

DESTINATION 2040

MIDDLESEX COUNTY ♦ NJ
STRATEGIC PLAN



VISION ZERO.

*Adopted by the Middlesex County
Board of County Commissioners, September 1, 2022*

Vision Zero.

Middlesex County's Action Plan to Eliminate
Traffic-Related Fatal and Serious Injury Crashes



Middlesex County Vision Zero Plan

Vision Zero Action Plan

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Middlesex County Office of Planning

With Support from:

Rutgers University/Alan M. Voorhees Transportation Center
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MIDDLESEX COUNTY VISION ZERO PLEDGE

The Middlesex County Board of County Commissioners adopted the following Vision Zero Pledge on July 21, 2022:

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.

EXECUTIVE SUMMARY

Between 2010 and 2019, there were 291,440 recorded crashes in Middlesex County, resulting in 466 fatalities and 964 suspected serious injury crashes. Although bicyclists and pedestrians comprised only 1.7 percent of the County's collisions between 2010 and 2019, they accounted for approximately one-quarter (24 percent) of its high-severity crashes. Pedestrian fatal and serious injury crashes are particularly concentrated in the cities of New Brunswick and Perth Amboy.

Figure 1: Crashes in Middlesex County

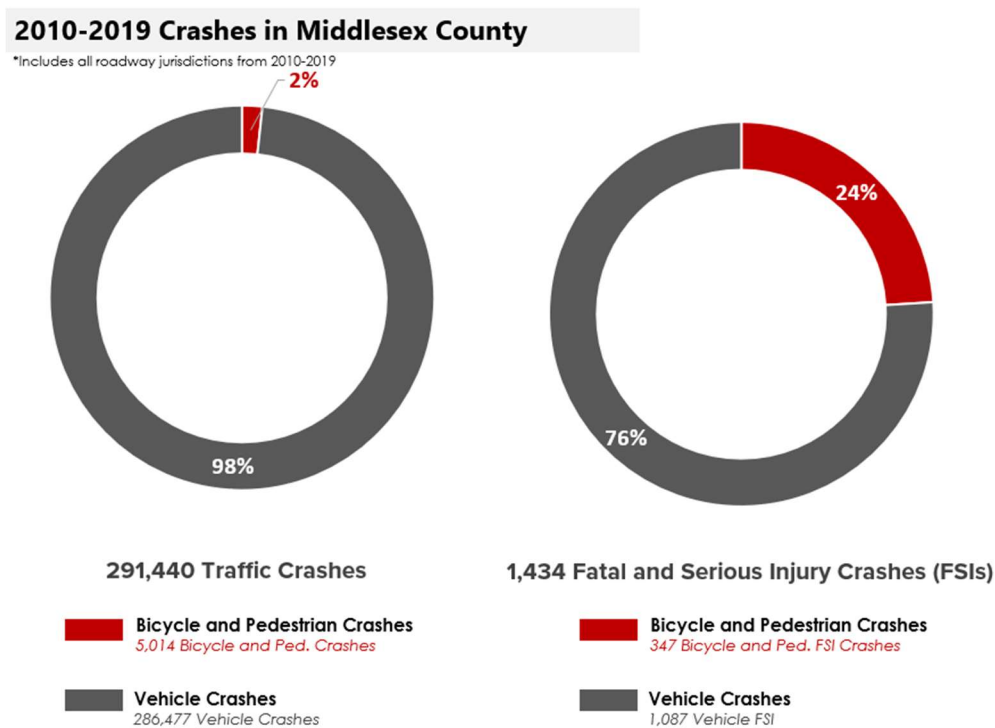


Figure 2: Condensed List of Action

1. SAFE ROADS

- Intersection Enhancements and Redesign
- Bicycle and Pedestrian Network Projects

2. SAFE SPEEDS

- Speed Management Policy
- Traffic Calming Policies

3. SAFE ROAD USERS

- Vision Zero Education for the Community
- Driver Education and Vision Zero

4. SAFE VEHICLES

- Safer County Vehicle Fleet
- AV Technology Task Force

5. SAFE POST-CRASH RESPONSE AND CARE

- Prompt Medical Service
- Establish a Rapid Response Team

This Vision Zero Action Plan is organized around the five elements of the Safe System Approach that is recommended by the U.S. Department of Transportation, Federal Highway Administration (FHWA). The five elements of safety are listed to the left, along with a condensed list of corresponding action items.

In July 2022, the Middlesex County Commissioners signed a resolution adopting the Vision Zero Pledge, making Middlesex the first County in New Jersey committed to developing a countywide Vision Zero Action Plan. This initiative is a partnership between the County and its 25 municipalities. This Partnership will allow maximum collaboration to make all county roads safer and eliminate preventable traffic deaths and injuries by 2040.

With the help of member municipalities, the County strives to implement the action items listed in this document, investing in the future of transportation and mobility in Middlesex County.

The Vision Zero Action Plan is an initiative of the Transportation and Mobility chapter of the County's strategic plan, Destination 2040.

WHAT IS VISION ZERO?

Vision Zero is a strategy developed in Sweden in the 1990s to eliminate traffic fatalities and serious injuries. Vision Zero has successfully spread throughout Europe with positive results. Recently, cities across the US have demonstrated an interest in advancing Vision Zero initiatives to tackle the staggering number of traffic injuries and fatalities each year.

A Vision Zero approach deviates from the standard way of thinking, where traffic deaths and injuries are considered unavoidable byproducts of navigating our roads. The traditional view of crashes also places the responsibility on individuals, with the expectation that they should not make mistakes. Vision Zero focuses on measures like policy and design that anticipate mistakes and ensures safe conditions for all road users, not just drivers.

Victims of Traffic Violence

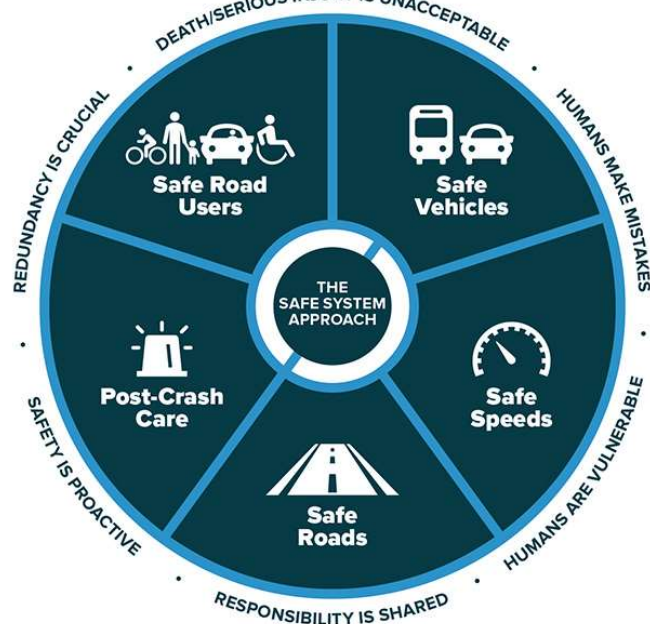
There were 466 crash victims in Middlesex County between 2010 and 2019. Too often, these statistics are regarded as a common byproduct of road usage and not treated with the same urgency as other public health issues. However, these lives are irreparable losses for our community.

When discussing traffic injuries and fatalities, language matters greatly. It is common to see articles that report "accidents" instead of "crashes." "Accident" implies that these are not preventable occurrences when we know that factors like speeding, road design, and distracted or impaired driving are responsible. There are also existing and proven safety countermeasures that can mitigate these incidences of traffic violence.

Safe System Approach

The Safe System approach represents a fundamental shift in transportation planning and is designed to facilitate achieving Vision Zero. This approach directly ties actions to reductions of fatal and serious injuries and is becoming a standard practice for the U.S. Department of Transportation, Federal Highway Administration (FHWA) and New Jersey Department of Transportation (NJDOT). The Safe System approach takes a comprehensive view of the road system with safety as the overarching goal, data as the rationale for action by the designers and owners of the transportation infrastructure, and responsibility that all stakeholders share. The Safe System approach prioritizes crashes that result in death and serious injury, which are unacceptable even when attributed to human error.

Figure 3: Five Principles of the Safe System Approach.



Source: FHWA.

The Safe System approach considers strategies to minimize the impacts of all crashes regardless of cause, preventing serious injury and death through transportation system design and

operation. Responsibility for safety extends beyond the owners and operators of the transportation infrastructure; vehicle manufacturers and all users must strive to ensure that crashes don't lead to fatal or serious injuries.

Figure 4: Source- FHWA



The Safe System approach is proactive, addressing deficiencies to prevent crashes. Redundancy is built into the Safe System approach; reducing risks requires strengthening all parts of the transportation system so that if one component fails, the other parts still protect people.

Middlesex County Vision Zero Goals

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 the following goals:

<p>GOAL 1: SAFER ROADS</p> <ul style="list-style-type: none"> •Design streets and transportation networks to be safe and comfortable for all users. 	<p>GOAL 2: SAFER SPEEDS</p> <ul style="list-style-type: none"> •Set roadway speed limits based on surrounding land use and activities focusing on vulnerable users.
<p>GOAL 3: SAFER ROAD USERS</p> <ul style="list-style-type: none"> •Foster a culture of safety, responsibility, and awareness within Middlesex County. 	<p>GOAL 4: SAFER VEHICLES</p> <ul style="list-style-type: none"> •Utilize the latest vehicle systems and safety features for the County fleet and support the development of new safety features.
<p>GOAL 5: POST-CRASH RESPONSE AND CARE</p> <ul style="list-style-type: none"> •Improve crash response time and data collection. 	<p>GOAL 6: FOCUS ON EQUITY</p> <ul style="list-style-type: none"> •Ensure equitable distribution of all traffic safety investments and benefits using a data-based approach.
<p>GOAL 7: DEVELOP STRONG PARTNERSHIPS</p> <ul style="list-style-type: none"> •Implement the Vision Zero Action Plan in collaboration with municipalities, non-profits, and state and regional agencies. 	<p>GOAL 8: COMMUNITY ENGAGEMENT</p> <ul style="list-style-type: none"> •Work with Middlesex County community members to obtain feedback.

Need

While Middlesex County is home to 9.3 percent of New Jersey residents according to 2019 American Community Survey data, the County accounts for 10.2 percent of New Jersey's crashes. Between 2010 and 2019, 291,440 traffic crashes were recorded, averaging more than two crashes every hour. Though the yearly number of recorded crashes has seen small peaks and valleys since 2010, the number of crashes increased in 2017 and 2018.

By adopting a Vision Zero Action Plan, Middlesex County recognizes that every crash is unacceptable and preventable. The County has a diverse road landscape, with major interstate and state roads bisecting the County. These major roads accommodate high-speed travel, including large volumes of freight transport. In cities like New Brunswick and Perth Amboy, pedestrians and bicyclists navigate local roads of varying widths, speeds, and amenities along with vehicles, creating their own safety challenges. Through a targeted systems approach, which focuses on policy and design, the County can enact context-specific interventions to ensure the safety of all road users.

Findings

From 2010 to 2019, there was 466 fatal injury, and 964 suspected serious injury crashes in the County. These crashes comprised 1,087 motor vehicle (76 percent), 306 pedestrian (21.4 percent), and 41 bicycle (2.9 percent) collisions. The numbers average out to four fatalities and eight incapacitations monthly during that time span.¹

Between 2010 and 2019, the number of traffic crashes in Middlesex County has generally followed a flat to slightly decreasing trend with some peaks and valleys (*Figure 6*). The most significant change during this period was in 2015, when the number of crashes decreased by 10.4 percent compared to the previous year. In recent years, the County saw a slight decrease in the number of crashes in 2017 (-0.6 percent), a notable increase in 2018 (+6.6 percent), and a slight reduction in 2019 (-0.5 percent). In order to see steady progress in reducing the number of crashes, the County needs to stabilize a downward trend consistent with its Destination 2040 and Vision Zero goals.

Figure 5: Average Crash Statistics



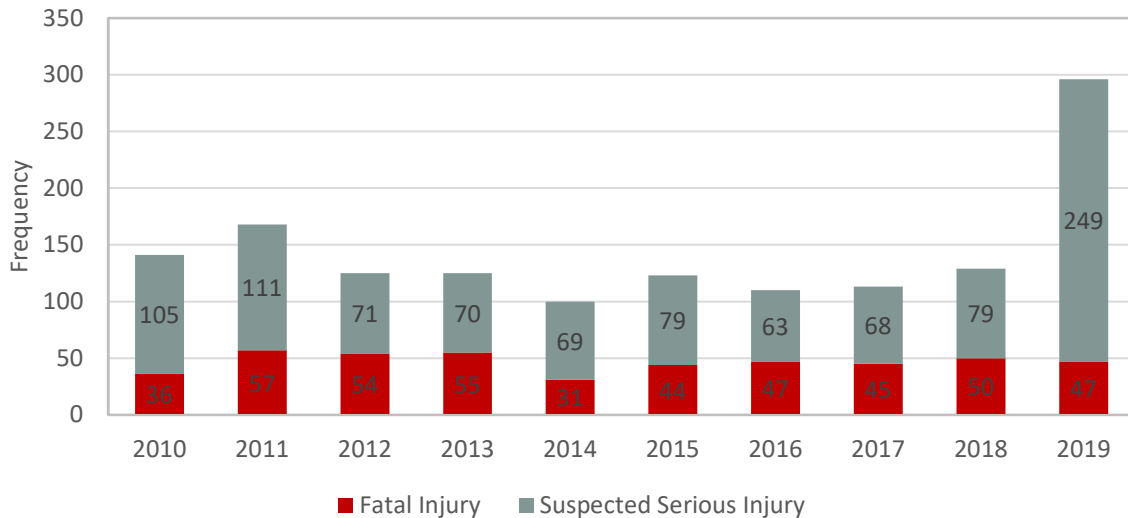
Data Source: NJ Department of Transportation, Safety Voyager 2010-2019

¹ New Jersey Department of Transportation, Safety Voyager, NJDOT's Crash Tables, and NHTSA's Fatality Reporting System (FARS).

The data shows a 129.5 percent increase in serious injury crashes from 79 in 2018 to 249 in 2019 (Figure 6.) This dramatic increase is likely due to the new statewide injury classification standards adopted in 2019. The *New Jersey Highway Safety Improvement Program 2020 Annual Report* states that the new standards record injuries previously assigned to other severity classifications as serious. **Because of this reason, the 2019 crash severity data is not comparable to previous years.**

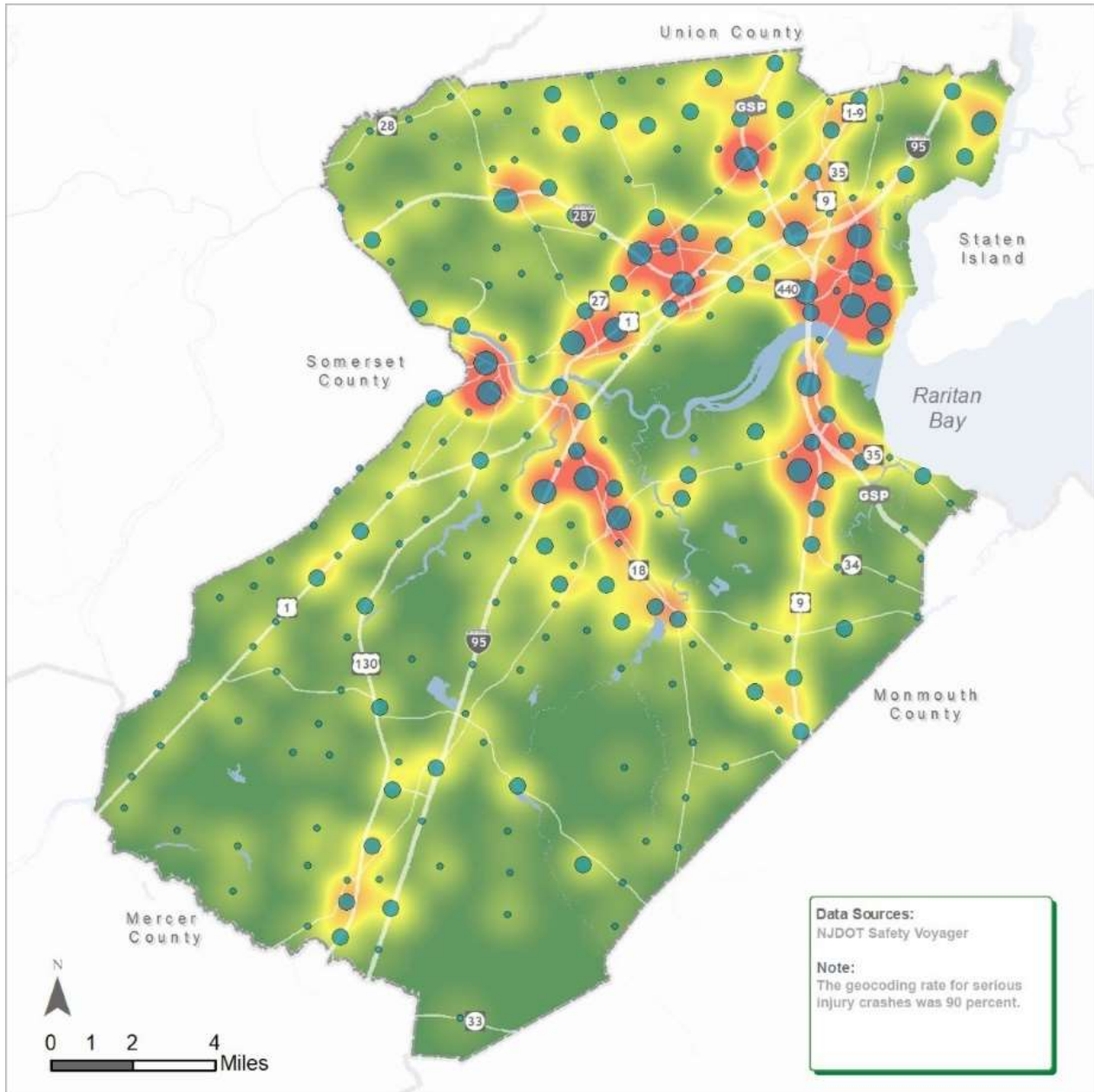
Between 2010 and 2018, the number of fatal and serious injury crashes in the County appears to follow a flat to slightly downward trend. However, in 2017 and 2018, these collisions rose by 2.7 percent and 14.2 percent, respectively. One big challenge for the Middlesex County Vision Zero effort is to counter this ongoing flat and slightly decreasing trend to achieve a notable reduction in fatal and serious injury traffic collisions.

Figure 6: 2010-2019 Annual FSI Statistics



Map 1 represents the spatial distribution of fatal and serious injury crashes in Middlesex County. The County's fatal crashes tend to cluster in the New Brunswick, Perth Amboy, Woodbridge, and Edison area, and around the major roadways, including I-95, I-287, Route 1, Route 9, Route 18, Route 27, Route 440, and the Garden State Parkway (GSP), among others. Most of these crashes are in the County's northern half, especially around major intersections such as the GSP and Route 9 junction. The County's serious injury collisions also cluster in the same areas with additional epicenters along Route 35 and Route 130, as well as the City of New Brunswick and Perth Amboy.

Map 1: Serious Injury Collisions in Middlesex County, 2010-2019



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Prepared: [May 23, 2021]

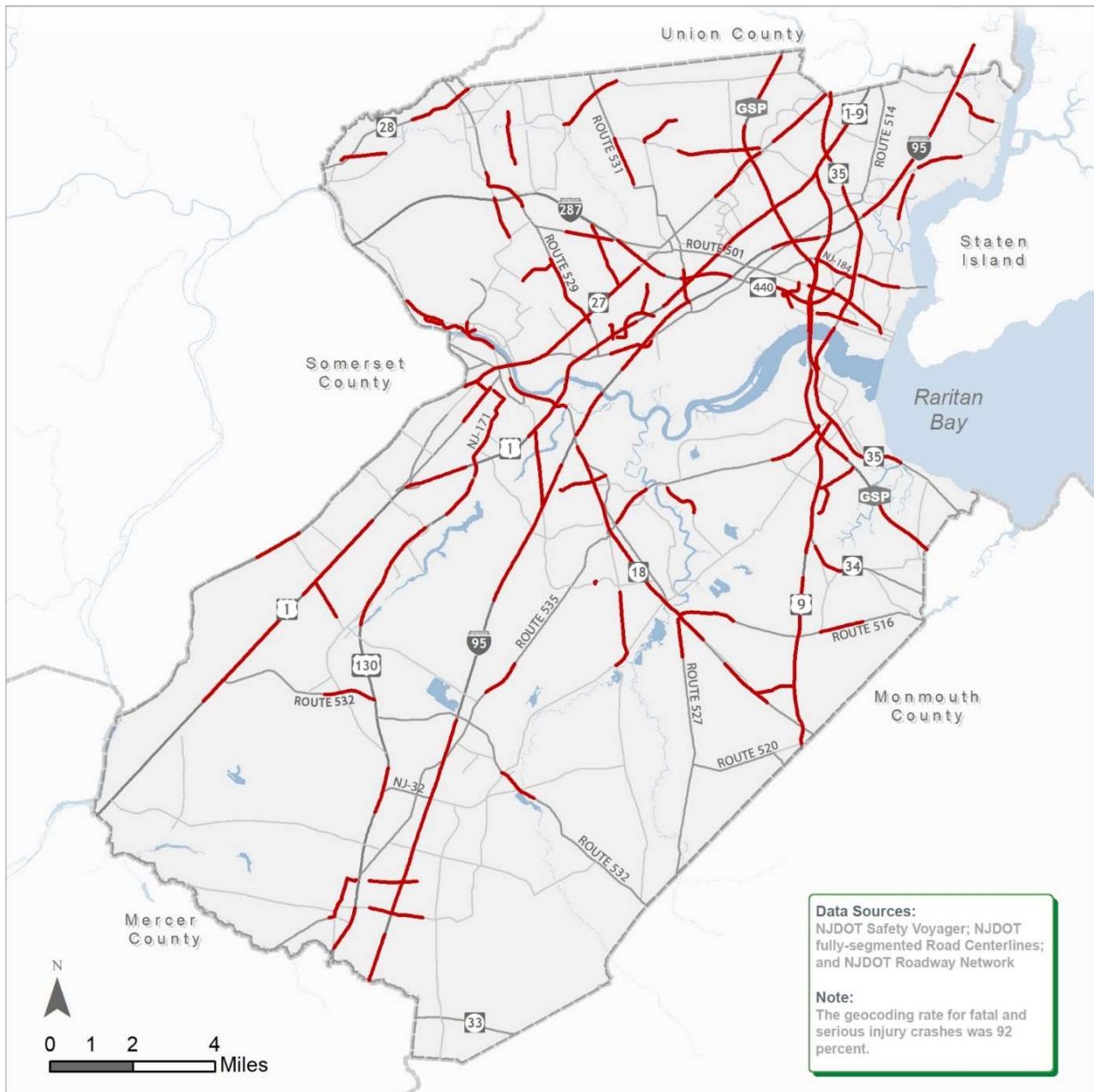
Number of Serious Injury Crashes

- 1 - 3
- 4 - 7
- 8 - 15

Serious Injury Crashes per Square Mile



Map 2: Middlesex County High Injury Network



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

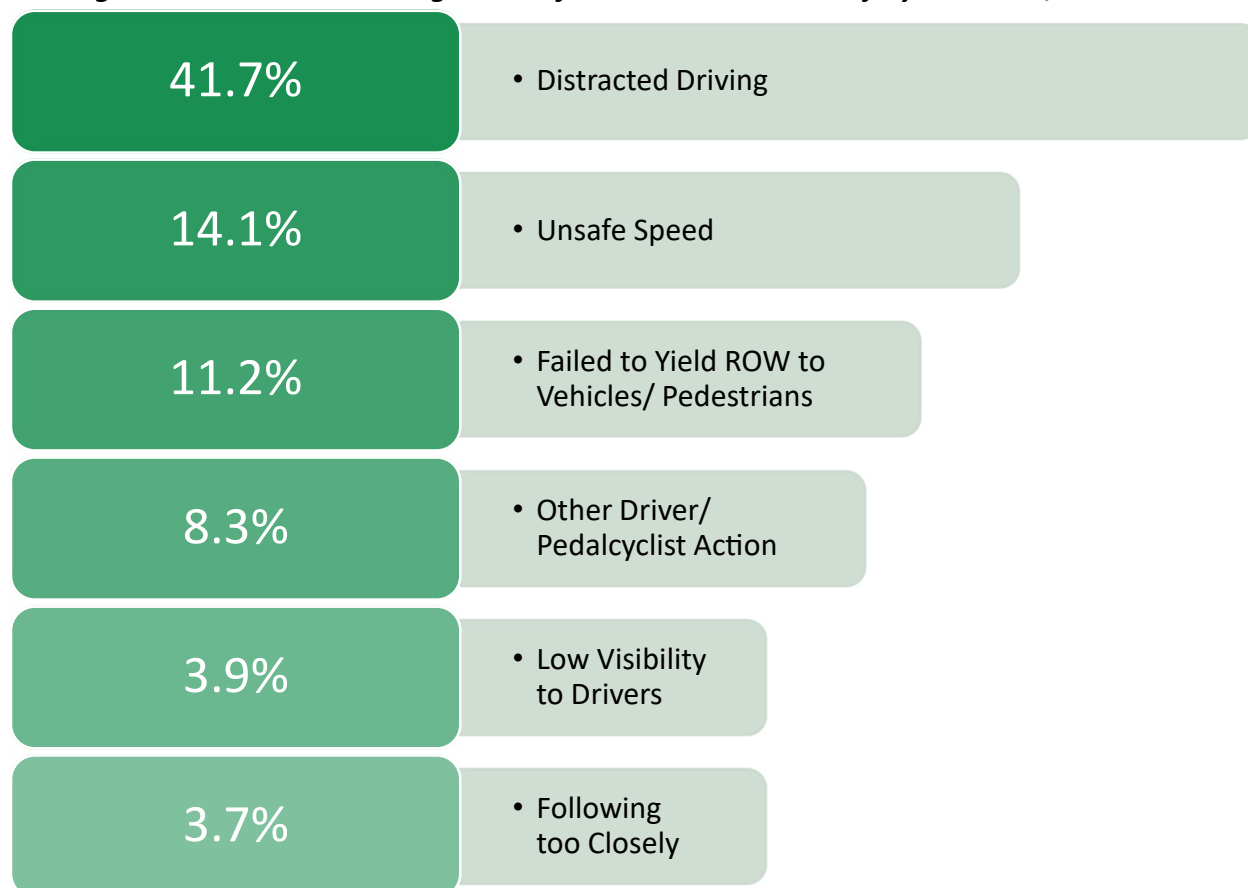
— Weighted HIN Score ≥ 6

Prepared: [June 26, 2021]

Creating a High Injury Network (HIN) is a data-driven process to identify locations that make up a disproportionate share of fatal and serious injury crashes. Mapping the HIN helps the County with its Vision Zero initiatives by highlighting locations that could benefit from additional resources and improvements (Map 2).

Systemic Crash Patterns

Figure 7: TOP 6 Contributing Factors for Fatal and Serious Injury Collisions, All Modes



Data Source- NJ Department of Transportation, Safety Voyager 2010-2019

The crash data analysis highlighted the top contributing factors for fatal and serious crashes. Distracted driving, unsafe speeds, and failing to yield the right of way to vehicles and pedestrians were responsible for over 60 percent of fatal and serious injury crashes in the County (Figure 7). Distracted driving alone contributed to 41.7 percent of fatal and serious injury crashes due to driver inattentiveness, use of an electronic device, or other distraction from inside or outside the vehicle. Distracted driving is a prevalent issue that the County must address as part of a comprehensive Vision Zero strategy.

Figure 8: Fatal and Serious Injury Collisions by Posted Speed Limit, 2010-2019

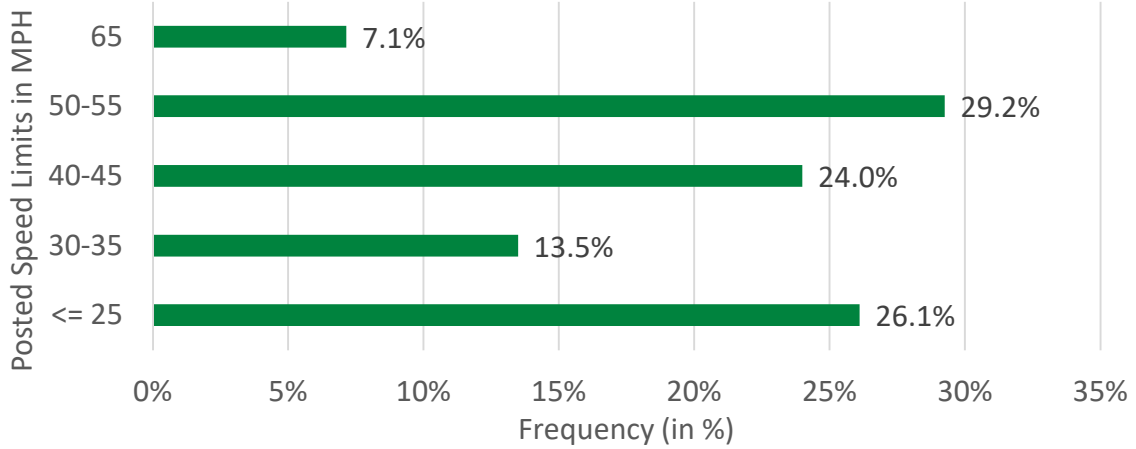
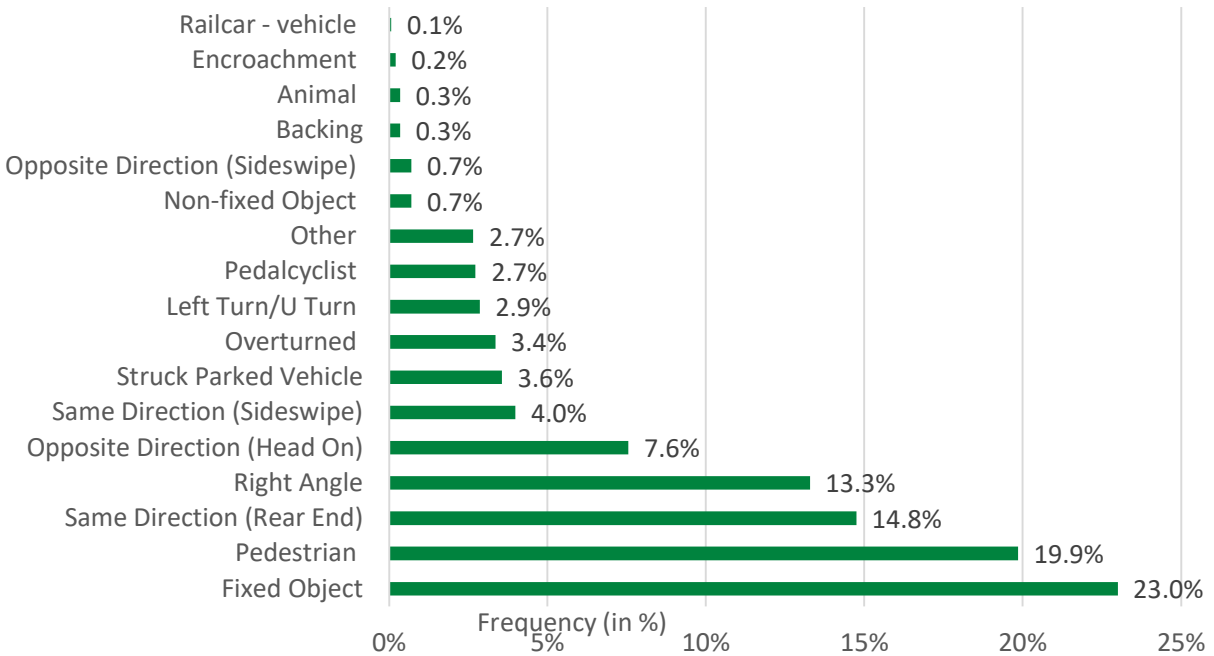


Figure 8: Data Source- NJ Department of Transportation Safety Voyager 2010-2019

Additionally, about 36 percent of the County's high severity crashes occurred on roadways with a posted speed limit above 50 miles per hour, and 24 percent occurred on roads with a posted speed limit of 40-45 miles per hour. County and state roads, combined, accounted for around 60 percent of fatal and serious injury collisions, while 22.5 percent occurred on municipal roadways, which typically have lower posted speed limits.

Figure 9: All Middlesex County Crash Types from 2010-2019

Data Source- NJ Department of Transportation, Safety Voyager 2010-2019



Intersections, like County and state roads, were another setting with a high concentration of crashes. Of the County's fatal and serious injury crashes, 30.8 percent occurred at an intersection.

Over 75 percent of the County's fatal and serious injury crashes involved the following five crash types: Fixed Object, Pedestrian, Same Direction (Rear End), Right Angle, and Opposite Direction (Head On). Figure 9 shows the complete data set for crash types in the County.

Other notable statistics include a disproportionate involvement of adults aged 75 or older in bicycle and pedestrian fatalities and serious injuries. They comprise 6.3 percent of the County's population but represent 10.9 percent of bicycle and pedestrian fatalities and serious injuries. Drivers over 65 years old were also involved in approximately 18.8 percent of the County's high-severity crashes. As our community ages, safety improvements help improve mobility for those who continue to drive and offer safer conditions for those who feel more comfortable walking or cycling.

About 14.5 percent of Middlesex County's fatal and serious injury crashes were alcohol-related, which can explain other contributing factors such as inattentiveness, speeding, or running a stop sign.

Overall, the County's crash data analysis mirrored the findings of other Vision Zero Action Plans. The analysis shows that high-speed roads and intersections are the most common locations for serious and fatal crashes. The County can implement design standards and other countermeasures to improve these specific priority areas.

Equity Assessment

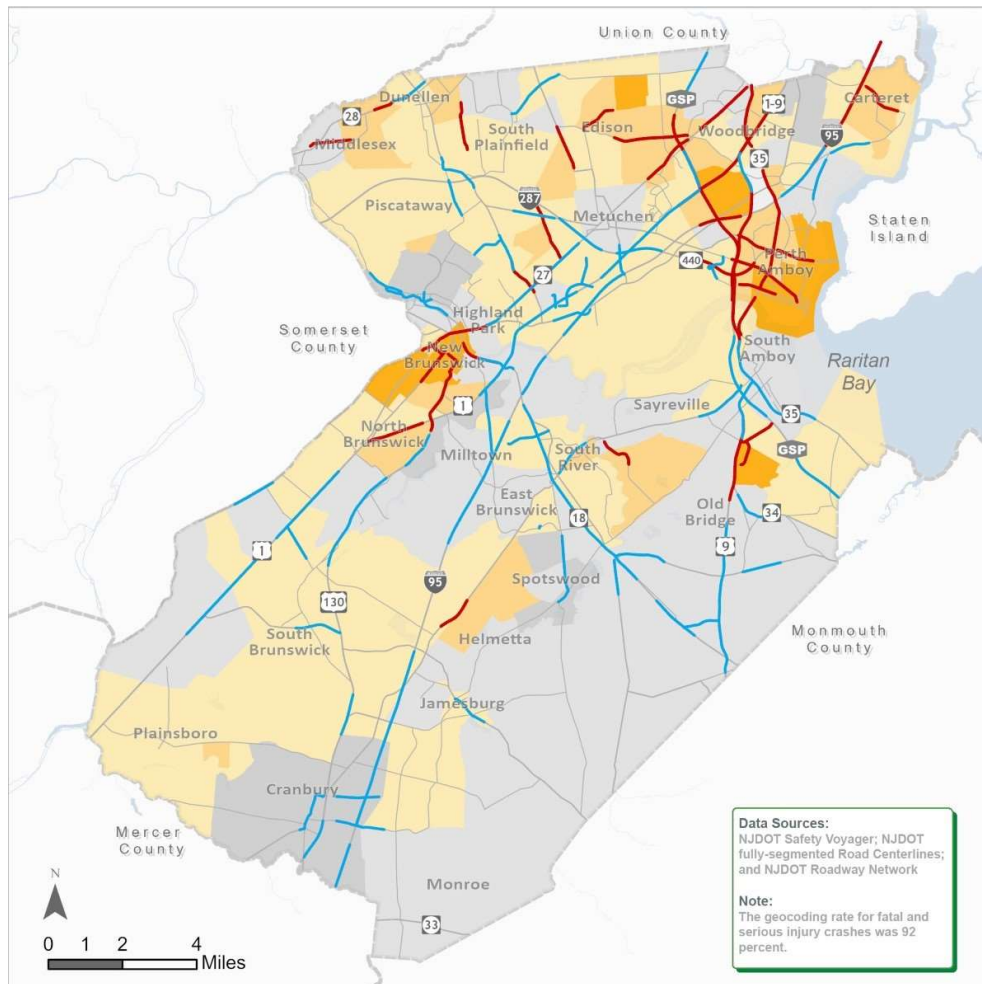
All Middlesex County community members deserve to have safe streets. Nationwide, the most underserved communities often have higher concentrations of unsafe roads, and higher concentrations of bicyclists and pedestrians.

The County used the Delaware Valley Regional Planning Commission's (DVRPC) Indicators of Potential Disadvantage (IPD) to determine communities of concern, which factors the following population groups: Disabled, ethnic minority, female, foreign-born, limited English proficiency, low-income, older adults, racial minority, and youth. Areas with an IPD score of above average or well-above average are communities of concern. The census tracts with well-above average IPD scores are located mainly in New Brunswick and Perth Amboy. Above average scores are in the top and central portions of the County, including Carteret, East Brunswick, Edison,

Helmetta, North Brunswick, Sayreville, and Woodbridge. A portion of Plainsboro also scores above average.

Within Middlesex County, about 26 percent of the census tracts (46 out of 175) have above-average or well above-average indicators of potential disadvantage (IPD) scores. Nearly 28 percent (364 crashes) of the total geocoded fatal and serious injury crashes (1,316 crashes) from 2010 to 2019 occurred within or near (within 250 feet of) these census tracts.

Map 3: HIN and IPD by Census Tract



Vision Zero Action Plan

Prepared: [June 30, 2021]

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.)

The County mapped the high injury network overlaying the census tracts containing communities of concern (Figure 10). The HIN corridors that fully or partially intersect with the "Above Average" and "Well Above Average" concentrations of these communities are shown in red on the map. About 89 network windows (40.6 percent) intersect with this category, and the majority are on State and County roadways, demonstrating the need to prioritize safety and investment along these corridors. Notably, some of the HIN corridors depicted in blue are just off the "Above Average" and "Well Above Average" interval areas; such corridors are in some places adjacent to communities of concern living on one side.

High-Severity Bicycle and Pedestrian Crashes

Although bicyclists and pedestrians comprised only 1.7 percent of the County's collisions between 2010 and 2019, they accounted for approximately one-quarter (24 percent) of its high-severity crashes. Pedestrian fatal and serious injury crashes are particularly concentrated in the cities of New Brunswick and Perth Amboy. The bicycle crashes are more scattered around the county.

Figure 10: Crashes in Middlesex County

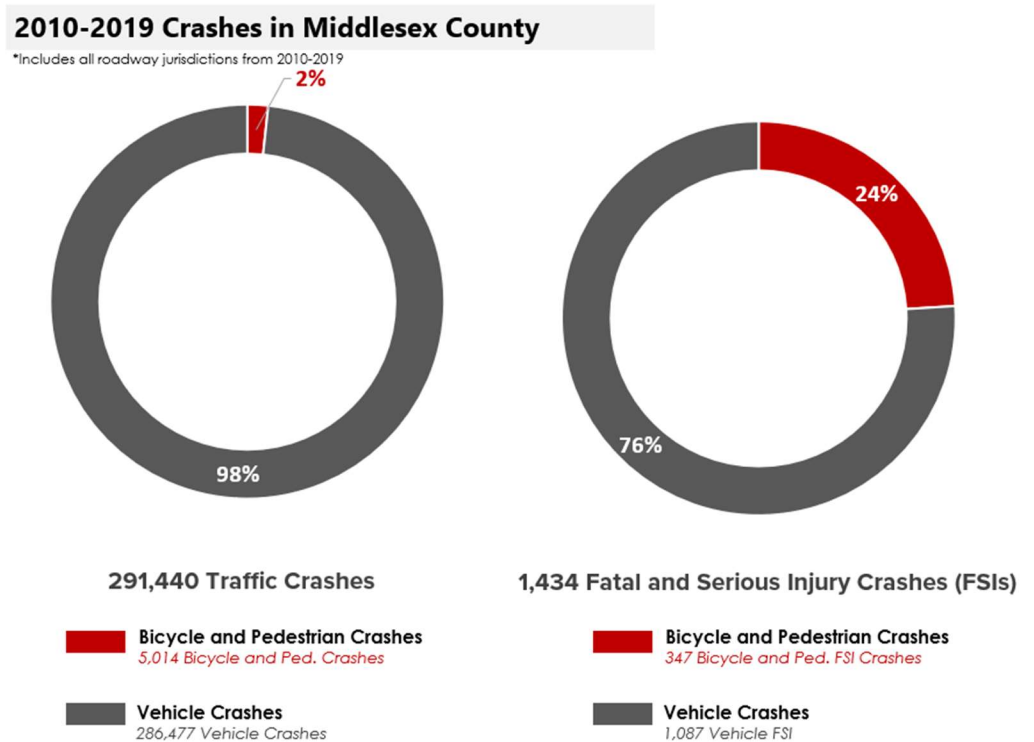
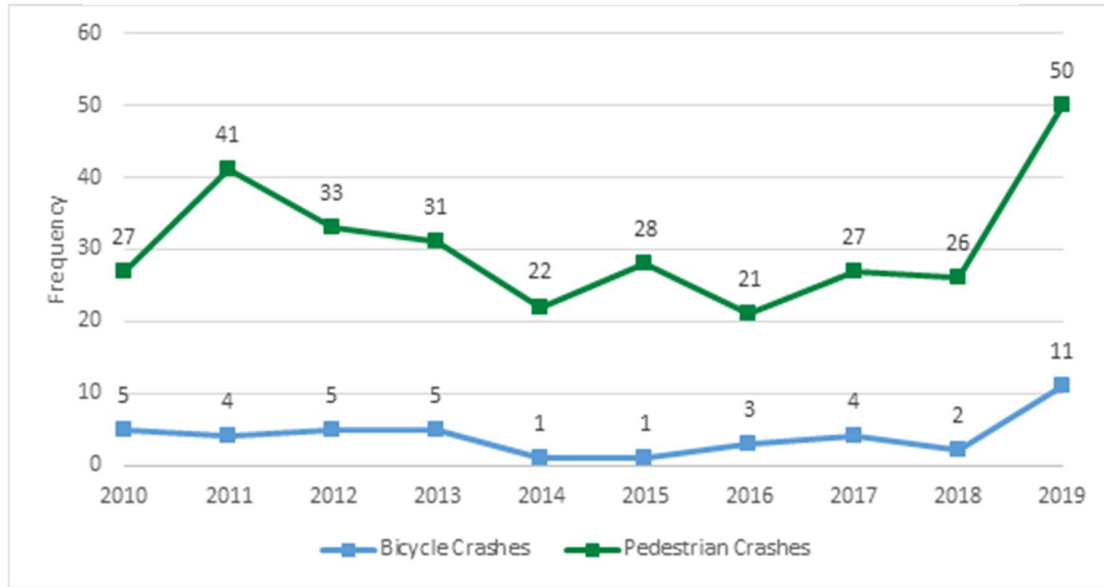


Figure 10: Data Source: NJ Department of Transportation, Safety Voyager 2010-2019

Crashes are categorized by their level of severity. High-severity crashes comprise the top two severity classifications involving fatalities and serious injuries (FSI). Generally, bicycle and pedestrian crashes represent a disproportionate share of fatal and serious injury collisions compared to total crashes.

Figure 11: Middlesex County Bicycle and Pedestrian FSI Crash Trends



Note: The 2019 crash severity data is not comparable to previous years because of modified reporting standards.
Source: NJDOT Safety Voyager

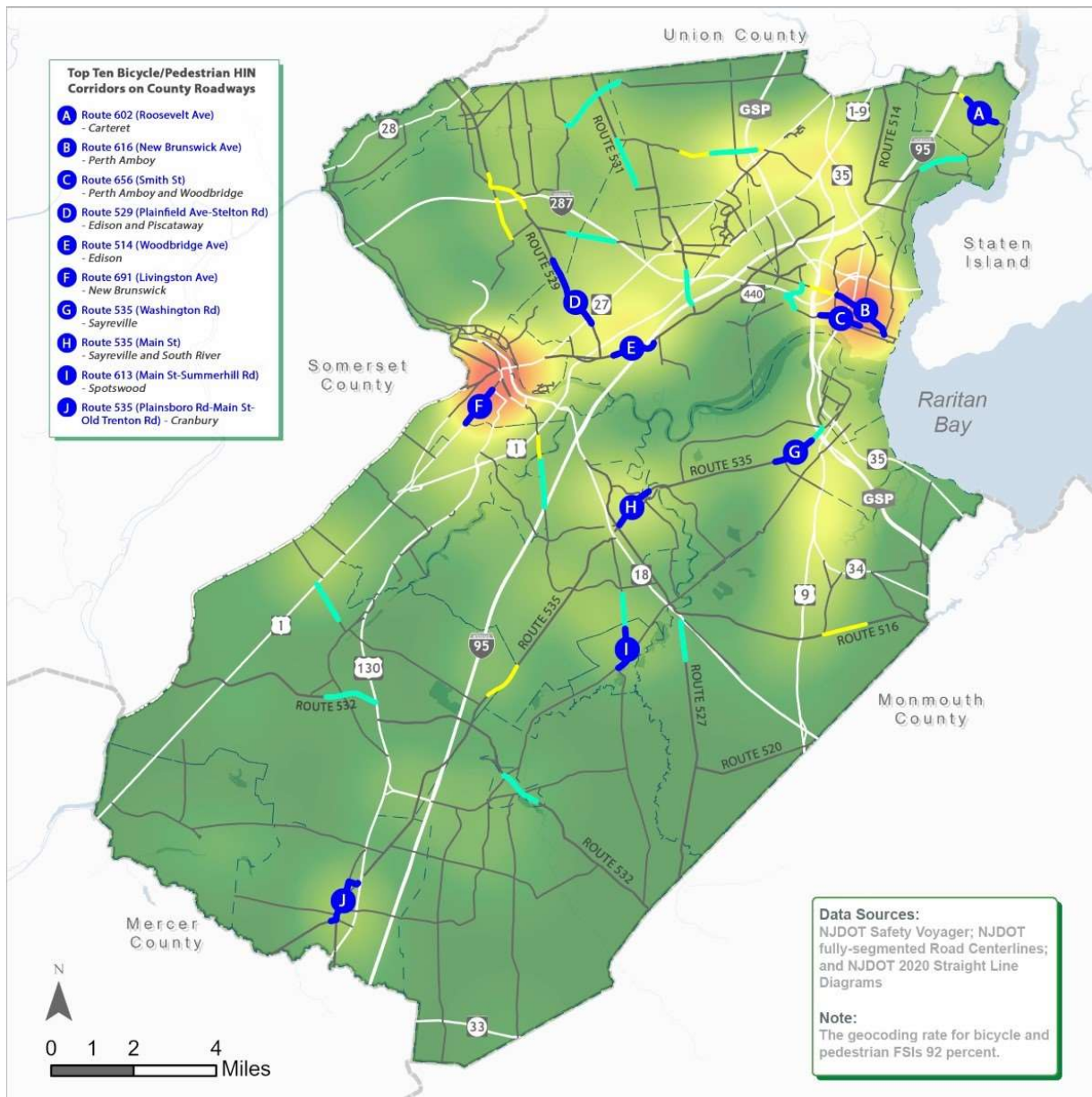
From 2010 through 2018, high severity crashes involving pedestrians in the County have generally followed a slightly downward trend. These incidents were at their lowest value of 21 in 2016, down from 28 in 2015. Since then, high severity pedestrian crashes in the County increased to 27 in 2017 and decreased marginally to 26 in 2018. The high severity crashes involving bicyclists in the County also appear to follow a slight downtrend during this period. Continuing these downward trends is a significant goal of this action plan.

The Map 4 below depicts the County corridors involving bicycle and pedestrian FSIs as identified by the HIN. It classifies the corridors by bicycle and pedestrian HIN scores ranging from 1 (lowest risk) to 3 (highest risk).

The top ten corridors with a HIN score of three identified by the network are listed below:

1. Route 514 (Woodbridge Ave) – Edison
2. Route 529 (Plainfield Ave-Stelton Rd) - Edison and Piscataway
3. Route 535 (Main St) - Sayreville and South River
4. Route 535 (Plainsboro Rd-Main St- Old Trenton Rd) – Cranbury
5. Route 535 (Washington Rd) – Sayreville
6. Route 602 (Roosevelt Ave) – Carteret
7. Route 613 (Main St-Summerhill Rd) – Spotswood
8. Route 616 (New Brunswick Ave) - Perth Amboy
9. Route 656 (Smith St) - Perth Amboy and Woodbridge
10. Route 691 (Livingston Ave) - New Brunswick

Map 4: Top 10 Bicycle/Pedestrian HIN Corridor Crashes on County Roadways



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Bicycle and Pedestrian Master Plan
DRAFT

Prepared: September 16, 2021

County HIN by Bicycle/Pedestrian HIN Scores, 2010-2019

- 3
- 2
- 1

County Roadways

Bicycle/Pedestrian FSIs per Square Mile, 2010-2019

6.4
0

Municipal Boundaries

Due to increased bicycle and pedestrian crash risk at these corridors, the County used these locations to determine where to conduct ground-truthing audits recommended in the County Bicycle and Pedestrian Master Plan. These audits helped define the safety issues in the area and identify improvement opportunities. Note that of the ten corridors, the Route 691 (Livingston Ave) corridor in New Brunswick was recently reconstructed as a Complete Street.

COMMUNITY AND STAKEHOLDER ENGAGEMENT

Destination 2040 Public and Stakeholder Engagement Program

The Middlesex County Board of County Commissioners launched the Destination 2040 strategic planning process in 2018. This initiative involved a public and stakeholder engagement program in 2018 and 2019.

Outreach included comment boxes in various locations throughout the County, online surveys, and public events targeting diverse groups for a comprehensive scope of responses from Middlesex County community members.

The comment boxes and online surveys asked the following two questions:

1. What do you like about living/working in Middlesex County?
2. What would you like to change about Middlesex County?

The County also held outreach events in the following locations:

1. Monroe Senior Center, Monroe Township
2. Rutgers Student Center, New Brunswick
3. Robert Wood Johnson Hospital, New Brunswick
4. Middlesex County College, Edison
5. Woodbridge Center Mall, Woodbridge
6. Menlo Park Mall, Edison Township
7. South Brunswick Public Library, South Brunswick
8. East Brunswick Public Library, East Brunswick
9. Raritan Bay Medical Center, Perth Amboy
10. Cathedral International, Perth Amboy

Participants were asked similar questions at the in-person events as in the online surveys and comment boxes. The County recorded these responses in "Phase I Outreach Report: Destination 2040 Phase I Outreach, November- December 2018."

Additionally, there were events held specifically for veterans, individuals with disabilities, older adults; high school students; and students in English as a Second Language (ESL) Classes.

Across all outreach events, community members expressed the desire for more bike and pedestrian facilities throughout the County. Older participants wanted increased accessibility, outdoor and physical activity options that are 'elder-friendly,' improved lighting, and cycling promotion. Participants of the ESL outreach event noted that traveling around the County was difficult and limited without a car. As the County strives to improve the bike and pedestrian network for increased accessibility, Vision Zero programs and policies will enhance the County's cyclist and pedestrian experience. Not only will the community have more opportunities for biking and walking, but they will also be able to do so in a safer setting.

Celebrate Middlesex

On June 11, 2022, the County held its Celebrate Middlesex County! event at Roosevelt Park in Edison. It was a free, family-friendly event that showcased the unique programs, services, and people of Middlesex County's government.

The Office of Planning hosted a booth with a "Make Your Street" interactive activity for community members to design their dream street.

This activity was done using a printed cross-section and moveable streetscape elements shown to the right and listed below.

Figure 12: Make Your Street Activity



Infrastructure:

- Bike Lanes
- Bollards
- Curb Extensions
- Shoulders
- Sidewalks
- Striped Buffers
- Travel Lanes of varying widths

Public Transportation:

- Bus Lanes
- Street Cars

Other:

- Food Trucks
- Parklets
- Grass Buffers
- Grass Medians
- Landscape Buffers with trees

Out of 59 participants, 83% included bike lanes in their ideal streets, 92% included public transportation options, and 97% had sidewalks, of which 71% chose 10-foot sidewalks. Most participants that included sidewalks and bike lanes in their ideal streets favored the wider options for each, largely expanding the bike and pedestrian realm on the road. For vehicle travel lanes, 71% of participants who included this element in their ideal street favored narrower lanes for vehicles, with 54% choosing 10-foot travel lanes.

D2040 Set the Table!

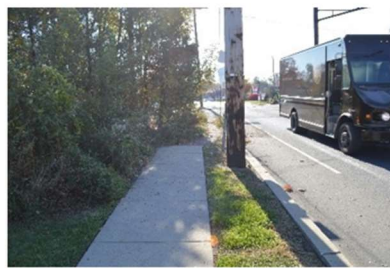
Set the Table! is a component of the County’s extensive public outreach campaign for Destination 2040. It is a spin on the “meeting-in-a-box” outreach format encouraging individuals living in Middlesex County to host social gatherings and discuss the issues in their community that are important to them. Meeting hosts were provided with a Middlesex County Destination 2040 Host Kit, which included everything needed to organize and hold a gathering, including a \$50 stipend to offset the cost of food. There was a total of 64 hosts and 317 guests. Below are some of the responses from community members when asked about transportation and street safety in Middlesex County:

- We prefer environmentally friendly transit like bikes and buses, but bike infrastructure is lacking, and bus schedules aren’t frequent enough.
- Increase crosswalk safety for pedestrians through curb extensions and flashing signs.
- Need better lighting on streets
- Main safety concern of reckless drivers
- Safe bike/walking paths that connect more towns to commute/to work at, also safer for kids, more attention to open space, greenways, parks
- Our state is designed for highways and commuting. We need more pedestrian-friendly and shared motorized electric bikes/scooters

D2040 Middlesex County Bicycle and Pedestrian Audits and Workshops



Summerhill Road, Spotswood, NJ



Sidewalk in Piscatway, NJ



Bicycle Audit on Smith Street, Perth Amboy, NJ

As part of the Destination 2040 Bicycle and Pedestrian Master Plan, the County performed three ground-truthing audits and hosted two public workshops around the County in November 2021. Audit locations were chosen from County owned roads and based on the following criteria:

- Bicycle and pedestrian high injury network (HIN) corridors
- Bicycle and pedestrian priority areas
- Surrounding land uses
- Availability of a sidewalk
- Roadway conditions
- Geographic diversity

The following three study corridors were selected:

1. Piscataway, Route 665 (Stelton Road)
2. Perth Amboy, Route 656 (Smith Street) and Route 658 (Market Street)
3. Spotswood, Route 613 (Summerhill Road and Main Street)

Middlesex County Office of Planning held two public workshops in Piscataway and Spotswood, close to the corridors, on the same day the project team conducted the ground-truthing audits.

The ground-truthing audits found common issues in all three study corridors that affect bicyclist and pedestrian safety. Safety issues included unmarked or low-visibility crosswalks, lack of audible cues at signalized intersections, missing or incorrectly placed curb ramps at intersections, infrequent presence of lighting, and discontinuous sidewalks.

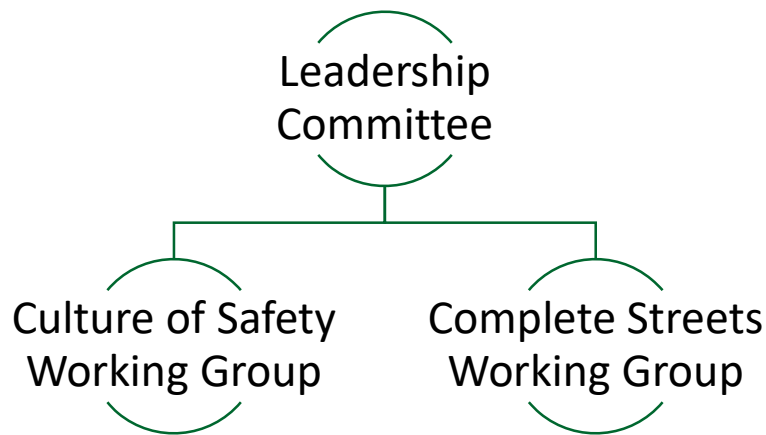
Middlesex County Vision Zero Partnership

The Middlesex County Vision Zero Partnership was created at the direction of the Board of County Commissioners by resolution on July 21, 2022. It consists of a Leadership Committee and two working groups. The Leadership Committee includes the mayors of Middlesex County's 25 municipalities or their designees and two County Commissioner co-chairs. The purpose of the Leadership Committee is to enable elected officials to take ownership of Vision Zero planning and implementation and to enable cross-jurisdictional change. The two working groups are composed of various stakeholders, including county and municipal staff, representatives of state and regional agencies, and non-governmental organizations. The

Culture of Safety Working Group focuses on safer vehicles, safer speeds, and post-crash care, and the Complete Streets Working Group focuses on safer roads and safer road users. Both working groups will address equity, partnerships, and public engagement.

The Partnership convened in person on August 10, 2022. The working groups met immediately following the Leadership Committee meeting so that working group members could hear the discussion by the Leadership Committee. The working groups helped develop consensus for prioritizing projects to be included in the Middlesex County Vision Zero Action Plan. The Partnership will be an ongoing collaboration to help implement, evaluate, and monitor the Vision Zero Action Plan.

Figure 13: The Middlesex County Vision Zero Partnership



A common theme in the Culture of Safety Group was emphasizing education programs, including Vision Zero education for the community and driver education programs focusing on distracted driving and unsafe speeds. Participants also supported right-sizing the County vehicle fleet as a Safe Vehicles strategy and better data sharing and coordination to improve Post-Crash Care.

The Complete Streets Working Group identified intersection enhancements and redesign as a priority for Safe Roads and traffic calming policies as a strategy for Safe Speeds. Bicycle and pedestrian network projects and funding for low-cost improvements were also strategies that were considered impactful and effective interventions.

Both working groups recommended working with the freight and logistics industries within the County to identify safer routes for the movement of goods. See complete results below in Figure 14 and 15 below:

Figure 14: Culture of Safety Project Prioritization

Safety Element	Project/Strategy	# of Responses
Safe Road Users	Vision Zero Education for the Community	8
	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 people do not bear a disproportionate financial burden.	1
	Environmental justice population engagement strategies	4
	Pilot Demonstration Projects	5
	Vision Zero task Force	3
Safe Vehicles	Safer County Vehicle Fleet	6
	Autonomous Vehicle Technology Task Force	1
	Right-Size County Vehicle Fleet	7
	DataCity Smart Mobility Testing Corridor	4
Post-Crash Response	Prompt Medical Service	7
	Establish a rapid response 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

Figure 16: What Defines Success Working Group Responses

What Defines Success	No More Deaths
	No More Serious Fatal Injuries
	Speed Limit Reduction
	Transparency
	Fewer Cars on the Road
	Behavioral Changes
	Shared Rides
	Road Diets
	Level of Service
	Partnership- Center for Advanced Infrastructure and Transportation (CAIT)

MIDDLESEX COUNTY VISION ZERO ACTION ITEMS

Policy and Process changes

In 2021, Middlesex County restructured the Department of Transportation to ensure greater coordination between its offices and a more streamlined process when completing transportation-related projects. The Middlesex County DOT now includes the Office of Planning, the Office of Engineering, Middlesex County Area Transit (MCAT), Keep Middlesex Moving (KMM), and the Office of Public Works. Unifying the various offices under the MCDOT umbrella allows the department to better coordinate project planning, engineering, construction, and operations.

Having reorganized the County's Department of Transportation for a more efficient process, the County also reviewed New Jersey traffic safety initiatives and Vision Zero action plans from around the country for policies and best practices. Based on that review, the County created the following initial recommendations for the Action Plan:

Figure 17: Policy Recommendations for Middlesex County's Vision Zero Action Plan

TOPIC	POLICY RECOMMENDATIONS
ENGINEERING	<ul style="list-style-type: none"> • Follow the current state of the practice for engineering countermeasures, utilizing the latest NACTO and MUTCD guidelines. • Align engineering recommendations with goals of NJ SHSP. • Align engineering recommendations with design guidance provided by NJDOT's Bicycle Planning and Design Guidelines, Pedestrian Planning and Design Guidelines, and Complete Streets Design Guide. • Prioritize engineering solutions that emphasize traffic-calming as a means to reduce speeding and improve vulnerable road user safety. • Incorporate multimodal planning practices, such as increased bicycle parking at transit stops, to advance Vision Zero goals. • Leverage safe street design interventions to reduce the need for police enforcement of traffic safety.
EDUCATION	<ul style="list-style-type: none"> • Work to bring about a cultural change that shifts responsibility for crashes from victims to the unsafe system that allows them to happen. • Execute data-driven public education campaigns that disseminate targeted messaging through multiple channels—such as social media, newsletters, flyers, and ads—to keep residents informed about ongoing Vision Zero activities. • Amend driver education programs for municipal and County employees to incorporate Vision Zero concepts and align with program goals. • Leverage existing Safe Routes to School programs run by Keep Middlesex Moving and incorporate transportation safety curricula in schools, referencing Greater Mercer TMA's Vision Zero for Youth program as a model. • Maintain a Vision Zero website to disseminate information and educational materials related to traffic safety. • Employ consistent branding for Vision Zero projects to heighten public awareness of these initiatives.

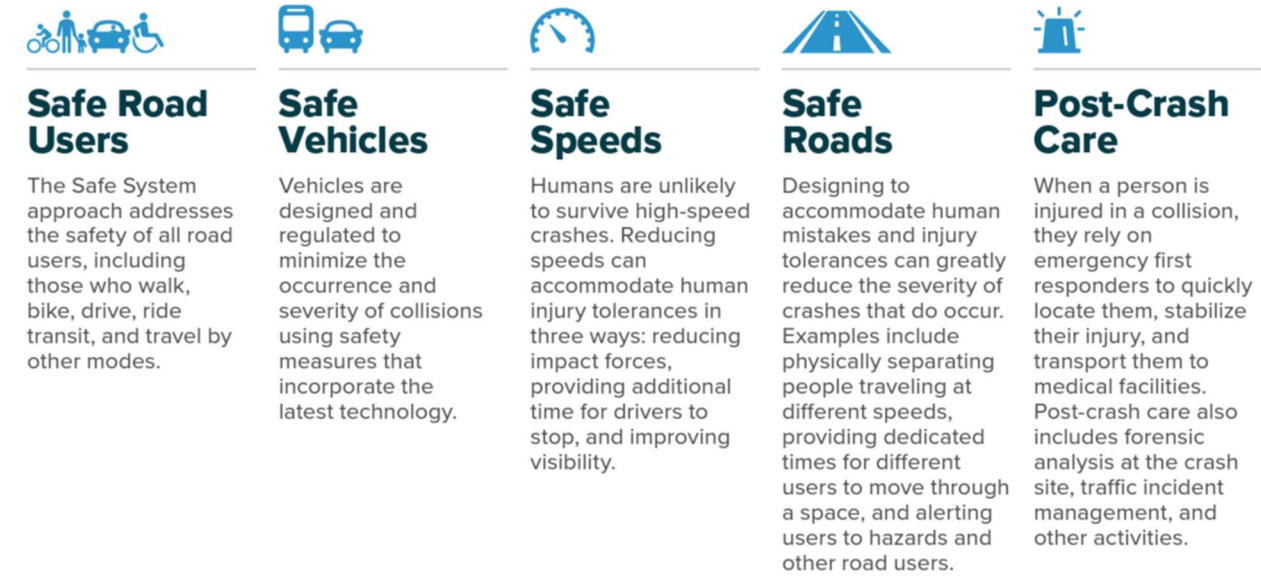
<p>ENFORCEMENT</p>	<ul style="list-style-type: none"> • Pursue community-based enforcement strategies that are non-discriminatory and support rather than replace engineering solutions. • Authorize enforcement only after conducting extensive engagement and education activities. • Although automated enforcement cameras are currently prohibited in New Jersey, pursue a legislative bill to pilot automated red light and speed enforcement programs to alleviate some of the equity concerns related to police enforcement of traffic violations, while ensuring site selection is equitable.
<p>ENGAGEMENT</p>	<ul style="list-style-type: none"> • Engage the public during the creation of the Vision Zero plan through multiple outlets, including interactive public workshops, surveys, focus groups, stakeholder interviews, and interactive online maps. • Meet residents where they are, such as community events like street fairs and farmers' markets. • Make a special effort to engage traditionally underserved populations by providing language translation for meetings and engagement materials, informational tables at existing community events, pop-up surveys near transit stops, and children's activities at events so families can participate. • Involve community members who have been directly impacted by traffic violence and encourage them to share their stories. • Utilize quick-build demonstration projects to introduce residents to Vision Zero concepts and collect feedback that will guide future infrastructure interventions. • Involve art and artists in the engagement process. • Create a new Vision Zero Task Force to liaison between the County and the general public, or add Vision Zero tasks to existing County Transportation Coordinating Committee. • Develop engagement toolkits residents can use to educate and engage with their neighbors on traffic safety issues. • Ensure that engagement activities continue through the implementation phase of the plan.
<p>EVALUATION</p>	<ul style="list-style-type: none"> • Develop evaluation strategies that prioritize robust data collection and analysis, including, but not limited to, trip/mode tracking and crash analysis.

	<ul style="list-style-type: none"> • Evaluate pilot projects and programs to measure success and determine necessary changes. • Develop indicators of success to help measure progress as recommended actions are implemented, consciously choosing metrics beyond Level of Service to include crash reduction and speeding reduction. • Regularly conduct evaluative efforts that result in publicly accessible progress reports or program updates.
EQUITY	<ul style="list-style-type: none"> • Identify geographic communities of concern through analysis of relevant demographic variables. • Make a special effort to engage traditionally underserved populations. • Consider and address impacts on equity and prioritize actions that promote racial and social justice. • Align actions with equity goals laid out in the NJ SHSP.

Applying the Safe System Approach

The Middlesex County Vision Zero Action Plan Table is organized by the five elements of the Safe System Approach, designed to eliminate fatal and serious injuries for everyone using the road system.

Figure 18: The Safe System Elements



Actions listed under the five elements are further divided into two groups or "Lenses" according to the element each is associated with.

- **"Complete Streets"** – Actions resulting in physical changes to transportation infrastructure and operation to address safety issues. This includes recommendations listed under the Safe System Elements.
 - Safe Speeds
 - Safe Roads
- **"Culture of Safety"** – Actions contributing to behavior change, stakeholder collaboration, and empowering communities to advocate for safety and enforcement. This includes recommendations listed under the Safe System Elements:
 - Safe Road Users
 - Safe Vehicles
 - Safe Post-Crash Response and Care

The Table includes:

- Rationale: why the action was included
- Lead: the entity primarily responsible for advancing the action
- Support: entities responsible for supporting the action
- Timeframe: For specific, discreet, and targeted actions, specific costs can be identified.

Many of the recommendations listed in the table are general actions that apply to several locations throughout the County. County staff used the Action Plan Table to spur discussion during the Partnership Meeting to prioritize actions and identify specific projects and strategies the Partnership can employ to implement the action items.

Project Prioritization Criteria

There are 56 actions in the Middlesex VZ Action Plan as noted in the table below. The project team identified priority actions based on the potential to have the highest impact on safety to achieve Vision Zero by 2040. The actions are ranked from 1 to 5, with 5 having the highest impact on safety, within the Safe System element. Majority of these transformative/high impact infrastructure actions can be implemented in many locations across the County. As and when funding is available, the County will prioritize the projects on the High Injury Network. However, the County also recognizes the need to have a proactive and systemic approach to safety by including a sub-granting program to municipalities to apply all types of Vision Zero actions (Complete Streets and Culture of Safety) throughout the County transportation network.

MIDDLESEX COUNTY VISION ZERO ACTION PLAN ITEMS

No.	Topic	Action Item	Action Description	Action Type	Potential Lead	Potential Support	Timeframe	Cost	Priority <i>(Impact to safety)</i>
SR1	SAFE ROADS	Equity/ Environmental Justice	<ul style="list-style-type: none"> Regularly update geographic communities of concern data and ensure the Destination 2040's Strategic Investment Framework is utilized in making transportation investment decisions. 	Policy, Programmatic	County	NJDOT, NJTPA, Municipalities	Short	Low	5
SR2	SAFE ROADS	HIN Corridors	<ol style="list-style-type: none"> <i>HIN County Projects</i> <ul style="list-style-type: none"> Focus on HIN projects on County Roads. Utilize FHWA Proven Safety Countermeasures. Conduct Road Safety Audits Implement recommendations identified through the Road Safety Audits. Consider and address impacts on equity and prioritize actions that promote racial and social justice. <i>HIN State Projects</i> <ul style="list-style-type: none"> Work closely with NJDOT to improve safety along Inter-State and State roadways in Middlesex County. Conduct road safety audits. <i>HIN Municipal Projects</i> <ul style="list-style-type: none"> Offer technical guidance and support to municipalities on HIN projects. <i>HIN New Jersey Turnpike Authority Projects</i> <ul style="list-style-type: none"> Work with the NJTA to assess and improve safety along New Jersey Turnpike and Garden State Parkway. 	1-3. Programmatic, Capital 4. Programmatic	1. MCDOT 2. NJDOT, MCDOT 3. Municipalities, MCDOT 4. NJTA	4. County	1-3. Short: Conduct studies to determine improvements on 4 HIN corridors Medium: Develop design plans for 2 HIN Corridors Long: Begin construction on HIN corridors 4. Short: same Medium: same Long: Begin construction on 2 HIN corridors	1-3. High 4. Medium	5
SR3	SAFE ROADS	Intersections Enhancements and Redesign	<ul style="list-style-type: none"> Redesign high-risk intersections by utilizing the FHWA Proven Safety Countermeasures such as crosswalk visibility enhancements, Lead Pedestrian Intervals (LPIs), shortening crossing distances, etc. 	Programmatic, Capital	County, Municipalities	NJDOT Municipalities	Medium	Medium	5
SR4	SAFE ROADS	Bicycle and Pedestrian Network Projects	<ul style="list-style-type: none"> Install and improve bicycle and pedestrian infrastructure on the HIN County Corridors located in established bicycle and pedestrian priority areas per the Middlesex County Bicycle & Pedestrian Master Plan. Focus on FHWA's Proven Safety Countermeasures for reducing bicycle and pedestrian crashes, such as crosswalk visibility enhancements, bicycle lanes, leading pedestrian interval timing, medians and pedestrian refuge islands, pedestrian hybrid beacons, road diets, and walkways. Consider separating users in space by installing separated and protected facilities wherever applicable per the Safe Systems Approach and FHWA. 	Programmatic, Capital	County	NJDOT, Municipalities	Long	High	5

Costs
 Low - <\$100,000
 Medium - \$100,000 - \$1 Million
 High - >\$1 Million

Timeframe
 Short: Under 2 years
 Medium: 2-5 years
 Long: Over 5 years

Action Type
 Policy
 Programmatic
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Prioritization
 Rank 1-5
 5 = High
 1= Low

MIDDLESEX COUNTY VISION ZERO ACTION PLAN ITEMS

No.	Topic	Action Item	Action Description	Action Type	Potential Lead	Potential Support	Timeframe	Cost	Priority <i>(Impact to safety)</i>
SR5	SAFE ROADS	Complete Streets Networks	<ul style="list-style-type: none"> Focus on bicycle and pedestrian infrastructure improvements: connect Complete Streets, establishing continuous Complete Street networks connecting neighborhoods to parks, off-road trails, schools, libraries, senior centers, government offices, and other public destinations, separating users from vehicular traffic where feasible. Tailor implementation strategies according to the urban, suburban, and rural contexts where they will be implemented for maximum effectiveness to support Destination 2040 and the Middlesex County Strategic Plan. 	Policy, Programmatic	County	NJDOT, Municipalities	Long	High	5
SR6	SAFE ROADS	County Roundabout Pilot Program	<ul style="list-style-type: none"> Establish a County Roundabout Pilot Program for municipalities. 	Programmatic, Capital	County	NJDOT Municipalities	Medium	Medium	4
SR7	SAFE ROADS	Safety Countermeasures Program	<ul style="list-style-type: none"> Establish a program to implement specific countermeasures such as road diets, road safety audits, etc., on an annual basis. 	Programmatic, Capital	County	NJDOT, Municipalities	Short-Term: Establish program Medium-Term: Conduct 2 Road Safety Audits and consider road diet studies for 2 corridors Long-Term: Implement RSA recommendation / road diets	Medium	4
SR8	SAFE ROADS	Improve Lighting Levels	<ul style="list-style-type: none"> Improve lighting levels at locations where crashes are attributable to insufficient lighting along the HIN. 	Policy, Programmatic, Capital	County	NJDOT, Municipalities	Medium	Medium	4
SR9	SAFE ROADS	Modify Signal Timing	<ul style="list-style-type: none"> Assess and modify signal timing and phasing to lower fatal and serious injury crashes for all users at intersections. This can include LPI, No Turn On Red, yellow change intervals, exclusive phasing for left turns, etc. 	Policy, Programmatic, Capital	County	NJDOT, Municipalities	Medium	Medium	4
SR10	SAFE ROADS	Implement LPIs	<ul style="list-style-type: none"> Implement Leading Pedestrian Intervals (LPIs) at high crash intersections along County roadways. Encourage municipalities with high crash intersections to consider LPIs. Work with NJDOT to implement LPIs on high-crash state roadways in the County. 	Programmatic, Capital	County	NJDOT, Municipalities	Medium	Short	4

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No.	Topic	Action Item	Action Description	Action Type	Potential Lead	Potential Support	Timeframe	Cost	Priority <i>(Impact to safety)</i>
SR11	SAFE ROADS	Design Standards and Guides	<ul style="list-style-type: none"> Develop a Middlesex County Complete Streets Design Guide Develop a policy to follow the current state of the practice for engineering countermeasures, utilizing the latest National Association of City Transportation Officials (NACTO) and Manual of Uniform Traffic Control Devices (MUTCD) guidelines. 	Policy	County	NJDOT, Municipalities	Short, Medium	Low	2
SR12	SAFE ROADS	Follow State Guidance Documents	<ul style="list-style-type: none"> Develop policy to align engineering recommendations with design guidance provided by NJDOT's Bicycle Planning and Design Guidelines, Pedestrian Planning and Design Guidelines, and Complete Streets Design Guide. Develop a policy to align engineering recommendations with the NJ Strategic Highway Safety Plan (SHSP) goals. 	Policy	County	NJDOT, Municipalities	Short	Low	3
SR13	SAFE ROADS	Curbside Management Program	<ul style="list-style-type: none"> Establish a Curbside Management Program that anticipates using multimodal, electric, and autonomous vehicles. 	Programmatic	County	NJDOT, Municipalities	Short	Low	4
SR14	SAFE ROADS	Multimodal Planning & Transit	<ul style="list-style-type: none"> Promote multimodal planning and integrate bicycle and pedestrian improvements with transit. Leverage existing NJDOT Safe Routes to Transit Program and NJ TRANSIT's Transit Friendly Planning Program. 	Programmatic, Capital	County	NJDOT, NJ TRANSIT	Short	Low	4
SR15	SAFE ROADS	Funding for Low-Cost Improvements	<ul style="list-style-type: none"> Develop a plan to ensure that low-cost infrastructure improvements such as crosswalk markings, lead pedestrian intervals, etc., are adequately funded and maintained. Leverage repaving efforts to get re-striping done at low- or no cost. 	Programmatic, Capital	County	NJDOT, Municipalities	Short	Low	5
SR16	SAFE ROADS	Regular Program Updates	<ul style="list-style-type: none"> Regularly update the status of our transportation network accessibility. 	Programmatic	County	NJDOT, Municipalities	Short	Low	2
SR17	SAFE ROADS	Ongoing Data Collection and Analyses	<ul style="list-style-type: none"> Develop and refine evaluation strategies that prioritize robust data collection and analysis, including but not limited to trip/mode tracking and crash analysis, and injury/fatality tracking, consciously choosing metrics beyond Level of Service to include crash reduction and speeding reduction. 	Programmatic	County	NJDOT, Municipalities	Short	Low	3
SR18	SAFE ROADS	Pilot / Demonstration Projects	<ul style="list-style-type: none"> Evaluate pilot projects and programs to measure success and determine necessary changes. 	Programmatic	County	NJDOT, Municipalities	Short	Low	4
SR19	SAFE ROADS	Sidewalk Program	<ul style="list-style-type: none"> Develop a sidewalk program to help municipalities build sidewalks on municipal and county roads. 	Capital Programmatic	County	NJDOT, Municipalities	Short	High	4
SR20	SAFE ROADS	Sub-Granting Program	<ul style="list-style-type: none"> Projects to be prioritized from municipal plans via a competitive solicitation. 	Varies	County, Municipalities	NJDOT, Municipalities	Varies	High	5

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SS1	SAFE SPEEDS	Speed Management Policy	<ul style="list-style-type: none"> Develop a policy for setting context-sensitive speed limits following the Safe System approach. Recommend use of USLIMITS2 and Safe System to determine speed limits along County Roadways. 	Policy	MCOP	MCOE	Short	Low	4
SS2	SAFE SPEEDS	Roadway Design Standards For Speed Management	<ul style="list-style-type: none"> Adopt roadway design standards focused on speed management, such as target-speed-based design. Adjust roadway geometries for context-appropriate speeds. 	Programmatic Capital	MCDOT	NJDOT, Municipalities	Short	High	5
SS3	SAFE SPEEDS	Traffic Calming Policies	<ul style="list-style-type: none"> Develop a policy prioritizing engineering solutions emphasizing traffic-calming to reduce speeding and improve vulnerable road user safety. 	Policy	MCDOT	NJDOT, Municipalities	Short	Low	4
SS4	SAFE SPEEDS	Collect Speed Data	<ul style="list-style-type: none"> Examine and correlate speed data to the HIN. 	Programmatic	MCDOT	NJDOT, Municipalities	Short	Low	3
SS5	SAFE SPEEDS	Sub-Granting Program	<ul style="list-style-type: none"> Projects to be prioritized from municipal plans via a competitive solicitation. 	Varies	County, Municipalities	NJDOT, Municipalities	Varies	High	5
SRU1	SAFE ROAD USERS	Vision Zero Education for the community	<ul style="list-style-type: none"> Execute data-driven public education campaigns that disseminate targeted messaging through multiple channels—such as social media, newsletters, flyers, and ads—to keep residents informed about ongoing Vision Zero activities. 	Programmatic	MCOP, MC Marketing	Municipalities, KMM, NJTPA	Short	Medium	3
SRU2	SAFE ROAD USERS	Vision Zero Branding	<ul style="list-style-type: none"> Develop Vision Zero messaging and branding that Middlesex County can use consistently through all engagement, education, and enforcement efforts. Work with the marketing department to develop both digital and print bilingual collateral. Incorporate short biographies of crash victims into public education and messaging. Work to bring about a cultural change that shifts responsibility for crashes from victims to the unsafe system that allows them to happen. Address the economic impact and high costs of crashes to make a case for Vision Zero. 	Programmatic	MCOP, MC Marketing	Municipalities, KMM, NJTPA	Short	Medium	3
SRU3	SAFE ROAD USERS	Public Engagement During the implementation	<ul style="list-style-type: none"> Engage the public when implementing the Vision Zero plan through multiple outlets, including interactive public workshops, surveys, focus groups, stakeholder interviews, and interactive online maps. 	Programmatic	MCOP, MC Marketing	Municipalities, KMM, NJTPA	Short	Medium	3

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		of the Vision Zero Action Plan							
SRU4	SAFE ROAD USERS	Outreach Strategies for Vision Zero	<ul style="list-style-type: none"> Apply state-of-the-practice public engagement strategies, e.g., The NJTPA's public engagement toolkit, "Engage!"; continue public engagement throughout the implementation of Vision Zero strategies. Meet residents where they are, such as at community events like street fairs and farmers' markets. Involve community members who have been directly impacted by traffic crashes and encourage them to share their stories, leveraging local arts programs such as CoLAB for this purpose. Involve art and local artists in the engagement process. Develop engagement toolkits residents can use to educate and engage with their neighbors on traffic safety issues; explore the possibility of modifying VTC-POET's Set the Table toolkit for this purpose. 	Programmatic	MCOP, MC Marketing	Municipalities, NJTPA	Short	Medium	3
SRU5	SAFE ROAD USERS	Driver Education & Vision Zero	<ul style="list-style-type: none"> Amend driver education programs for municipal and County employees to incorporate Vision Zero concepts and align with program goals. 	Programmatic	MCOP, Police, EMS	Municipalities, NJTPA	Short	Low	4
SRU6	SAFE ROAD USERS	Distracted Driving and Unsafe Speed Training and Education	<ul style="list-style-type: none"> Educate and train police officers to focus on the top two contributing factors for all crashes in Middlesex County - distracted driving and unsafe speeds. Focus on these factors and less on non-moving violations. 	Programmatic	Police, County		Short	Medium	5
SRU7	SAFE ROAD USERS	Safe Routes to School & Vision Zero	<ul style="list-style-type: none"> Engage with schools (K-12) through the Safe Routes to School programs run by Keep Middlesex Moving. Work with KMM to establish and incorporate Vision Zero programming in transportation safety curricula in schools, referencing Greater Mercer TMA's Vision Zero for Youth program as a model. 	Programmatic	KMM, County	Municipalities	Short	Low	3
SRU8	SAFE ROAD USERS	Outreach Platforms for Vision Zero Data Sharing	<ul style="list-style-type: none"> Maintain a Vision Zero website to disseminate information and educational materials related to traffic safety, including links to relevant plans, projects, and initiatives that advance Vision Zero goals and actions; collect website analytics and user information. 	Programmatic	MCOP, MC Marketing	Municipalities NJTPA	Short	Low	4
SRU9	SAFE ROAD USERS	Collaboration with Community Groups and Ambassadors	<ul style="list-style-type: none"> Identify and maintain a database of community-based organizations within the County to support engagement and outreach efforts as actions are implemented throughout the County. 	Programmatic	MCOP	Municipalities, NJTPA	Short	Low	4

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			<ul style="list-style-type: none"> Collaborate with community groups and local ambassadors to raise awareness for traffic safety projects and campaigns—target campaigns geared towards older drivers and young drivers. 						
SRU 10	SAFE ROAD USERS	End Impaired Driving Deaths	<ul style="list-style-type: none"> Continue to support and expand County campaigns toward ending impaired driving deaths in the County. 	Programmatic	MCOP, Police, Public Health	Municipalities	Short	Low	5
SRU 11	SAFE ROAD USERS	Community-Based Enforcement Strategies	<ul style="list-style-type: none"> Pursue community-based enforcement strategies that place officers on patrol in the same communities for extended periods, allowing them to build relationships with residents and work together to solve problems related to traffic safety. Provide opportunities for law enforcement officers to build relationships and gain trust among residents through engagement and outreach at community events. Work with County Sheriff and local police to educate officers on Vision Zero 	Policy, Programmatic	MCOP, Police, County Sheriff	KMM, NJTPA	Short	Low	5
SRU 12	SAFE ROAD USERS	Vision Zero Training for Law Enforcement	<ul style="list-style-type: none"> Develop traffic safety training for law enforcement officers emphasizing Vision Zero concepts. Ensure enforcement strategies are non-discriminatory and support rather than replace engineering solutions. Support diversion programs focused on education rather than punishment. Consider removing discriminatory ordinances and laws that require bike registration and don't allow biking on sidewalks. 	Policy, Programmatic	MCOP, Police	County	Short	Medium	5
SRU 13	SAFE ROAD USERS	Vision Zero County Staff Training	<ul style="list-style-type: none"> Conduct training with County Staff to educate on Vision Zero and Safe Systems approach. Consider highlighting the impact of Vision Zero on public health 	Programmatic	MCOP, Office of Public Health	NJTPA	Short	Medium	5
SRU 14	SAFE ROAD USERS	Equity	<ul style="list-style-type: none"> Support structured fines for traffic violations so that low-income people do not bear a disproportionate financial burden. Implement best practices to avoid bias in enforcement. 	Programmatic	Police, MCOP	County	Short	Low	3
SRU 15	SAFE ROAD USERS	EJ Population Engagement Strategies	<ul style="list-style-type: none"> Prioritize engagement with traditionally underserved populations by providing language translation for meetings and engagement materials, informational tables at existing community events, pop-up surveys near transit stops, and children's activities at events so families can participate. 	Programmatic	MCOP, MC Marketing	Schools, NJ TRANSIT, Parks & Recreation	Short	Medium	5
SRU 16	SAFE ROAD USERS	Pilot Demonstration Projects	<ul style="list-style-type: none"> Utilize quick-build demonstration projects to introduce residents to Vision Zero concepts and collect feedback to guide future infrastructure interventions. 	Programmatic, Capital	County	Municipalities	Short	Medium	5
SRU 17	SAFE ROAD USERS	Vision Zero Program Administration	<ul style="list-style-type: none"> Create a new Vision Zero Program Coordinator position to liaison between the County and the public. 	Programmatic	MCOP	Marketing	Short	Low	3

Costs
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No.	Topic	Action Item	Action Description	Action Type	Potential Lead	Potential Support	Timeframe	Cost	Priority (Impact to safety)
SRU 18	SAFE ROAD USERS	Engagement Strategies in a Pandemic Environment	<ul style="list-style-type: none"> Amend engagement activities to comply with public health guidelines related to the ongoing COVID-19 pandemic, such as masking and social distancing. Host virtual workshops, focus groups, and stakeholder interviews if necessary. Utilize web-based tools such as electronic surveys and interactive online maps to gather feedback without requiring face-to-face contact. Employ newsletters and the County's Vision Zero website to disseminate information about engagement opportunities. 	Programmatic	MCOP, MC Marketing	Municipalities	Short	Medium	2
SRU 19	SAFE ROAD USERS	Education Programs for Local Board Members	<ul style="list-style-type: none"> Provide education programs, webinars, and/or workshops to inform local board members, e.g. council members, planning boards, and zoning boards, of how to incorporate Vision Zero in planning practices. 	Programmatic	Municipalities		Short	Low	2
SRU 20	SAFE ROAD USERS	Freight and Logistic Involvement	<ul style="list-style-type: none"> Work with freight and logistics companies to determine the safest truck routes to use in Middlesex County 	Programmatic	County		Medium	High	2
SRU 21	SAFE ROAD USERS	Sub-Granting Program	<ul style="list-style-type: none"> Projects to be prioritized from municipal plans via a competitive solicitation. 	Varies	County, Municipalities	NJDOT, Municipalities	Varies	High	5
SV1	SAFE VEHICLES	Safer County Vehicle Fleet	<ul style="list-style-type: none"> Ensure that all new County fleet and emergency response vehicles are equipped with the latest crash reduction technology and safety equipment. Some new technologies include automatic braking, lane assist, and pedestrian detection. 	Capital	MCDOT, Police, EMS	MCOP	Long	High	2
SV2	SAFE VEHICLES	AV Technology Task Force	<ul style="list-style-type: none"> Consider creating a task force or plan to study the potential opportunities and impacts associated with emerging technologies such as autonomous vehicles and micromobility modes. 	Programmatic	MCDOT, Police, EMS	MCOP, Municipalities	Short	Low	4
SV3	SAFE VEHICLES	Right-Size County Vehicle Fleet	<ul style="list-style-type: none"> Ensure that county-owned vehicles are right-sized for the areas they serve. 	Programmatic	MCDOT, Police, EMS	MCOP	Long	Medium	2
SV4	SAFE VEHICLES	DataCity Smart Mobility Testing Corridor	<ul style="list-style-type: none"> Utilize data gathered from DataCity to inform Vision Zero policies and programs Use testing corridor to assess recommended design guidelines and principles 	Programmatic, Capital	County	MCOP	Medium	High	4
SV5	SAFE VEHICLES	Sub-granting program	<ul style="list-style-type: none"> Set up a program that allows municipalities to submit VZ applications to receive SS4A or other funds from Middlesex County. 	Programmatic Capital	County	MCOP	Varies	High	5

Costs
 Low - <\$100,000
 Medium - \$100,000 - \$1 Million
 High - >\$1 Million

Timeframe
 Short: Under 2 years
 Medium: 2-5 years
 Long: Over 5 years

Action Type
 Policy
 Programmatic
 Operational
 Capital

Prioritization
 Rank 1-5
 5 = High
 1= Low

MIDDLESEX COUNTY VISION ZERO ACTION PLAN ITEMS

No.	Topic	Action Item	Action Description	Action Type	Potential Lead	Potential Support	Timeframe	Cost	Priority <i>(Impact to safety)</i>
PC1	POST CRASH RESPONSE & CARE	Prompt Medical Service	<ul style="list-style-type: none"> Ensure post-crash response time is prompt and track deployment to scene time. 	Programmatic	MCDOT, Police, EMS	Health Agencies	Short	Low	4
PC2	POST CRASH RESPONSE & CARE	Establish a Rapid Response Team	<ul style="list-style-type: none"> Establish an interagency rapid response team to coordinate with victim families for support services, ensure accurate data collection, and share post-crash care. 	Programmatic	MCDOT, Police, EMS	Health Agencies	Short	Low	1
PC3	POST CRASH RESPONSE & CARE	Data Sharing and Coordination	<ul style="list-style-type: none"> Share data across agencies and organizations to develop a holistic understanding of the safety landscape and to improve accuracy. Create a feedback loop to regularly share crash data insights across county departments to influence design and outreach. 	Programmatic	MCDOT, Police, EMS, CAIT	Health Agencies	Medium	Low	3
PC4	POST CRASH RESPONSE & CARE	Collaborate with Hospitals	<ul style="list-style-type: none"> Work with County hospitals for comprehensive crash data collection. Incorporate Vision Zero initiatives in public health plans including the Community Health Needs Assessment (CHNA). 	Programmatic	County	Health Agencies	Short	Low	3
PC5	POST CRASH RESPONSE & CARE	Sub-Granting Program	<ul style="list-style-type: none"> Projects to be prioritized from municipal plans via a competitive solicitation. 	Varies	County, Municipalities	NJDOT, Municipalities	Varies	High	5

Costs
 Low - <\$100,000
 Medium - \$100,000 - \$1 Million
 High - >\$1 Million

Timeframe
 Short: Under 2 years
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Action Type
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Prioritization
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 5 = High
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MEASURING MIDDLESEX COUNTY SUCCESS

Defining Success – Tracking Crash, Injury, and Fatality Reduction

Transparency and accountability are at the core of a Vision Zero approach. The key performance measure that will indicate if the action items outlined in this document are a step in the right direction is a continuous decline in traffic-related fatal and serious injuries until the target of Zero FSIs by 2040.

Data collection and analysis are critical when measuring progress. The County has assessed crash data for 2010 to 2019 as one baseline measure.

The County will develop a holistic set of performance measures and targets for each of its action items in collaboration with the Partnership and will publish the measures to the County's webpage. The webpage will be updated the website annually as data becomes available. Providing this information will assist the Partnership and the public in maintaining focus on eliminating traffic-related deaths and serious injuries and assessing the effectiveness of strategies and projects. The County will adjust strategies when warranted.

Potential measures include the following:

All Modes:

- Total crashes and Total FSIs Countywide
- Total crashes and Total FSIs by Municipality
- Total crashes and Total FSIs by Communities of Concern
- Total crashes and Total FSIs by HIN Window

Pedestrians:

- Total crashes and Total FSIs Countywide
- Total crashes and Total FSIs by Municipality
- Total crashes and Total FSIs by Communities of Concern
- Total crashes and Total FSIs by HIN Window

Bicyclists:

- Total crashes and Total FSIs Countywide
- Total crashes and Total FSIs by Municipality
- Total crashes and Total FSIs by Communities of Concern
- Total crashes and Total FSIs by HIN Window

Mode Split for Journey to Work:

- Percent Walk
- Percent Bike
- Percent Drive
- Percent Public Transit

PROGRAM ADMINISTRATION

The County will designate a Vision Zero program director to be the central coordinator of vision zero implementation.

Strategies for Program Implementation and Administration

1. Perform additional Vision Zero Partnership engagement to refine and update the Middlesex County Vision Zero Action Plan.
2. Consider additional studies that may be needed to improve or refine the plan.
3. Continue public engagement to support plan implementation and the Partnership.
4. Designate a full-time County Vision Zero Coordinator within the MCDOT, to oversee plan implementation.
5. Create and evaluate performance measures as a strategy for accountability and performance.