

VISION ZERO.

Middlesex County, NJ
Vision Zero Action Plan
NJ Complete Streets Summit 2023

Michael Dannemiller, PE Supervising Engineer Middlesex County Office of Planning



November 1, 2023 Rutgers University – College Avenue



Nothing is more important than SAFETY

Vision Zero Pledge

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

VISION ZERO....



Is a strategy to eliminate **ALL** traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all



Views traffic deaths as **PREVENTABLE**



Includes 3 Main Principles: managing speed, centering equity, engaging communities



Saves lives; Saving lives is **INEXPENSIVE**



VISION ZERO

A strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, equitable mobility for all." – VZ Network

TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

PERFECT human behaviour

Prevent **COLLISIONS**

INDIVIDUAL responsibility

Saving lives is **EXPENSIVE**

VISION ZERO

VS

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent FATAL AND SEVERE CRASHES

SYSTEMS approach

Saving lives is **NOT EXPENSIVE**

VISION-41:TONETWORK



Middlesex County Vision Zero Action Plan

JULY 21, 2022

BOARD OF COUNTY COMMISSIONERS ADOPT A VISION ZERO PLEDGE

AUGUST 10, 2022

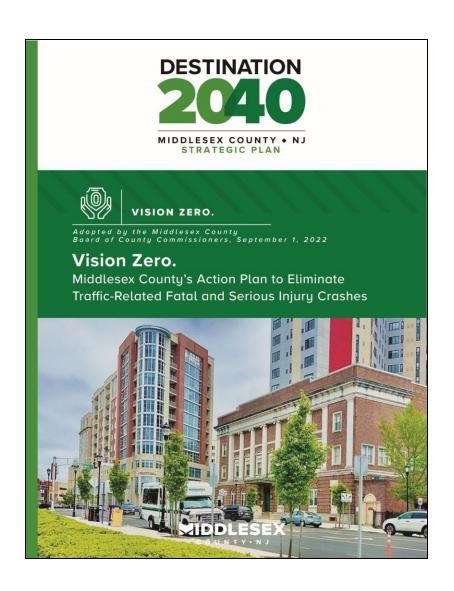
VISION ZERO PARTNERSHIP KICKOFF MEETING

SEPTEMBER 1, 2022

BOARD OF COUNTY COMMISSIONERS ADOPT THE VISION ZERO ACTION PLAN

SEPTEMBER 15, 2022

MCOP SUBMITTED OUR USDOT SAFE STREETS AND ROADS FOR ALL (SS4A) IMPLEMENTATION GRANT APPLICATION



VISION ZERO PARTNERSHIP

Leadership Committee

COUNTY AND MUNICIPAL ELECTED LEADERS



Vision Zero Partnership Leadership Committee Meetin

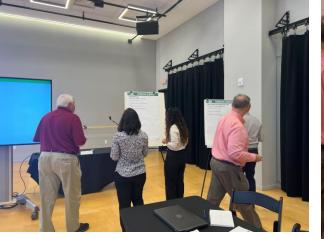
2040

Culture of Safety Working Group

Complete Streets Working
Group

PLANNERS
PLANNERS
ENGINEERS
PUBLIC WORKS
HEALTH OFFICIALS
PROSECUTOR'S OFFICE
KMM
NJ DOT
NJTPA

AAA AARP OTHER STAKEHOLDERS











CULTURE OF SAETY PROJECT PRIORITIZATION			
SAFETY	PROJECT/STRATEGY	# OF RESPONSES	
ELEMENT			
SAFE ROAD	Vision Zero Education for the Community	8	
USERS	Outreach and Engagement Strategies and Platforms	4	
	Driver Education and Vision Zero	9	
	Safe Routes to School and Vision Zero	6	
	Community Ambassadors database	0	
	Collaboration with Community Groups and Ambassadors	1	
	End Impaired Driving Deaths	5	
	Community-based enforcement strategies	4	
	Vision Zero Training for Law Enforcement	5	
	Vision Zero County Staff Training	1	
	Support structured fines for traffic violations so that low-income	1	
	people do not bear a disproportionate financial burden. Environmental justice population engagement strategies	4	
	Pilot Demonstration Projects	5	
	Vision Zero task Force	3	
SAFE	Sa fer County Vehicle Fleet	6	
VEHICLES	Autonomous Vehicle Technology Task Force	1	
	Right-Size County Vehicle Fleet	7	
	Data City Smart Mobility Testing Corridor	4	
POST-CRASH	Prompt Medical Service	7	
RESPONSE	Esta blish a ra pid re sponse team	5	
	Data sharing and coordination	9	











Figure 15: Complete Streets Project Prioritization			
SAFETY ELEMENT	PROJECT/STRATEGY	# OF RESPONSES	
Safe Roads	Intersection Enhancements and Redesign	12	
	Bicycle and Pedestrian Network Projects	8	
	Complete Streets Networks	6	
	County Roundabout Pilot Program	6	
	Safety Countermeasures Program	4	
	County Complete Streets Design Guide	4	
	Design Standards and Guides	5	
	Coordinate with the NJ SHSP	1	
	Follow State Guidance Documents	0	
	Curbside Management Program	4	
	Multimodal Planning and Transit	4	
	Funding for Low-Cost Improvements	8	
	Regular Program Updates	0	
	Ongoing Data Collection and Analyses	7	
	Pilot/Demonstration Projects	6	
	Road Safety Audits	7	
Safe Speeds	Speed Management Policy	6	
	Roadway Design Standards for Speed Management	6	
	Traffic Calming Policies	11	

What Defines Success

No More Deaths

No More Serious Fatal Injuries

Speed Reduction

Transparency

Fewer Cars on the Road

Behavioral Changes

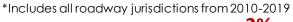
Shared Rides

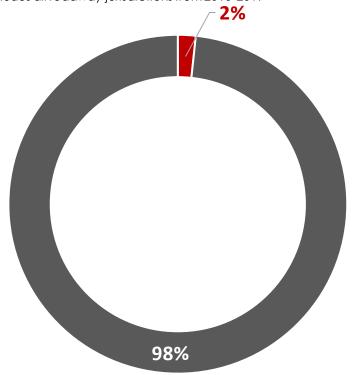
Road Diets

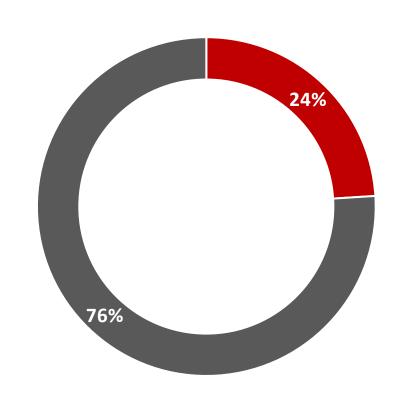
Level of Service

Partnership- Center for Advanced Infrastructure and Transportation (CAIT)

2010-2019 Crashes in Middlesex County







291,440 Traffic Crashes





1,434 Fatal and Serious Injury Crashes (FSIs)

Bicycle and Pedestrian Crashes
347 Bicycle and Ped. FSI Crashes

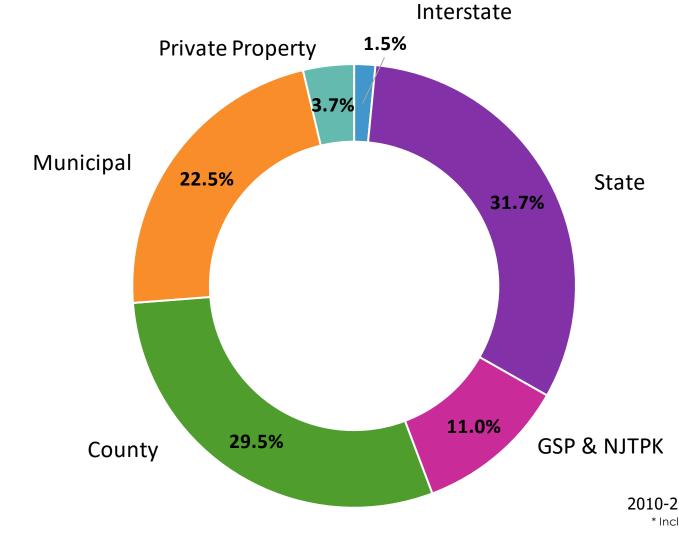


On Average, the County Saw:

- 2 Crashes/Hour
- 4 Fatalities/Month
- 8 Incapacitations/Month
- 23 Injuries/Month



FATAL & SERIOUS INJURY CRASHES BY ROADWAY JURISDICTION



FATAL CRASHES HOTSPOT MAP

2010-2019

Number of Fatal Crashes

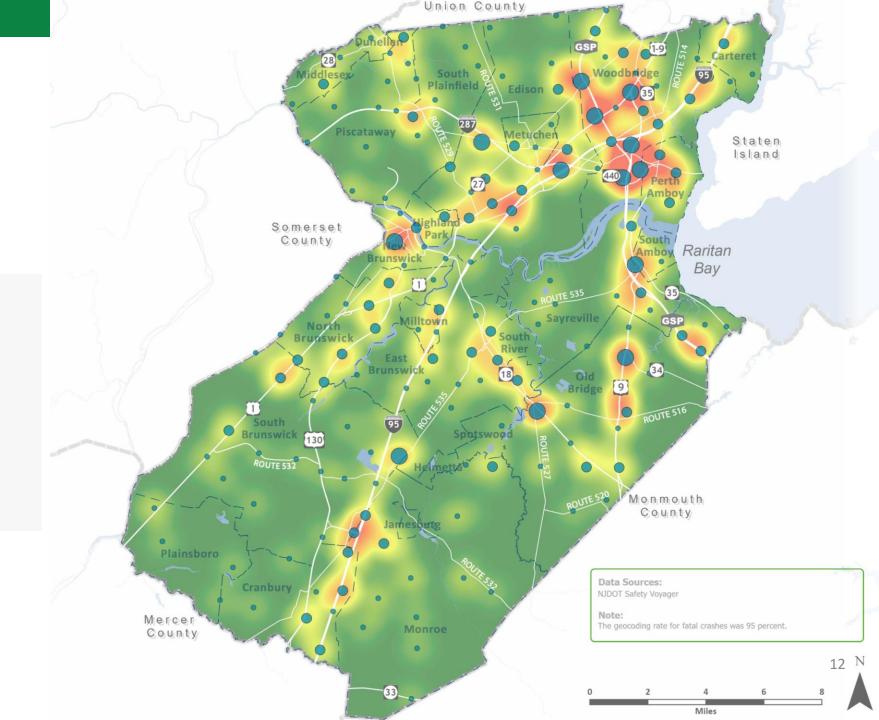
- 1 2
- 3 5
- **6** 9

Fatal Crashes per Square Mile

___'

High: 11.7

Low: 0



SERIOUS INJURY CRASHES HOTSPOT MAP

2010-2019

Number of Serious Injury Crashes

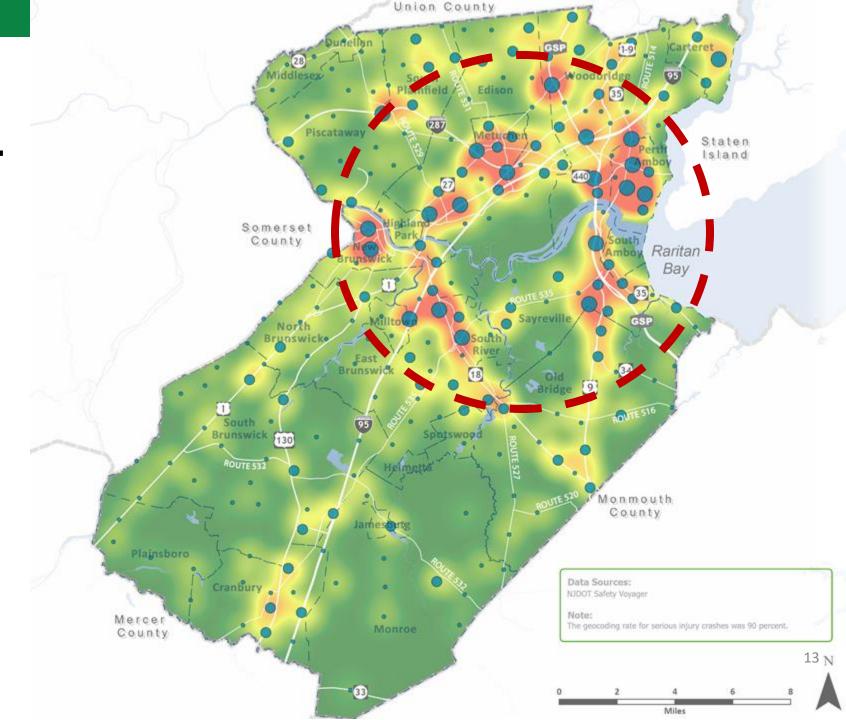
- 1 3
- 4 7
- 8 15

Serious Injury Crashes per Square Mile

F

High: 17.4

Low: 0



HIGH INJURY NETWORK (HIN)



Identifies roadway locations that account for a disproportionate share of fatal and serious injury crashes (FSIs).



Data driven

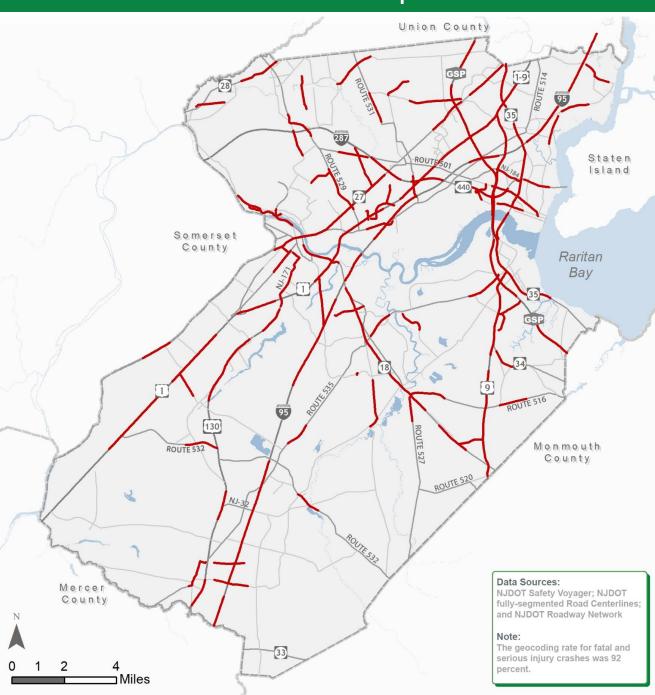


Helps prioritize investments



Equity

3. TARGETING THE PROBLEM | HIN ANALYSIS



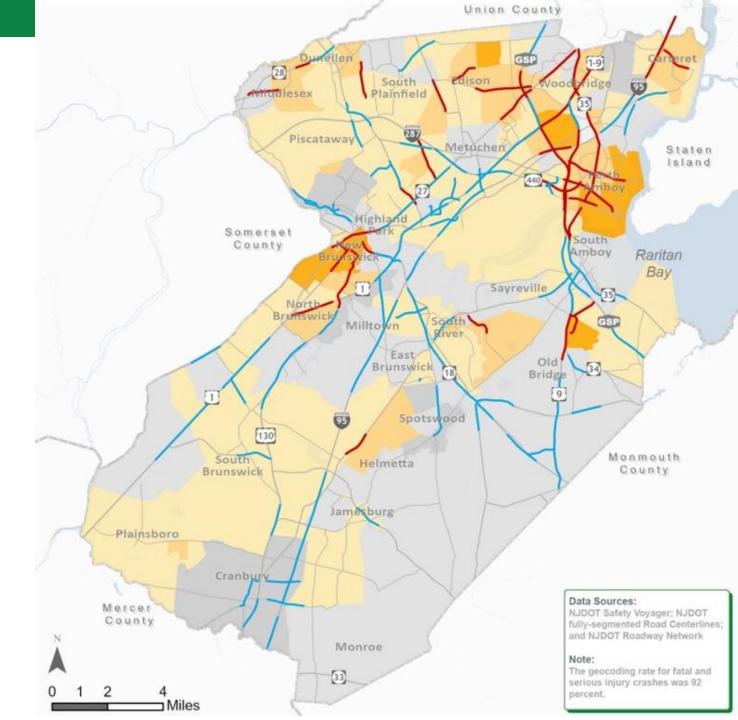
HIGH INJURY NETWORK MAP

Weighted High Injury Network (All Modes), 2010-2019

Weighted HIN Score >= 6

HIN BY INDICATORS OF POTENTIAL DISADVANTAGE

Weighted High Injury Network, 2010-2019 In the Top 2 IPD Intervals Not In the Top 2 IPD Intervals Indicators of Potential Disadvantage (IPD) by Census Tract Well Below Average (< -1.5 Std. Dev.) Below Average (-1.5 - -0.5 Std. Dev.) Average (-0.5 - 0.5 Std. Dev.) Above Average (0.5 - 1.5 Std. Dev.) Well Above Average (> 1.5 Std. Dev.)



EBROSE Serious Injuries by 2040

WHAT WILL SUCCESS LOOK LIKE

-GOALS-

1. SAFER STREETS

• Design streets and transportation networks to be safe and comfortable for all users.

2: SAFER SPEEDS

 Set roadway speed limits based on surrounding land use and activities focusing on vulnerable users.

3: SAFER ROAD USERS

• Foster a culture of safety, responsibility, and awareness within Middlesex County.

4: SAFER VEHICLES

• Utilize the latest vehicle systems and safety features for the County fleet. Support the development of new safety features.

WHAT WILL SUCCESS LOOK LIKE

-GOALS-

5: POST CRASH RESPONSE AND CARE

• Improve crash response time and data collection.

6: FOCUS ON EQUITY

 Ensure equitable distribution of all traffic safety investments and benefits using a data-based approach

7: DEVELOP STRONG PARTNERSHIPS

• Implement the Vision Zero Action in collaboration with municipalities, non-profits, and state and regional agencies.

8: COMMUNITY ENGAGEMENT

 Work with Middlesex County community members to obtain feedback.

REDESIGN THE ROAD

Livingston Avenue, New Brunswick, NJ



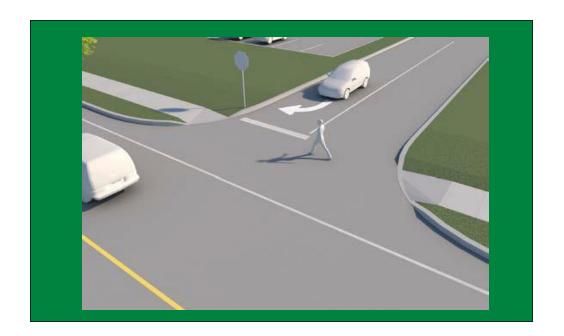




Development Application reviewsAll over Middlesex County

Continuous sidewalk networks Including concrete sidewalk across driveway aprons Any development that has traffic control on their driveway:

Don't do this:



Continue the sidewalk across the driveway





Questions and Discussion







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