

NJSEA | Meadowlands Action Plan for Safety (MAP4S)

Safety Task Force Meeting #5

February 25, 2025









Project Team





Project ManagementAnthony Durante, Senior Associate



Data Collection & Analysis

Matthew Maher, Principal





Outreach & Engagement

Jessie Cohen, Outreach Lead

SAFETY TASK FORCE









Safety Task Force Members

THANK

Municipalities

- Carlstadt Hernan Lopez, OEM Director
- East Rutherford Francis Joseph Jr., OEM Director
- Jersey City Lyndsey Scofield, Senior Transport Planner
- Kearny Stephen Marks, Town Administrator
- Little Ferry Lisette M. Duffy, Borough Administrator
- Lyndhurst Michael Carrino, Police Captain
- Moonachie Richard Behrens, Chief of Police
- North Arlington Stephen Lolacono, Borough Administrator
- North Bergen Janet Castro, Town Administrator, and Robert Farley, Chief NBPD
- Ridgefield Borough Joe Greco, OEM Director, and Kenny Sheridan, Deputy Chief of Police
- Rutherford Robert Kakoleski, Borough Administrator, and Anthony Bachmann, Traffic Bureau Coordinator
- Secaucus Lieutenant Martin Moreda, Director of Traffic Bureau
- South Hackensack Michael J. Ward, OEM/Safety Coordinator, and Robert Chinchar, Police Chief
- Teterboro Nicholas Saros, Municipal Manager

Counties

- Bergen County Peter Kortright, Principal Planner
- Hudson County Francesca Giarratana, Dept. Deputy Director

Transportation Agencies

- EZ Ride Avnish Gupta, COO & General Counsel
- PANYNJ Kevin Walkes, Traffic Engineer
- NJSEA Christopher Stefanacci, Director of Public Safety
- NJ Turnpike Authority (NJTA) Janet Sharkey, Supervising Engineer, Traffic
- NJTPA Lois Goldman, Director of Long-Range Transportation Planning
- NJ TRANSIT Michael Viscardi, Director Programmatic Planning

Non-Profit Organizations & Businesses

- Bike North Bergen **Johan Andrade**, President
- Hackensack Meridian Health Elizabeth Koller, VP Administrator IHSC Operations
- Hartz Mountain Industries Grant Lewis, VP of Site Development and Engineering
- HRP Group Jeremy Grey, Executive VP of Industrial Development
- Kearny Public Schools Mark Bruscino, Director of Operations
- Meadowlands Chamber of Commerce James Kirkos, CEO, and Judy Ross, Senior Director of Operations
- NJ Bike Walk Coalition **Debra Kagan**, Executive Director









Agenda



- STF Role, Meetings
- Safety Assessment Tool (SAT) Update
- Safe System Policy Update
- Safety Countermeasures Matrix
- Project Location Prioritization
- Next Steps





Safety Task Force (STF)

Role:

- Participate in STF meetings and surveys
- Provide input on topics concerning the project
- Provide feedback on planned community engagement activities and assist in outreach facilitation
- Identify local stakeholders for additional input
- Provide feedback on project materials, safety recommendations, and SAT
- Provide feedback on final report

Meeting #1 – *March 27, 2024*

Kickoff meeting to introduce project, desired outcomes, outreach activities

Meeting #2 - June 20, 2024

Outreach plan, Preliminary data findings

Meeting #3 – September 25, 2024

 Outreach findings, Safety Assessment Tool introduction, High Injury Network

Meeting #4 - December 12, 2024

Outreach update, Safety countermeasures, Project ideas, Policy introduction

Meeting #5 – TODAY

Policy update, Countermeasures matrix, Location prioritization, SAT update/preview

Meeting #6 – April 2025

Safety projects, Final SAT

Meeting #7 – June 2025

Final presentation

*May 2025*SAT User Training

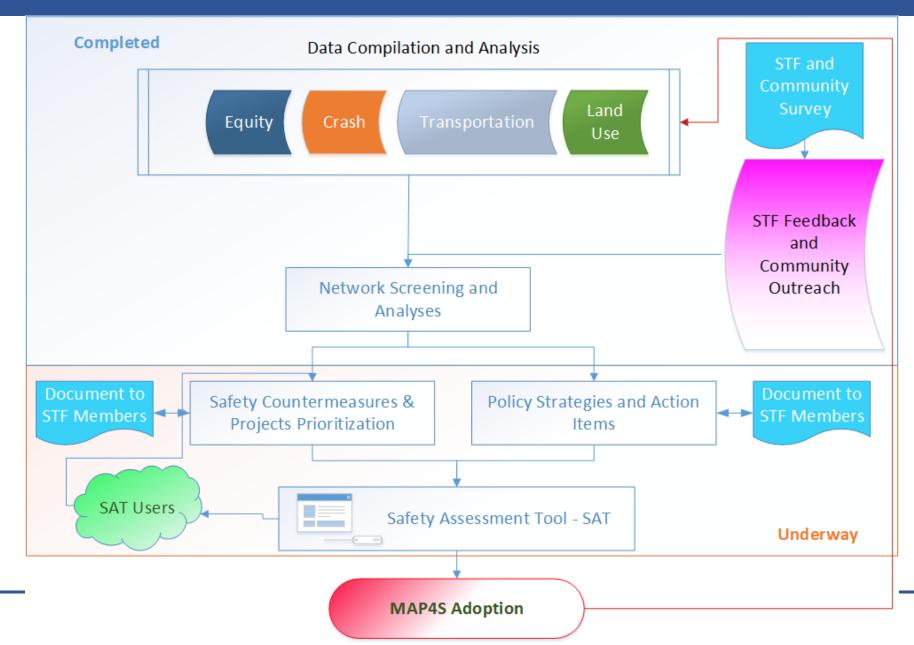








Recap of Work Performed and Underway



MAP4S Safety Assessment Tool





Projects Analysis

- This page shows a table of the projects which are in progress or planned along intersec this information with user-inputted data on projects within the NJSEA municipalities.
- Information shown in the project status section is intended to be mostly user-entered thable to access these spreadsheets and enter their project information, which the dashbot

Crash Analysi:

 Split roughly into four sections: an introductory text box with crash filters, a crash map crash tree diagram, and crash trends graph are interactive—selections a user makes by the rest of the crashes page.

Strategies Tracking

 \cdot Tracks the implementation of actions and their corresponding safety strategies $\,$ in the N $\,$

For more information, visit the v

Safety Assessment Tool











SAT Overview

- Leverages safety and planning data, alongside modern visualization techniques to facilitate effective, user-friendly, data-driven safety analysis
 - Fully interactive—enables users to filter and rearrange data
- The main users of this tool are expected to be the New Jersey Sports and Exposition Authority (NJSEA) and municipal planners, engineers, and decision makers evaluating outcomes of safety projects for future planning.
- Built in Power BI with the intention of enabling NJSEA and STF maintain and update data
 - Select users will be granted access to edit data







SAT Status

- Current version: Alpha
 - Initial draft SAT was shared with NJSEA
 - Team is reviewing comments and making appropriate edits
- Upcoming version: Beta
 - Functional tool ready for limited NJSEA testing
 - Expected March 2025
- Final version
 - May 2025
 - Will incorporate Beta version feedback from the STF







- Landing Page / Planning Process
 - Explain the tool and its usage
 - Provides an overview of the safety planning process

MAP4S Safety Assessment Tool Crashes Projects Strategies Safety Plan - Safety Assessment Tool (SAT) can leverage safety and planning data, alongside modern visualization techniques to facilitate effective, user-friendly, data-driven safety analysis. The tool provides a means of assessing the roadway network, filtering safety data for the region, and tracking implementation actions from the Plan. Proiects Analysis · This page shows a table of the projects which are in progress or planned along intersections and segments on the High Injury Network. The table also merges this information with user-inputted data on projects within the NJSEA municipalities. Information shown in the project status section is intended to be mostly user-entered through the use of Excel spreadsheets hosted on SharePoint. Users will be able to access these spreadsheets and enter their project information, which the dashboard connects to and displays on the Projects page. Crash Analysis Split roughly into four sections: an introductory text box with crash filters, a crash map and summary, a crash tree diagram, and a crash trends module. The map, crash tree diagram, and crash trends graph are interactive—selections a user makes by clicking on those visual elements alter the data which are displayed in the rest of the crashes page. Strategies Tracking · Tracks the implementation of actions and their corresponding safety strategies in the NJSEA municipalities For more information, visit the www.map4s.com









- Project Status page
 - Shows a table of the projects which are in progress or planned along intersections and segments on the High Injury Network. The table also merges this information with user-inputted data on projects within the NJSEA municipalities.
 - A map shows locations of projects. When a user selects a project on the map or in the table, additional information about the specific improvements being planned or constructed at that site is displayed in the "Planned Projects" section
 - Information about projects and project status will be entered through an Excel spreadsheet on SharePoint (accessible to specific users)





Project Status page







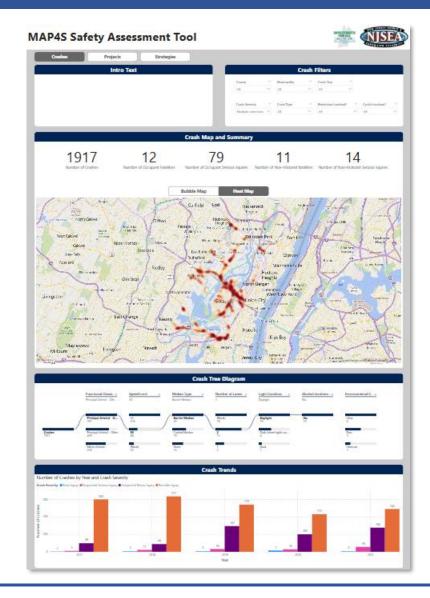
- Crash analysis
 - Input data
 - Safety Voyager crash data for the NJSEA area
 - Years 2017-2021, with the option of updating or adding years
 - Output visualizations all visualizations are interactive, i.e., selections in on visualization filter the others
 - Crash map
 - Heat map or point options
 - Displaying individual crashes is preferred in cases where there are few crashes
 - Crash tree diagram
 - Fully reconfigurable on-the-fly based on user needs
 - Charts
 - Column charts, pie charts, etc
 - Useful for crash trends based on severity and crash type, as well as other crash characteristics







Crash analysis











SAT Schedule

- Beta version
- STF update
- Final SAT
- Virtual training session

March 2025

April STF meeting

May 2025

May 2025























Status of Policy Recommendations



Policy relates with <u>non-infrastructure</u> strategies to improve roadway safety outcomes.

We are tasked with...

- 1. Review of Existing Policies
 - Peer Review of similar agencies
- 2. Gap Analysis & Needs
- 3. Vision Zero Policy Strategies today







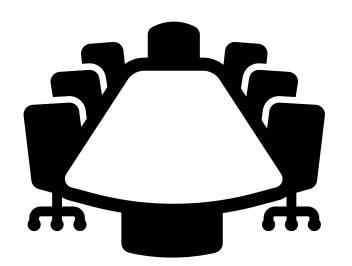




Your Role as a Safety Task Force Member

Why is your participation important?

- Allows NJSEA and its partners to access funding
- Check-in process on the effectiveness of strategies
- Duties and timelines assigned: Time-Frame = start-up
- Transportation safety requires eternal vigilance
- Other agencies using this model
 - City of Jersey City
 - County of Middlesex
 - Other regional agencies (Memphis Urban Area MPO, amongst others)



Your participation extends far beyond this project!



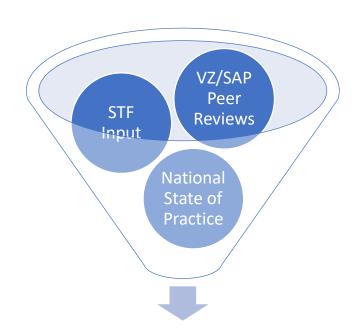








Draft Vision Zero Policy Strategies (14)



14 Policy strategies with draft actions for discussion

- 1. Access Management Policies
- 2. Public Outreach Campaign
- 3. Vision Zero Website
- 4. Families for Safer Streets Local Chapter
- 5. Targeted enforcement for speeding
- 6. Slow Streets Program
- 7. Engagement with historically disadvantaged areas
- 8. Safety Overlay District
- 9. Rapid Response Team / Quick Build
- 10. Agency partnerships and collaborations
- 11. Healthcare coordination
- 12. Equity Impact Assessment (EIA)
- 13. Annual reporting and evaluation
- 14. Complete streets policies for all municipalities











1. Access Management Policies

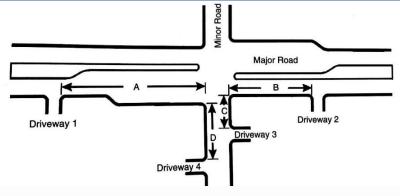


Table 1 - Criteria of Access Spacing

| Criteria | Agency | | |
|----------------------------|-------------------------------------|-------------|--------|
| | | 25 | 30 |
| Minimum Access | Minimum Access Separa | tion (feet) | |
| Spacing Peer State DOTs | NJDOT(C) | 105 | 125 |
| | Peer State DOTs | 125-245 | 125-24 |
| | AASHTO Sight Distance | 280 | 335 |
| | | (240*) | (290) |
| | TRB-Manual** | 330 | 330 |
| | NJ Local Agencies | 150-300 | 200-35 |
| Minimum Corner | Minimum Distance from Corner (feet) | | |
| Clearance | NJDOT(C) | 50 | 50 |
| | Peer DOTs | | |
| | NJ Survey | | |

| • | Action Item | Responsibility | Time-Frame | Quantifiable Target |
|------------------------|---|--|--|---|
| 0 25 | On roadways with speeds 35 mph and over, look for opportunities to consolidate and/or revoke access | County and Municipal Engineering Departments | 2026, continual yearly convening of STF to check on progress | Counties to seek to work with municipalities and property owners to consolidate or revoke at least 5 ingress/egress points per year |
| 35 90) 30 -35 | NJSEA, based on its analysis, to suggest candidate locations based on crash, spacing, and corner clearance data | NJSEA | 2026, continual yearly convening of STF to check on progress | Evaluate pre- vs. post- implementation crash data to document downward crash trend at these locations |

https://www.njdottechtransfer.net/2019/05/16/local-access-management-regulations/











2. Public Outreach Campaign



| Action Item | Responsibility | Time-Frame | Quantifiable Target | |
|--|---|---|---|--|
| Coordinate with NJTPA's Street Smart for 3 HIN corridor campaigns | NJTPA, Municipalities of HINs, TMAs, School Districts, and PDs | 2027, check in following year on possibility of expanding program | Implement campaign/signing at 3 locations, expand program based on reception | |
| Work with TMAs to initiate a public safety campaign to highlight the epidemic of FSI crashes | EZ Ride and Hudson TMA | 2026, continual yearly convening of STF to check on progress | Development of communications and education materials for a 2026 social media and advertising (possible billboard) campaign | |
| Tracking of campaign effectiveness | NJSEA | 2028, continual yearly convening of STF to check on progress | Evaluate pre- vs. post-implementation crash data to document downward crash trend at HIN Street Smart locations | |











3. Vision Zero Website



| Action Item | tion Item Responsibility Time-Frame | | Quantifiable Target |
|--|-------------------------------------|--|--|
| Use map4s.com and njsea.com to host FSI crash map, MAP4S document, and linked resources for STF team's use | NJSEA | 2026, continual yearly convening of STF to check on progress, monthly convening of NJSEA internal STF to update website as needed | Generate traffic of at least 100 unique hits to signify significant traffic from stakeholders and public for project information and transparency |
| Hold STF team accountable to assigned responsibilities and timelines | NJSEA | 2026, continual yearly convening of STF to check on progress, monthly convening of NJSEA internal STF to call external STF members on progress of their assigned roles | Table of all 14 policy strategies is to be easily accessible to the public along with information on parties responsible and whether or not work has progress/is on schedule |









4. Families for Safer Streets Local Chapter

| | Action Item | Responsibility | Time-Frame | Quantifiable Target |
|--------------------------------|---|--|---|--|
| | Expand Jersey City's Families for Safe Streets Local Chapter to include Meadowlands | NJSEA, FSSNJ, Bergen County DHS, and Hudson County DHHS | 2027, check in following year on possibility of expanding program | Implement campaign/signing at 3 locations, expand program based on reception |
| | Establish a walking or biking bus in municipalities with overrepresentation of crashes involving those under 18 | NJ Safe Routes Resource Center (VTC), School Districts, | 2026, continual yearly convening of STF to check on progress | Schedule two walk and/or bike bus events per year in the District with communities identified using crash age data |
| NJ Safe Routes Resource Center | Coordinate with school districts to make traffic safety a mandatory part of elementary school curriculum | School Districts, EZ Ride, and Hudson TMA | 2026, continual yearly convening of STF to check on progress | Evaluate pre- vs. post-implementation crash data to document downward trend for youths involved in crashes |









5. Targeted Enforcement for Speeding









Stantec



6. Safety Overlay District

| | Action Item | Responsibility | Time-Frame | Quantifiable Target |
|---|--|---|--|--|
| SAFE CORRIDOR FINES DOUBLED SPEEDING AND OTHER VIOLATIONS | NJSEA to petition NJDOT to designate their HIN roads within the District as Safe Corridors | NJSEA, NJDOT, and New Jersey State Police (NJSP) | 2030, continual yearly convening of STF to check on progress | Install signs and augment NJSP enforcement efforts on segments of Routes 1&9T, 3, 7, 17, 46, 120, and 495 to double fines for speeding and other violations on these corridors |
| | Continue monitoring of FSI crash data on NJDOT roadways in the District to add/remove Safe Corridor overlays as needed | NJSEA | 2030, continual yearly convening of STF to check on progress | Annually refresh HIN mapping for NJDOT to see how roadway limits for the HIN changes year-by-year |









7. Slow Streets Program

| Monticello Av | | |
|---------------|--|--|
| | | |
| | TRAFFIC Calming, POP-UP EVENT IN THE POP-UP EV | |
| | | |

| systemic project from MAP4S |
|--|
| Encourage District municipalities and Hudson/Bergen counites to use the countermeasure matrix to select low-cost projects for implementation |
| Systemic speed lim reductions within the District |

Action Item

jurisdictions to

initiate concept

development or

Encourage assigned

NJSEA, Bergen County (planning and engineering), and Hudson County (planning and engineering)

NJSEA, Municipal

Departments

Responsibility

NJSEA and

applicable

jurisdictions

2028, continual yearly convening of STF to check on progress

Time-Frame

2028, continual

STF to check on

progress

yearly convening of

At least two traffic projects should be built annually by each municipality, counties to tie to Bergen Cty. Local and Hudson Cty. VZ Safety Action Plan

Quantifiable Target

At least one project

to be moved every

three years to the

process by each

project development

jurisdiction assigned

Jersey City Traffic Calming Toolkit

2028, check-in Administration, and following year for Municipal Engineer additional local streets if program is successful

Investigate feasibility of 20 mph for Local functional classification streets

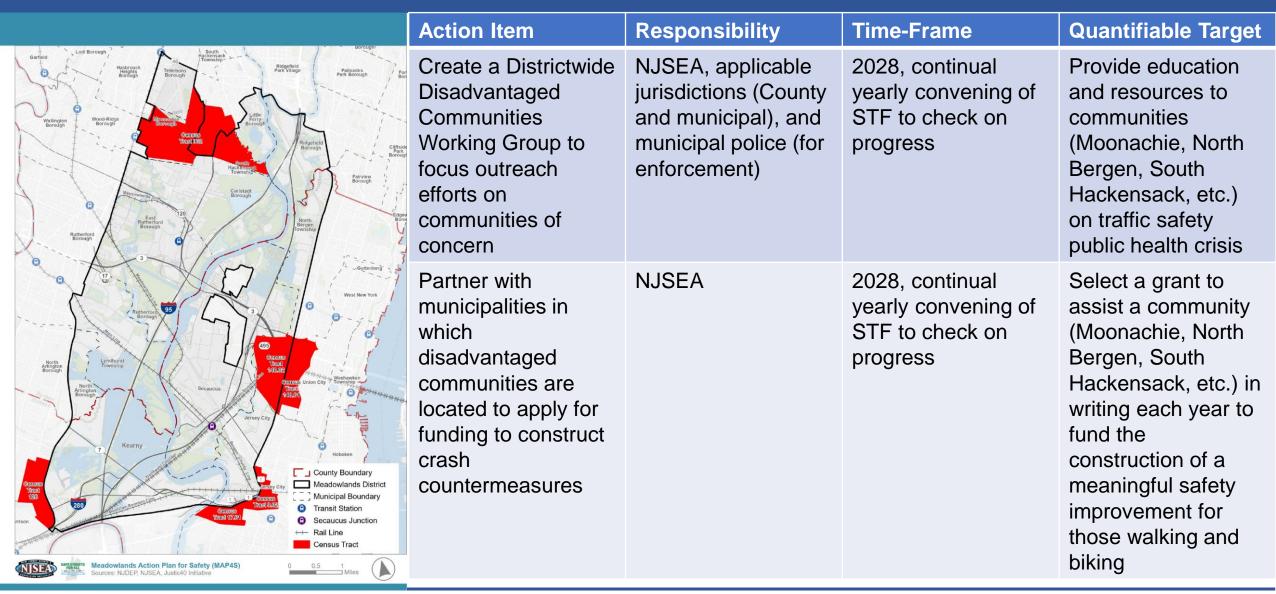








8. Engagement with Disadvantaged Areas









Stantec



9. Rapid Response Team/Quick Build

| | Action Item | Responsibility | Time-Frame | Quantifiable Target |
|--------------------|---|--|--|--|
| SECAUCUS IN SECULO | Establish a bi-county Rapid Response Team to convene with NJSEA after every FSI crash within the District to determine root cause and fixes | NJSEA (Rapid Response Team), Hudson County Sheriff's Office, and Bergen County Sheriff's Office | 2026, continual convening of internal STF as needed after FSI crashes occur | Hold a meeting within a week of each FSI crash to formulate a plan to fix by any means possible with the idea that all crashes are preventable |
| | Provide expedited design plans for addressing the FSI crashes occurring | NJSEA (Rapid Response Team), County/Municipal Engineering | 2030, continual yearly convening of STF to check on progress | Provide a conceptual design plan for a safety improvement targeted at the FSI crash |
| nj.com | Establish a Rapid Response Team for NJSEA to respond to FSI crashes accordingly | NJSEA | 2026, continual convening of internal STF as needed after FSI crashes occur | Form by next year, staff augmentation may be needed if NJSEA resources are limited |









10. Agency Partnerships and Collaborations



| Action Item | Responsibility | Time-Frame | Quantifiable Target | |
|--|------------------------------|--|--|--|
| Coordinate with District employers (e.g. Hartz) to sign VZ commitment and distribute VZ materials to employees | NJSEA, Various Businesses | 2026, continual yearly convening of STF to check on progress, monthly calls to petition private developers | Seek talks with 10 major employers within the District, employ financial incentives in coordination with TMAs to cut down on SOV traffic | |
| Included everyone on the STF in a MOU for the permanent establishment of the team with commitments | NJSEA and all STF agencies | 2026, continual yearly convening of STF to check on progress | Review MOU with all subregional and partnering agencies to all agree upon the commitment to safer transportation | |

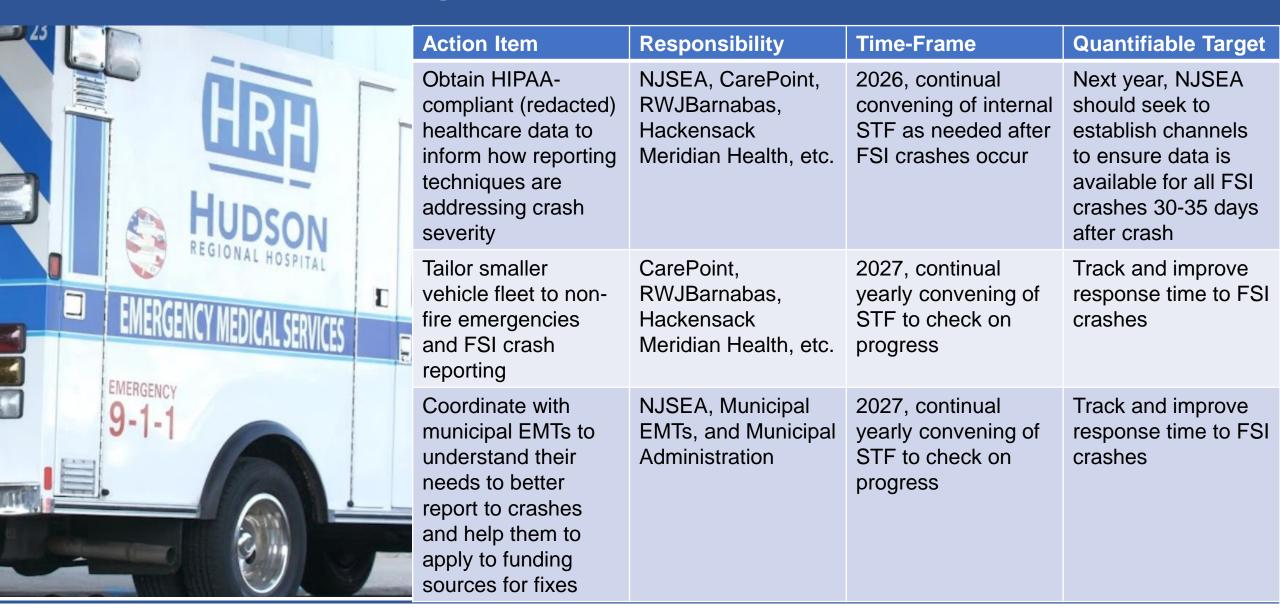








11. Healthcare Coordination













12. Equity Impact Assessment (EIA)

Equity Analysis Tool

Understanding the distribution of traditionally underserved populations

About the Tool

As a recipient of federal funding, the NJTPA is required to comply with various civil rights statutes, executive orders, and regulations intended to ensure that the planning process includes traditionally underserved populations and that those populations have access to the agency's activities.

Understanding the spatial distribution of all populations, specifically those populations who have been identified as protected under federal regulations is an essential first step to performing an equity analysis.

An equity analysis can assess the impacts that plans, programs and projects may have on underserved residents and communities. Transportation investment and project specific impacts such as access to transit can be evaluated via this lens.

This tool helps to identify areas of traditionally underserved populations using data collected from the American Community Survey (ACS) 2018-2022 5-year estimates. This analysis mirrors one developed by <u>Delaware Valley Regional Transportation</u>
<u>Planning Commission (DVRPC)</u> in 2019.

Population thresholds should not be the only determinant in evaluating the impact of a program, plan, or policy on a specific group as it relates to Environmental Justice and Title VI. The next step would be to calculate the possibility of discrimination or disproportionately high and adverse effects on these populations using additional data that corresponds to the specific program, plan or policy being investigated.



How to Use the Tool

The Equity Analysis Tool helps staff and partner agencies quickly gauge where Title VI and EJ populations are within the region, individual counties and communities.

Each study and program should identify traditionally underserved populations in order to avoid disproportionately high and adverse impacts on any of the identified populations, meet federal and state guidance, and better understand the integration of equity and transportation planning.

What the Map Shows

To better understand the data collected, the standard deviation was calculated using the census tract percentages for each **factor** in the NJTPA region. Using the methodology performed by <u>DVRPC</u>, the data was separated into five categories with corresponding scores:

Very Below Average – 0

Average – 2

Above Average – 3

Very Above Average – 4

Action Item Responsibility

In each disadvantaged community (Moonachie, North Bergen, South Hackensack, etc.) where crash countermeasures are to be implemented, perform an assessment to ensure that such populations would not be negatively

impacted

Time-Frame

2028, continual yearly convening of STF to check on progress

Quantifiable Target

Reduction of negative impacts (during project development process) typically affecting disadvantaged populations disproportionately: right-of-way, noise, GHG emissions, lengthened path of travel to alternate modes, or reduction in walking and biking facilities

NJTPA Equity Analysis Tool



NJSEA and NJTPA









13. Annual Reporting and Evaluation



| Action Item | Responsibility | Time-Frame | Quantifiable Target |
|--|-----------------------------|--|---|
| Convene on a yearly basis to report on the progress of these strategies, adding a level of accountability | NJSEA, Safety Task Force | 2026, continual yearly convening of STF to check on progress | Annual meeting |
| Write an annual summary report to track the progress of policies, and highlight images of constructed projects, and data showing reduced FSI crashes | NJSEA | 2026, continual yearly convening of STF to check on progress | Annual issuance of Vision Zero report to be publicly-displayed on NJSEA website |
| Monthly check-ins with Bergen County, Hudson County, and Jersey City for lessons learned on their Action Plans | NJSEA | 2026, monthly check-ins starting next year | Addition of strategies that have been resulting in measurable FSI reductions for neighboring entities |



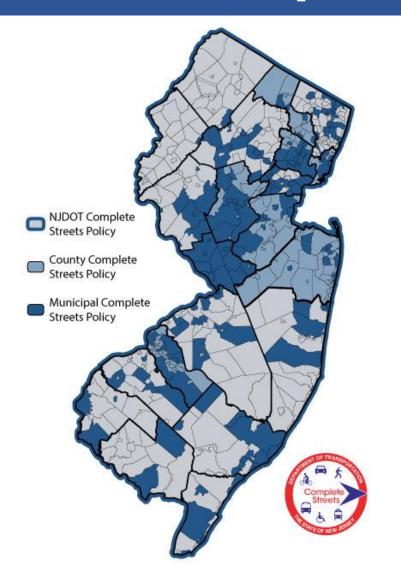








14. Municipal Complete Streets Policies



| Action Item | Responsibility | Time-Frame | Quantifiable Target |
|--|--|--|----------------------------------|
| Have every subregional county and municipality write a Complete Streets policy | County and municipality planning departments and/or planners | Looking to have this completed by 2030 | 100% of agencies having a policy |

Policies already written:

- Rutherford, 2011
- Jersey City, 2011
- Hudson County, 2012
- Secaucus, 2013









Time for Policy Feedback...

Discussion

- Are you comfortable with responsibilities assigned to your agency?
- Do you feel that the timelines are realistic?
- Are they any other safety policies that we should consider?
 - Any that have worked for your agencies?
 - Are you seeing reductions in FSI crashes currently due to specific policies?









Summary of Strategies

| # | Policy Type | Timeline | Priority | Lead Agencies | Supporting Agencies |
|----|--|----------|----------|-----------------------------|---|
| 10 | Agency partnerships and collaboration | 000 | 倡 | NJSEA | Various Businesses & Safety Task Force |
| 13 | Annual reporting / Evaluation | 000 | 倡 | NJSEA | Safety Task Force |
| 3 | Vision Zero Website | 000 | 冒 | NJSEA | N/A |
| 11 | Healthcare Coordination | 000 | で冒 | Healthcare Agencies | NJSEA and Local EMTs |
| 2 | Public Outreach Campaign | 000 | 冒 | NJTPA, TMAs | School Dist., Muni. Police, NJSEA |
| 1 | Access Management Policies | 000 | | Counties, Municipalities | NJSEA |
| 4 | Families for Safer Streets Local Chapter | 000 | | FSSNJ, School Dist. | County DHSs, NJSRRC, TMAs |
| 8 | Engagement with historically disadvantaged areas | 000 | 冒 | NJSEA | Applicable municpalities |
| 5 | Targeted enforcement for speeding | 000 | | NJSEA, Muni/ County PDs | Muni./County DPW, Admin, Purchasing |
| 7 | Slow Streets Program | 000 | | Muni./Cty. Eng./Planning | NJSEA |
| 9 | Rapid Response Team / Quick Build | 000 | | NJSEA | County Sheriff's Office & Engineering |
| 12 | Equity Impact Assessment (EIA) | 000 | | NJSEA | NJTPA |
| 14 | Municipal Complete Streets | 000 | 昌 | Bergen/Muni. Planners | N/A |
| 6 | Safety Overlay District | 000 | 昌 | NJDOT, NJSP | NJSEA |

Summarized to the left are the top policy strategies, descending in order of importance

DHS: Department of Health (or Health and Human) Services

DPW: Department of Public Works

FSSNJ: Families for Safe Streets New Jersey - https://nikhilbadlanifoundation.org/about-2/

NJDOT: New Jersey Department of Transportation

SCP: Safe Corridor Program - https://nj-dot.nj.qov/transportation/about/safety/scp.shtm

NJSP: New Jersey State Police - https://www.nj.gov/njsp/index.shtml

NJSRRC: New Jersey Safe Routes Resource Center

NJTPA: New Jersey Transportation Planning Authority - https://www.njtpa.org/About-NJTPA/Who-We-Are/The-NJTPA.aspx

PD: Police Department

TMAs: Transportation Management Associations, two of which are EZ Ride and Hudson TMA

VZNJA: Vision Zero New Jersey Alliance - https://www.visionzero4nj.org/members











Policy Next Steps



Review the 14 Vision Zero Strategies, along with timelines and responsibilities assigned to your agency

Draft document will be circulated mid-March

Report back with direction or preferences on strategies assigned to your agency by NJSEA

Formalize public commitment to safety

- Municipal resolution and/or complete streets policies
- NJSEA adoption of Safety Action Plan

Continue your participation in NJSEA's Safety Task Force!











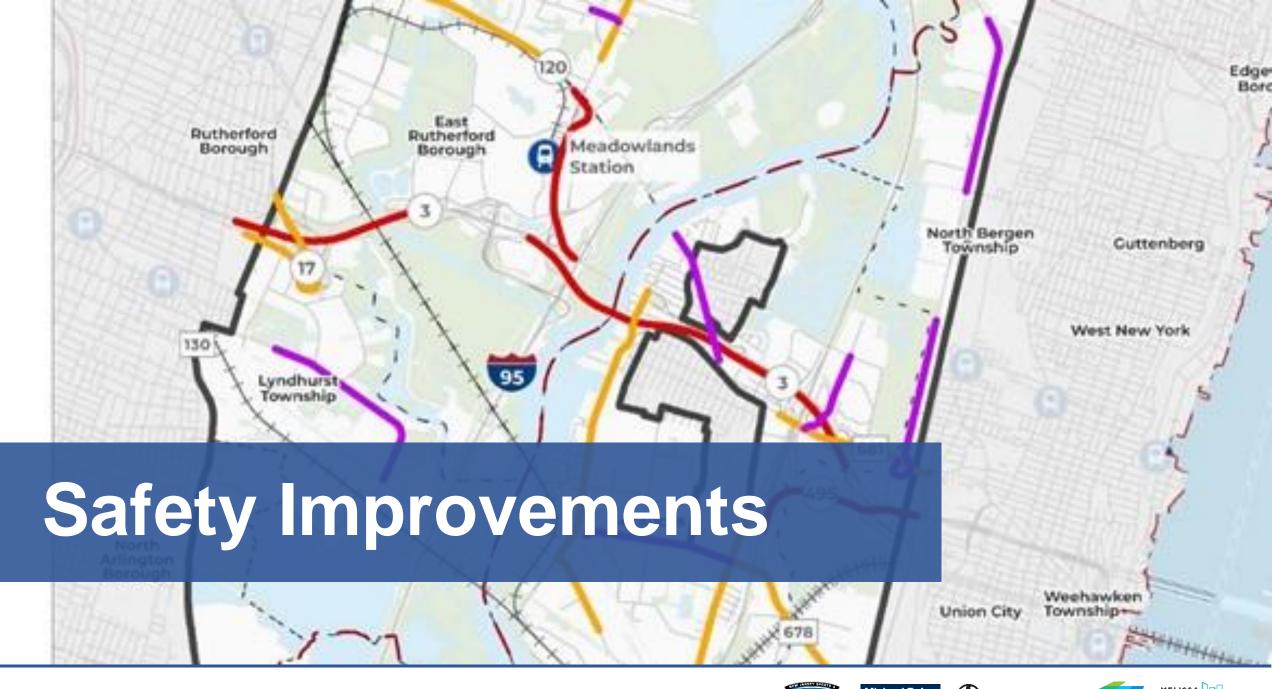




















Safety Project Development



5 "Es" of Safety: Engineering, Enforcement, Education, Emergency Response, Equity

Location Prioritization

Ranking locations by prioritization factors

CURRENT STAGE

Project Development

Application of countermeasures at priority locations to develop safety projects









Safety Countermeasure Overview

Countermeasure is a strategy to reduce (or prevent) specific crash types



Engineering

Convert intersection to a roundabout



Education

• "Click it or Ticket" campaign



Enforcement

Maximum legal BAC of 0.08



Emergency Response

Traffic signal preemption for emergency vehicles



Equity

Include disadvantaged communities in project prioritization



Engineering: Roundabout



Education: Behavior Campaign











Countermeasures Selection

Countermeasures identified based on established need

- Overrepresented crash types (all severities and FSI)
 - Rear end
 - Sideswipe
 - Fixed object
 - Head on
 - Pedestrian
- Public input themes (from survey)
 - Planning for complete streets
 - Transit access
 - Speeding and aggressive driving
- Roadway functional classification
 - Local roads
- Implementation considerations
 - Potential impacts to/from heavy vehicle operations
 - Implementation complexity
 - Low: Signage, pavement markings, signal operations
 - Medium: Construction within ROW
 - High: Construction with ROW impacts











Countermeasure Matrix Components

Matrix contains and allows filtering by:

- Countermeasures and crash reduction factors (or resource links)
- High level unit/construction cost estimates
- Crash types
- Engineering, Enforcement, Education, Emergency Response
- Location: segment, unsignalized intersection, signalized intersection
- Implementation considerations
 - Project Complexity
 - Heavy Vehicle Compatibility
 - Transit Compatibility
 - Suitability for Local Road Contexts









Matrix Demonstration

| 4 Es | Location | Safety Countermeasure | Description | CRF Applicable Crash Types | Crash Reduction Potential (CRF) | CRF Source | FSI Crash Reduction Potential (CRF) | FSI CRF Source | High Level Unit/Construction Cost Estimates | All Crash Types ▼ | Same Direction - Rear End | Same Direction - Sideswipe | Fixed Object |
|------|-------------------|--|---|---|---------------------------------------|--|---|----------------|--|--------------------|------------------------------|-------------------------------|--------------|
| | All Intersections | Improve Intersection Angle | Improving intersection angles could reduce crashes and provide enhanced visibility and simplified maneuvers for drivers. | All crashes | Varies | https://cmfclearinghouse.fh wa.dot.gov/detail.php?facid =11275 | | | \$80,000 per intersection | ✓ | | | |
| | | Improve Intersection Sight Distance | Intersection sight distance is the distance at which a driver approaching an intersection can see oncoming traffic, pedestrians, or other potential hazards, allowing them to make safe decisions about entering or crossing the intersection. | N/A | - | N/A | | | \$20,000 per intersection | ✓ | | | |
| | | Intersection Lighting | Adding lighting can improve visibility of the intersection and potential conflicts between modes. | All crashes | 12% | https://cmfclearinghouse.fh wa.dot.gov/detail.php?facid =4462 | | | \$85,000 per intersection | √ 2 | | | |
| | | Add Curb Extensions | Curb extensions visually and physically narrow the roadway at pedestrian crossing locations and provide additional space to wait at street corners while reducing crossing distances for pedestrians. Curb extension can be implemented with concrete, or low-cost temporary materials such as striping, paint, and planters. | Pedestrian, Angle, Left Turn, Right Turn | - | N/A | | | Varies by scale and design; \$2,000- \$20,000 per corner | | | | |
| | | Add Turn Lanes | Auxiliary turn lanes provide physical separation between turning traffic that is slowing or stopped at adjacent through traffic at approaches to intersections. | All crashes | LT 28%-48% RT 14%-0.26% | https://highways.dot.gov/saf ety/proven-safety- countermeasures/dedicated left-and-right-turn-lanes- intersections | | | \$45,000-\$60,000 for LT \$15,000-\$20,000 for RT | | ✓ | ✓ | |
| | | Reduced Left-turn Conflict Intersection | Reduced Left Turn Conflict intersections are geometric designs that alter how left turn movements occur. These intersections simplify decision-making for drivers and minimize the potential for higher severity crashes. | | 22% | https://highways.dot.gov/saf etv/proven-safety- countermeasures/reduced- left-turn-conflict- intersections | | | \$1,700,000- \$2,400,000 per intersection | | | | |



















Project Location Prioritization Methodology

Intent

- Determine locations of greatest "need" for a safety project
- Need determined by:
 - High Injury Network (HIN)
 - High risk roadway features
 - Equity data
 - Public input survey responses





Project Location Prioritization Methodology

Prioritization Factors

- High Injury Network
 - Equivalent Possible Injury (EPI) segment scores
- High Risk Roadway Features
 - Functional classification
 - Posted speed limit
 - Number of lanes, etc.
- Equity Data
 - Equity composite score
- Public Input Survey Data
 - Map locations of where bike paths or sidewalks don't exist, aggressive driving behavior, lack of bus shelters, etc.









Project Location Prioritization Methodology

Preliminary Prioritization Weighting Factors

- High Injury Network 35%
- High Risk roadway features 20%
- Equity data 25%
- Public input survey data 20%

Discussion

- Which factors are more important to you?
- How would you allocate the weights?









Next Steps

- More detailed project prioritization methodology
- List of prioritized safety project locations and potential treatments
 - Distribution to jurisdictions for review















Next Steps

- Refine/complete NJSEA Safe System policy
- Refine and apply prioritization methodology
- Develop safety improvement projects
- Complete Safety Assessment Tool development
 - Virtual user training in May
- Next STF meeting: April 30, 2025, in-person meeting













