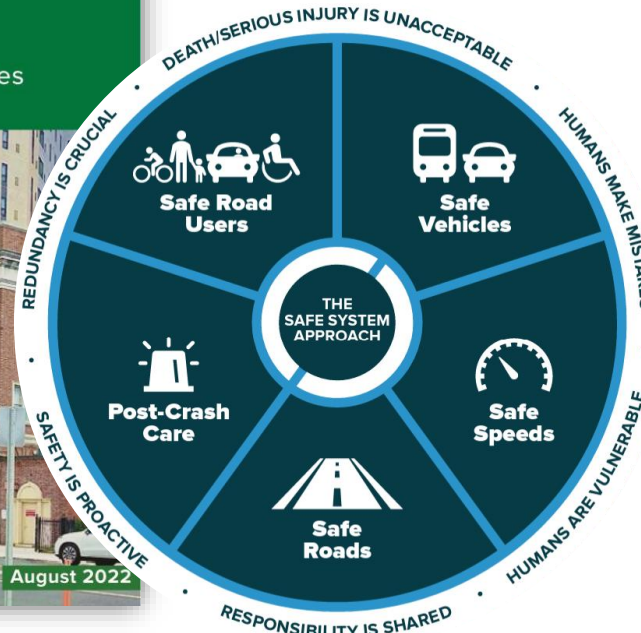
BOARD OF COUNTY COMMISSIONERS ADOPT A VISION ZERO PLEDGE

AUGUST 10, 2022

VISION ZERO PARTNERSHIP KICKOFF MEETING

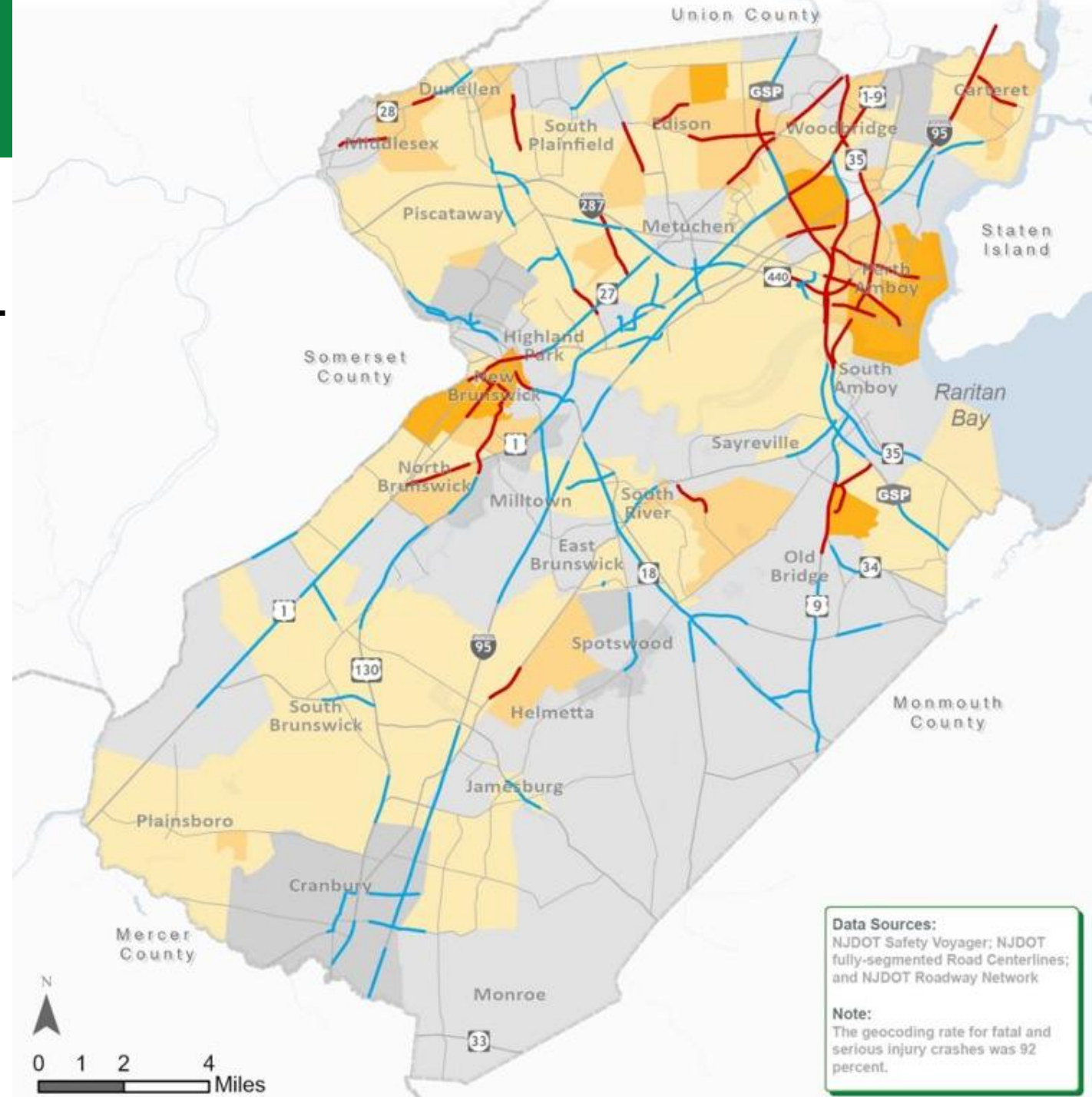
SEPTEMBER 1, 2022

BOARD OF COUNTY COMMISSIONERS ADOPT THE VISION ZERO ACTION PLAN

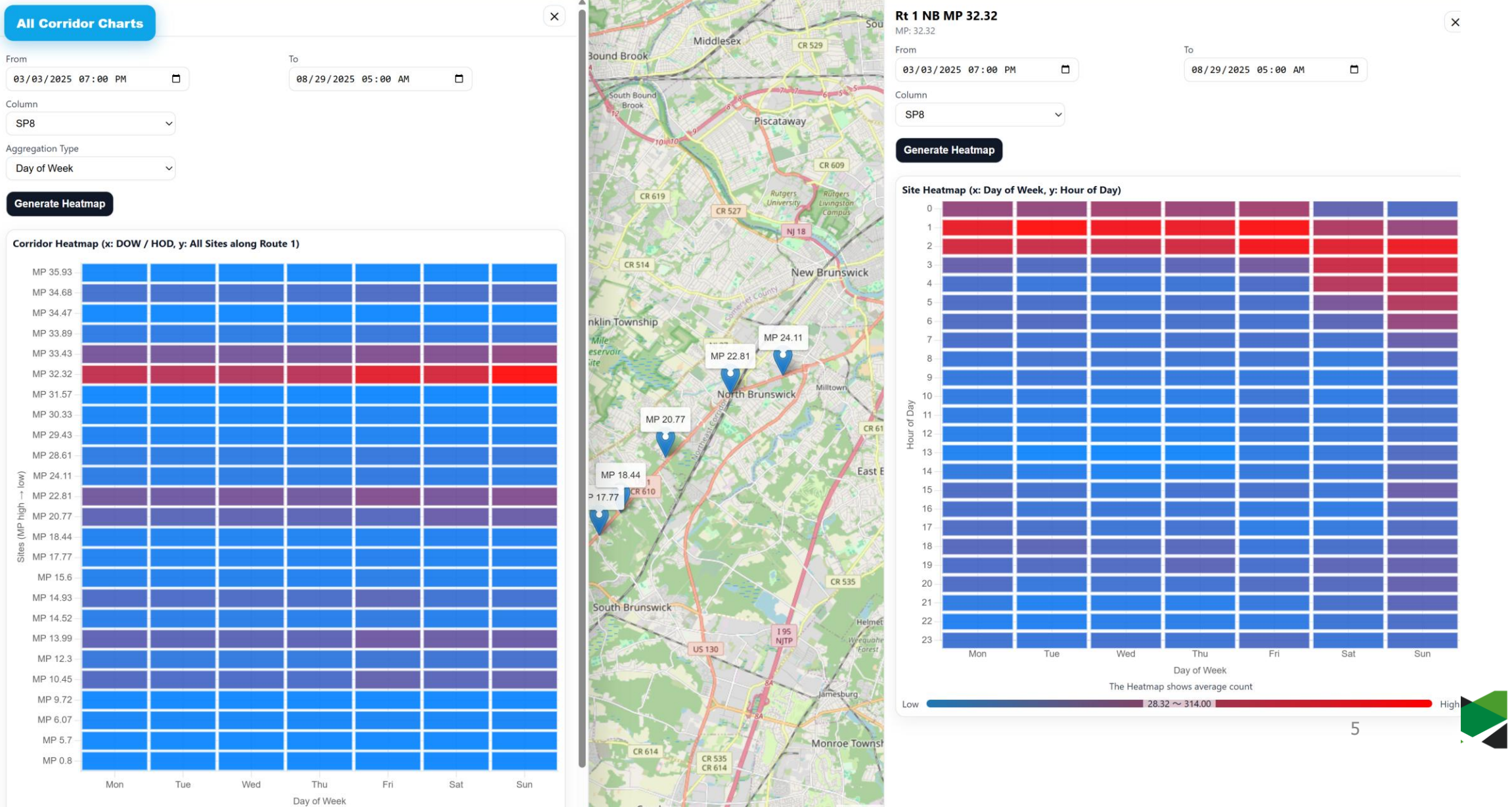


# High Injury Network

## HIN BY INDICATORS OF POTENTIAL DISADVANTAGE



# US-1 Speed Violation Visualization (For Enforcement by County Prosecutor's Office in Support of Vision Zero)



# Complete Streets Policy (work underway)

**“Adopt NJDOT’s model complete and green street policy as County policy. Encourage municipalities to follow suite”**

- D2040 Strategic Initiative T2

**“Establish continuous Complete Street networks...”**

- Middlesex County Vision Zero Action Plan Item SR5

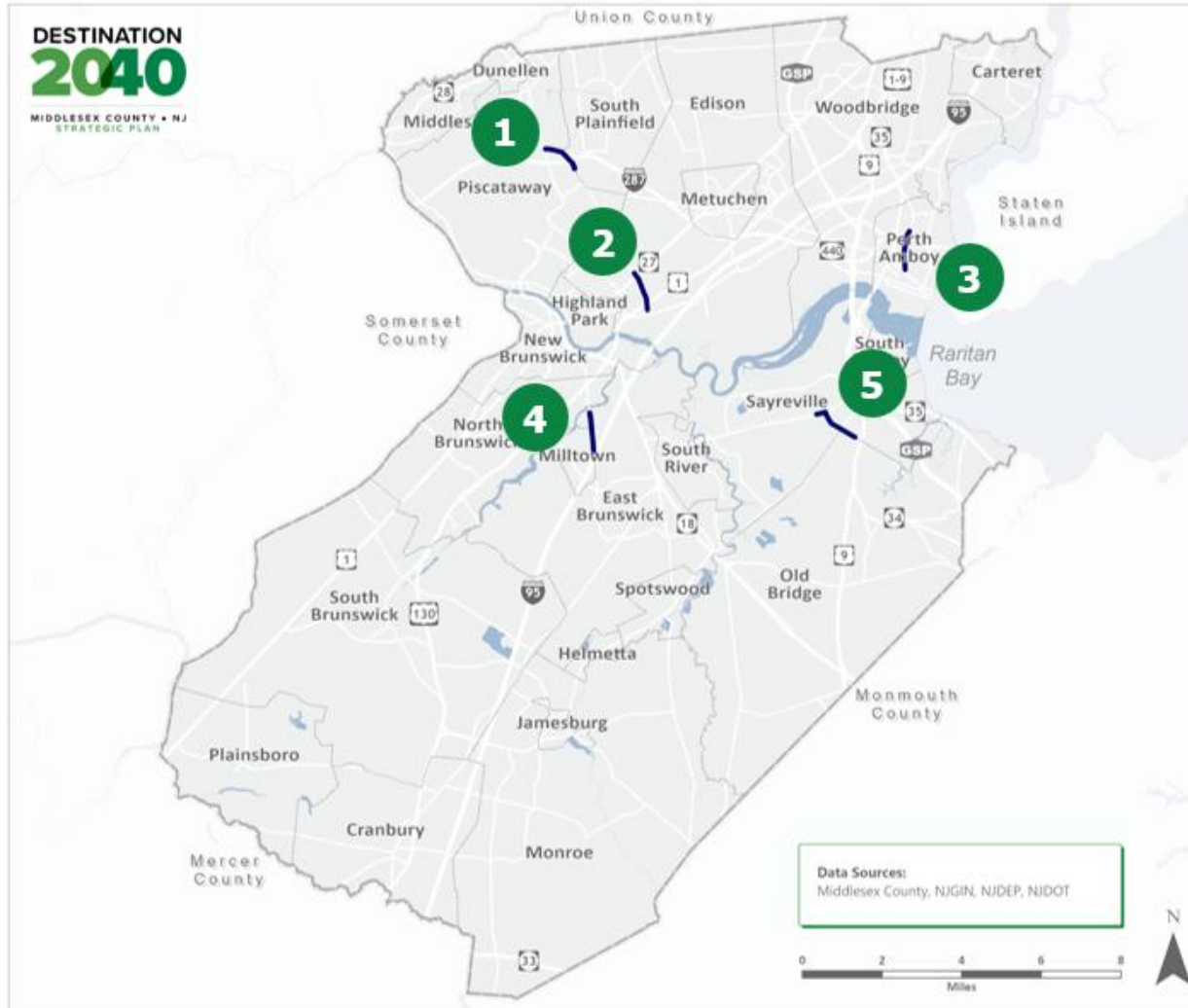
6/3/2026

Middlesex County Department of Transportation



Amboy Ave (CR 653), Perth Amboy (2024)

# Road Safety Audits for Five Corridors



**Map 1: Road Safety Audit (RSA) Corridors**

**MIDDLESEX COUNTY • NJ**  
Middlesex County Road Safety Audits, 2024



**Legend**

- RSA Corridors
- ▭ Middlesex County
- ▭ Municipalities of Middlesex County
- ▭ Water Bodies

*Prepared: September 20, 2024*  
*By: Middlesex County Office of Planning*



# Grant Funded Projects

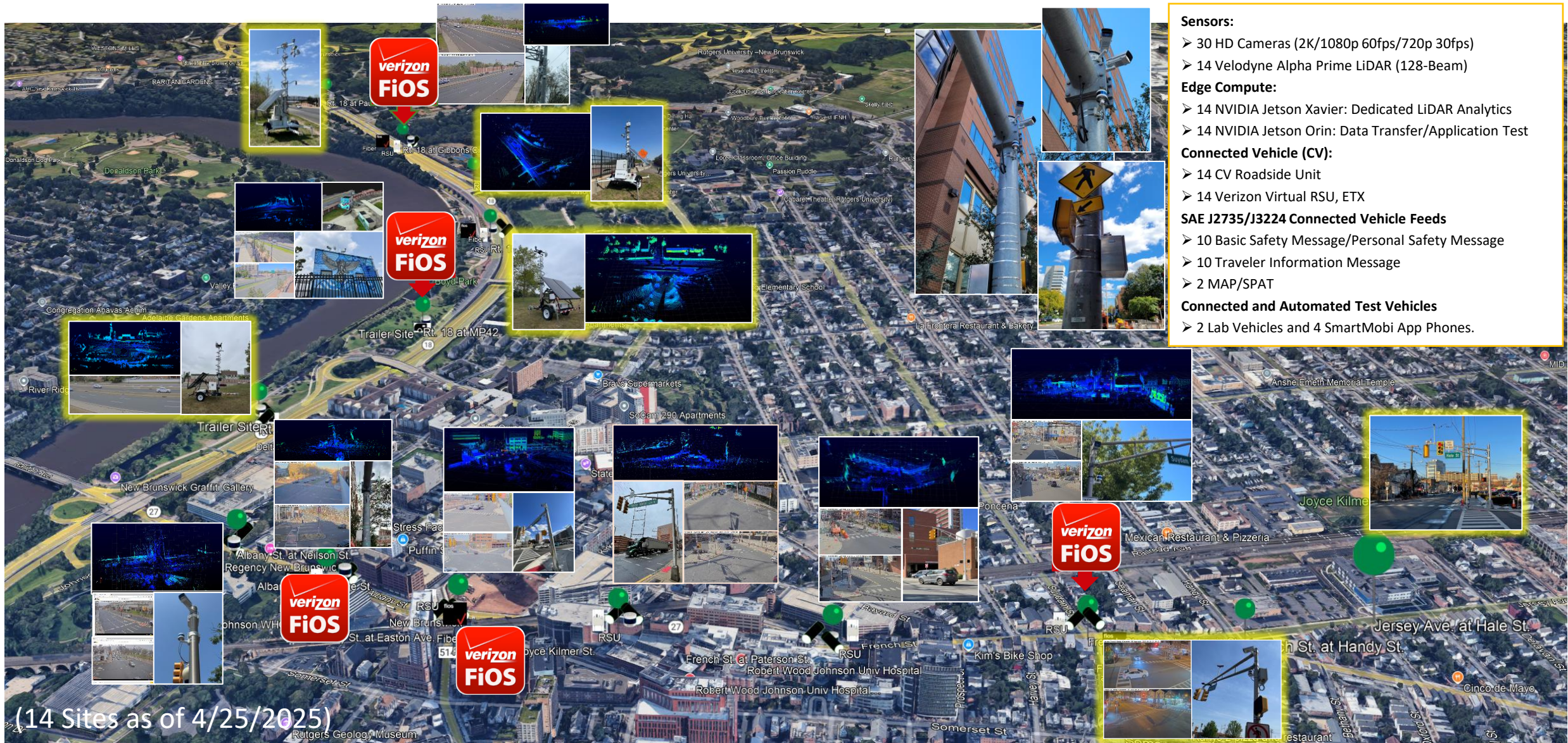
- **Ryder's Lane Shared Use Path** – Congressional earmark funding
- **Oak Tree Road Safety Improvements** – TASA funds
  
- **Ryder's Lane Pedestrian and Safety Enhancements** – BUILD grant application (pending)
- **Vision Zero Action Plan Update** – SS4A grant application (pending)



# DataCity Smart Mobility Testing Ground



# DataCity Testbed 2025 (14 Sites as of 4/25/25, New Brunswick, NJ)



## Sensors:

- 30 HD Cameras (2K/1080p 60fps/720p 30fps)
- 14 Velodyne Alpha Prime LiDAR (128-Beam)

## Edge Compute:

- 14 NVIDIA Jetson Xavier: Dedicated LiDAR Analytics
- 14 NVIDIA Jetson Orin: Data Transfer/Application Test

## Connected Vehicle (CV):

- 14 CV Roadside Unit
- 14 Verizon Virtual RSU, ETX

## SAE J2735/J3224 Connected Vehicle Feeds

- 10 Basic Safety Message/Personal Safety Message
- 10 Traveler Information Message
- 2 MAP/SPAT

## Connected and Automated Test Vehicles

- 2 Lab Vehicles and 4 SmartMobi App Phones.

(14 Sites as of 4/25/2025)

# DataCity Control Center

## Control Center Functions and Capabilities

### Functions

- Central computing
- Data analytics and sharing
- Application Testing

### • Components:

- Video wall
- TMC Console Workstation, performs traffic operation
- 1.5 Petabyte Storage nodes to store, send, and receive data
- AI Analytics: 4 x NVIDIA A100 GPUs
- TMC Network Switch (aka bridging hub)
- Wireless Access Point and Wireless AP controller
- Firewall Appliance (hardware and software)



# Vision Zero Pledge and DataCity

*Middlesex County is committed to **eliminating traffic fatalities and serious injuries** on roadways in the county by 2040.*

*Middlesex County will work in partnership with **municipalities, agencies, and other stakeholders** to achieve this goal.*

*-Middlesex County Board of County Commissioners  
July 21, 2022*

## **DataCity's first-wave of CAV application testing and pilots:**

1. BlueCity AI Intersection Safety Analytics Platform (historical data)
2. PedSafe Radar-based School Zone Safety System (Jersey@Hale)
3. Speed Violation Visualization Platform for Law Enforcement Campaign Planning
4. SAE J2735 SPaT and J3224 SDSM based Pedestrian on-crosswalk warning



# School Zone Pedestrian Safety Pilot

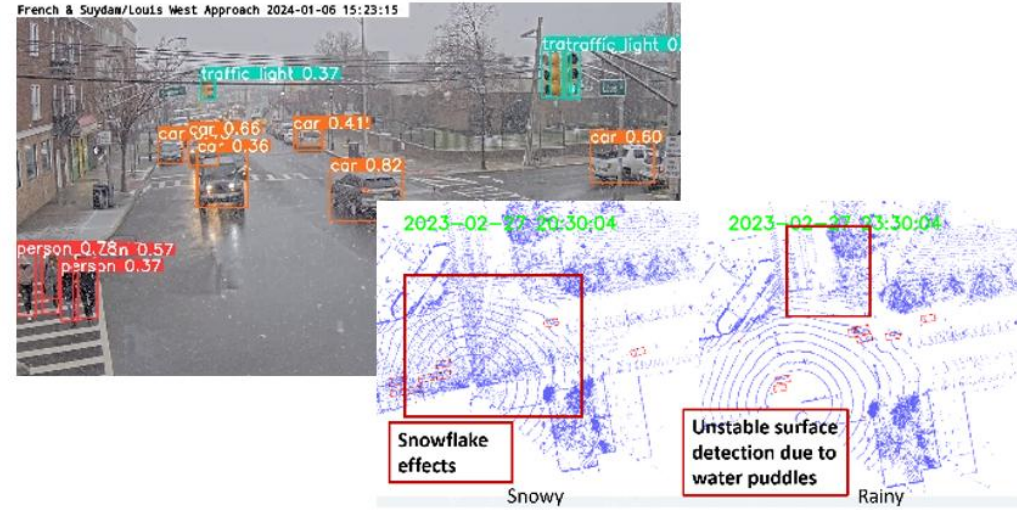
## Out-of-Crosswalk Pedestrian Activities



## Vulnerable Road Users (K-12 Students)



## Road Weather Video/LiDAR Data

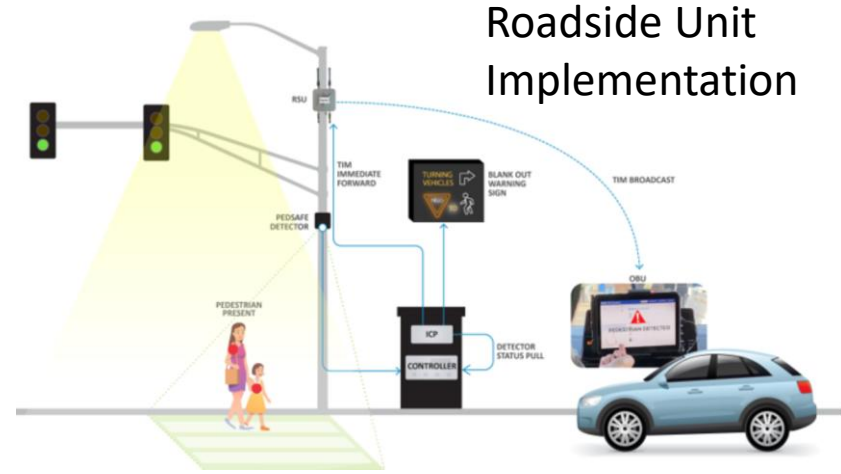


## Vulnerable Road Users (Cranes and Wheelchair)

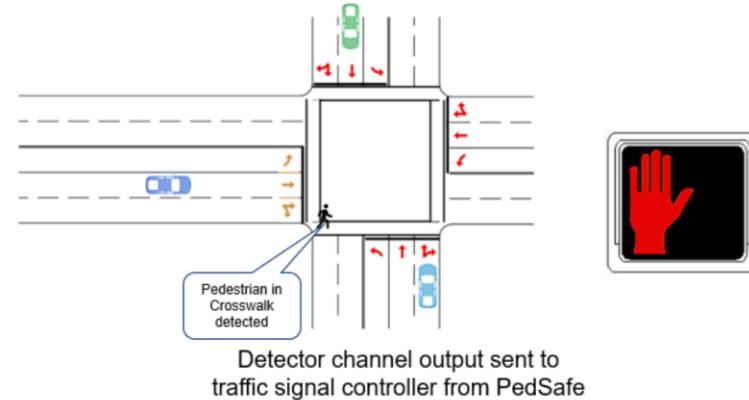


# Jersey Ave.@Hale St. Intersection Pilot

## Blanquita B. Valenti Community School, New Brunswick



**Red Clearance Extension due to Pedestrian**  
Detect Pedestrian in Crosswalk and don't start conflicting phase until crosswalk is clear



Radar Sensors  
for each  
crosswalk



PedSafe  
Warning  
Signs

Installed Dec. 2-3, 2024 in collaboration with  
Iteris Inc.



# Jersey Ave. At Hale Street Crosswalk Activity and Safety Analytics



# DataCity Technology 2025-2026 Expansion

## DataCity Expansion – Woodbridge Ave. (2025)



## DataCity Expansion – French/Easton Corridor



## DataCity Expansion – Ryders Lane (2026)



# MIDDLESEX

## C O U N T Y • N J

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6/3/2026

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