



2025

Nashua Regional Planning Commission [NRPC]

Safety Action Plan



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The NRPC extends its sincere appreciation to the survey and focus group participants who generously shared their time, thoughts, and feedback. Your contributions have been invaluable to the development of this plan.

¹ USDOT SS4A Program: <https://www.transportation.gov/grants/SS4A>



Executive Summary

The Safe Streets and Roads for All (SS4A) grant program, established as part of the Bipartisan Infrastructure Law (BIL) in 2022, allocates \$5 billion over five years (2022-2026) to support regional, local, and tribal initiatives aimed at preventing serious injuries and fatalities from roadway crashes. This funding can be used to develop Safety Action Plans or implement project proposals outlined in such plans.

The Rockingham Planning Commission (RPC) has been awarded a planning grant from the first round of SS4A on behalf of New Hampshire's four MPOs to develop regional Safety Action Plans for all four regions including the Nashua Regional Planning Commission (NRPC), Southern New Hampshire Planning Commission (SNHPC) and Strafford Regional Planning Commission (SRPC). These comprehensive plans aim to reduce or eliminate serious injuries and fatalities through data-driven and holistic strategies developed in a transparent and inclusive process. Safety Action Plans include required components and are a prerequisite for applying for SS4A Implementation Grant funding.

A Safety Action Plan is a detailed, data-driven roadmap that outlines specific measures and strategies to enhance transportation safety, reduce crash frequency and severity, and ultimately achieve zero fatalities and serious injuries. It includes a comprehensive analysis of crash data, identification of high-risk locations and behaviors, and targeted interventions. Developed through collaboration with stakeholders such as transportation agencies, law enforcement, public health organizations, and community members, the plan outlines projects, policies, and ongoing communication efforts to foster a shared understanding and responsibility for safety.

The NRPC Safety Action Plan focuses on several key areas. Firstly, it involves analyzing safety data and input, where data on reported crashes were scrutinized to identify "hot spots" for historic traffic crashes and determine risk factors leading to serious injury and fatal crashes. Local and regional plans and policies were reviewed to understand the decision-making tools influencing roadway safety projects, and community input was gathered to incorporate the lived experiences of residents, workers, and travelers in the region and surrounding areas. Secondly, the plan determines safety problems and emphasis areas by summarizing the results of data analysis and community input to identify specific safety issues and establish prioritized safety countermeasure recommendations based on road classification. The analysis of crash types and emphasis areas revealed patterns and behaviors that can be addressed through a comprehensive approach, incorporating engineering, enforcement, education, and emergency response. Thirdly, strategies and projects are identified by linking the emphasis areas, according to the development context, with the elements and principles of the Safe Systems approach. Proven safety countermeasures for engineering and infrastructure formed the primary set of strategies, following procedures like the Road Safety Assessment method. Additional strategies, including education, enforcement, and data collection, were also considered. Specific actions were identified for each strategy to create an implementation framework, and action items were prioritized for execution in Priority Focus Areas and along the High Injury Network.

The implementation of the plan involves seeking various funding sources for the outlined actions. The NRPC region and its partners will strategically align these actions for potential funding through the NHDOT Highway Safety Improvement Program (HSIP), federal discretionary grants such as the Safe Streets for All program, and other state and federal funding sources. Implementing these projects will require ongoing coordination with partners, including NHDOT, NRPC, and municipalities served by the NRPC. The plan also incorporates performance metrics to monitor ongoing and continuous implementation efforts, centered on reducing or



eliminating serious injuries and fatalities from roadway crashes. These metrics rely on traditional data sources such as reported crashes, supplemented by gathering additional data such as near misses and insights from the experiences of the region's residents. Updating this plan every five years is essential to align with the latest NH New Hampshire Strategic Highway Safety Plan (SHSP), new federal and state funding opportunities, and evolving traffic safety issues and priorities.

The ultimate goal of this plan is to achieve zero deaths and serious injuries on our roadways by 2050. By employing a comprehensive and systematic approach, the NRPC aims to utilize data-driven methods to identify and implement effective countermeasures aimed at reducing crashes in the NRPC region.

Introduction

New Hampshire's Regional Planning Commissions were established by state law in 1969 as advisory bodies formed voluntarily by member communities.

Established in 1959, the Nashua Regional Planning Commission (NRPC) is the oldest of New Hampshire's nine regional planning commissions. Initially formed by the City of Nashua and the Town of Hudson to address highway congestion and coordinate land use development, the commission continues to embody regional cooperation and problem-solving in its activities today. The NRPC region is situated in the Merrimack River Valley on the New Hampshire-Massachusetts border and is located just 45 miles from downtown Boston.

Currently, the NRPC serves 13 municipalities: Nashua, Hudson, Amherst, Brookline, Hollis, Litchfield, Lyndeborough, Mason, Merrimack, Milford, Mont Vernon, Pelham, and Wilton. The Commission focuses on developing and implementing innovative planning strategies to preserve and improve the quality of life in Southern New Hampshire. The region has a total population of approximately 213,900. All roadways excluding interstates in this region total approximately 1,900 miles.

The NRPC is dedicated to enhancing transportation safety with the goal of eliminating deaths and serious injuries from crashes by 2050. This plan outlines the transportation risks, safety data, and strategies for improving safety across the region. Implementing this plan will enhance transportation safety for residents and visitors alike. Developed with input from various safety partners and stakeholders, this Safety Action Plan represents a continuous effort to make safety improvements. The ultimate goal of this plan is to achieve zero deaths and serious injuries on our roadways.

According to the 2023-2050 Metropolitan Transportation Plan, the NRPC aims to improve transportation safety by reducing vehicle crashes, particularly those involving pedestrians and non-motorized modes, through data-driven strategies, infrastructure enhancements, and maintaining the network in optimal condition.

What is a Safety Action Plan

The Safe Streets and Roads for All (SS4A) grant program, established as part of the Bipartisan Infrastructure Law (BIL) in 2022, allocates \$5 billion over five years (2022-2026) to support regional, local, and tribal initiatives aimed at preventing serious injuries and fatalities from roadway crashes. This funding can be used to develop Safety Action Plans or implement project proposals outlined in such plans.

A Safety Action Plan is a strategic roadmap designed to enhance safety within a community or organization by identifying risks and outlining specific measures to mitigate them. It begins with a thorough assessment and

analysis of potential hazards, gathering data on crashes and near-misses, and incorporating input from stakeholders to understand safety concerns comprehensively.

The plan sets clear safety objectives and establishes performance indicators to measure progress. It details actionable steps, such as infrastructure improvements, policy changes, training programs, and public awareness campaigns, all within defined timelines. Roles and responsibilities are clearly assigned to ensure coordination and accountability. The plan's execution is continuously monitored to stay on track, with regular performance evaluations to measure effectiveness. Periodic reviews allow for adjustments based on feedback and evolving circumstances.

Need for a Safety Action Plan

Transportation in southern New Hampshire is being strategically developed to support the region's high quality of life, strong economy, and distinct community character. Significant investments are being made in infrastructure systems to support both communities and businesses. This includes enhancing transportation networks to ensure efficient and reliable connectivity across the region. There is a focus on supporting public transportation options to help residents adapt to the high cost of energy and to provide alternatives to private vehicle use. This effort aims to reduce traffic congestion, lower emissions, and improve overall accessibility.

However, people of all ages and abilities from the region have been killed and seriously injured in roadway crashes. Every life matters, and The Nashua Regional Planning Commission is dedicated to zero fatalities and serious injuries on the roadway. A traffic crash analysis was conducted from 2018 to 2022. Over these five years, the region experienced a total of 52 fatal crashes. The number of serious injury, minor injury, possible injury, no apparent injury, and unknown injury crashes cumulatively amounted to 19,044. The analysis reveals critical areas needing attention, with speed and aggressive driving, vulnerable motorized users (motorcycles and mopeds), and vulnerable non-motorized users (pedestrians and bicyclists) showing the highest percentages of crashes resulting in fatalities or serious injuries. Efforts to improve safety in these areas could significantly reduce the number of severe traffic incidents in the region.

Safe System Approach

The Safe System Approach is a holistic and comprehensive strategy for road safety that aims to reduce the risk of severe injuries and fatalities from road traffic crashes. It is based on the understanding that while human error is inevitable, road traffic fatalities and serious injuries are not. It works by building and reinforcing multiple layers of protection to both prevent crashes from happening in the first place and minimize the harm caused to those involved when crashes do occur.

Six Principles form the basis of the Approach:

- Deaths and serious injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Safety is proactive
- Redundancy is crucial
- Responsibility is shared

The Five Elements that form the Safe System address every aspect of crash risk:

- Safe Speeds
- Safe Roads
- Safe People
- Post-Crash Care
- Safe Vehicles

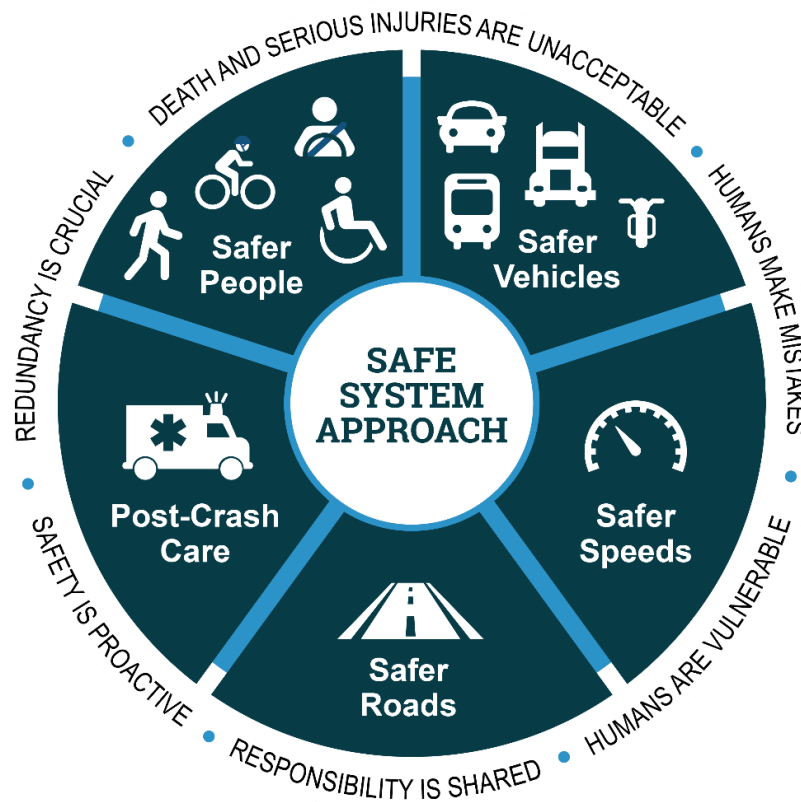


Figure 1. Safe System Approach Wheel (FHWA)

Engagement Emphasizing an approach in transportation safety to ensure that all individuals, regardless of their socio-economic status, race, gender, age, disability, or location, have safe and reliable access to transportation is essential. This approach includes addressing focusing on vulnerable populations such as pedestrians, cyclists, seniors, children, and people with disabilities. In addition, addressing safety improvements in high-risk areas, often found in lower-income neighborhoods, the plan ensures fair resource allocation and balanced investment across all communities.

Inclusive planning and community engagement are essential in the decision-making process to ensure the needs of all people are met and to build trust between transportation authorities and residents. This not only enhances health outcomes by reducing crashes and promoting active transportation options but also improves the overall quality of life by providing reliable access to jobs, education, healthcare, and other essential services.

Economic access is also a key consideration, as safe and affordable transportation reduces the financial burden on all people including low-income families and opens up greater economic opportunities for underserved communities. This comprehensive approach fosters fairness, inclusivity, and the well-being of the entire community.

Equitable Transportation Community (ETC) Explorer Methodology

The process of evaluating Transportation Insecurity, Health Vulnerability, Environmental Burden, Social Vulnerability, and Climate and Disaster Risk Burden involves summing ranked normalized indicators for each component to generate a composite score. This composite score for each component is then percentile-ranked against all other census tracts, both nationally and statewide, through USDOT's National Results and State Results dashboards, respectively.

Census tracts are rated from 0% to 100%, with 0% indicating the least disadvantaged and 100% the most. A census tract is deemed disadvantaged if its overall index score places it at or above the 65th percentile, a cutoff chosen for consistency with the Climate and Economic Justice Screening Tool (CEJST). This percentile threshold has been validated through sensitivity analyses for its appropriateness in the Equitable Transportation Community (ETC) Explorer.

To generate an Overall Score, the ranked Component Scores are summed, with Transportation Insecurity given double weight based on feedback from the Request for Information (RFI) process and further sensitivity analyses. This Overall Score is then percentile-ranked again to produce the Final Index Score, allowing a comparative assessment of each census tract's overall disadvantage both nationally and statewide.

This methodology provides comprehensive insights into the interplay of various factors contributing to transportation disadvantage. It offers flexibility in qualifying tracts as disadvantaged and assesses cumulative impacts—combined environmental, social, or economic effects that can be more significant collectively than individually. By focusing on cumulative impacts, the DOT can pinpoint communities facing the highest combined burdens, enabling more targeted and beneficial funding for projects in those areas.

NRPC Disadvantaged Communities

A disadvantaged community is a population that experiences higher levels of economic, social, and environmental hardships compared to other communities. These communities often face multiple, overlapping barriers that limit their opportunities and quality of life.

The NRPC region has a total population of 213,900 and the total population living in disadvantaged Census Tracts is 47,900 which is about 23%. Under Climate & Disaster Risk Burden, Impervious Surfaces (from Land Cover) ranks in the 69th percentile. Communities with higher scores have more impervious surfaces, like roads and parking lots, which worsen heat islands and air quality, increasing the risk of heat-related illnesses and deaths, especially in areas already facing significant environmental burdens. Within Environmental Burden, Ozone Level ranks in the 81st percentile. Transportation activities contribute to this factor by releasing compounds that interact to create ozone. Diesel PM Level ranks in the 74th percentile. Communities with higher scores experience higher levels of diesel particulate matter (DPM) which are fine particles in the air that come from diesel engine exhaust from sources like diesel-powered vehicles, such as trucks and buses, and industrial activities like shipping, construction, and mining. Hazardous Sites Proximity ranks in the 65th percentile. Examples of these sites include brownfields and superfund sites which have been identified by the Environmental Protection Agency as contaminated by hazardous materials. Toxic Release Sites Proximity ranks in the 66th percentile. These sites are listed under the Environmental Protection Agency's Toxic Release Inventory and are defined as having 10 or more full-time employees and either manufacture or use more than a specified amount of toxic chemicals. Living close to TRI sites and other noxious land uses can result in increased stress from noise and odor. Airport proximity ranks in the 72nd percentile. Communities with higher scores have a greater percentage of their census tracts within 5 miles of airports and tend to experience higher levels of noise and air pollution.

Vision, Mission, & Goal

Vision

We are the leader in transportation, land use and environmental planning for a thriving region, in support of its communities and its people.

An integrated, cost effective, multimodal transportation system that safely and efficiently moves people and goods throughout the region in an equitable and environmentally responsible manner to support economic prosperity and the highest possible quality of life for all users.

By employing a comprehensive and systematic approach, we will utilize data-driven methods to identify and implement effective countermeasures aimed at reducing crashes in the NRPC region.

Mission

We provide leadership, facilitation, guidance, and technical assistance to foster collaboration in support of a vibrant future for our region.

Encourage and maintain cooperation among private and public stakeholders in implementing the 4 E's strategies—education, enforcement, engineering, and emergency response—to cultivate a safety culture where even one death on NRPC region roadways is unacceptable.

Goal

Reduce the number of fatalities and serious injuries by 50% by 2035, working toward 0 by 2050.

Safety Action Plan Approach

The NRPC implemented the following FHWA Local Road Safety Plan (LRSP) process to develop the Safety Action Plan. This approach is a FHWA Proven Safety Countermeasure. This process entails the following steps:



Figure 2. Infographic showing the Local Road Safety Plan (LRSP) process (FHWA)

Step 1. Establish Partners and Process

During this phase of the planning process, the NRPC identified additional stakeholders and voices essential to informing the plan. Leaders in this effort included members of the TAC committee and focus group members. The leadership team pinpointed further data and topics for research, and they developed a vision statement to articulate the local safety culture and the desired outcomes for the plan.

Step 2. Analyze Safety Data and Input

Data on reported crashes were analyzed to identify "hot spots" for historic traffic crashes and to determine risk factors leading to serious injury and fatal crashes. Local and regional plans and policies were reviewed to understand the decision-making tools influencing roadway safety projects. Community input was gathered to incorporate the lived experiences of residents, workers, and travelers in the region and surrounding areas.

Step 3. Determine Safety Problems and Emphasis Areas

The results of data analysis and community input were summarized to outline specific safety issues and priority locations for further review. Crash types and Emphasis Areas highlighted patterns and behaviors that can be addressed through a comprehensive approach, incorporating engineering, enforcement, education, and emergency response.

Step 4. Identify Strategies and Projects

Strategies were formulated by linking the Emphasis Areas, according to the development context, with the elements and principles of the Safe Systems approach. Proven safety countermeasures for engineering and infrastructure formed the primary set of strategies, following procedures like the Road Safety Assessment method. Additional strategies, including education, enforcement, and data collection, were also considered. Specific actions were identified for each strategy to create an implementation framework. Action items were prioritized for execution in Priority Focus Areas and along the High Injury Network. This plan will be used to refine strategies and develop specific projects, timelines, and cost estimates.

Step 5. Implement Plan

The NRPC region and its partners will seek various funding sources for implementation. The actions outlined in this plan are strategically aligned for potential funding through the NHDOT Highway Safety Improvement Program (HSIP), federal discretionary grants such as the Safe Streets for All program, and other state and federal funding sources. Implementing these projects will require ongoing coordination with partners, including NHDOT, Hillsborough County, and nearby communities.

Step 6. Evaluate and Update Plan

This plan incorporates performance metrics to monitor ongoing and continuous implementation efforts. These metrics are centered on reducing or eliminating serious injuries and fatalities from roadway crashes. They rely on traditional data sources such as reported crashes, supplemented by gathering additional data such as near misses and insights from the experiences of the region residents. Updating this plan every five years is essential to align with the latest New Hampshire Strategic Highway Safety Plan (SHSP)², new federal and state funding opportunities, and evolving traffic safety issues and priorities.

² 2022-2026 New Hampshire Strategic Highway Safety Plan: <https://www.dot.nh.gov/sites/g/files/ehbemt811/files/inline-documents/strategic-highway-safety-plan-2022-2026.pdf>

Outreach Efforts

The Nashua Regional Planning Commission (NRPC) utilized a comprehensive strategy to gather public input. This approach included holding two focus group meetings, holding two public workshops, conducting an online public survey, and updating the NRPC's website. The collective feedback from this outreach was essential in guiding the analysis and recommendations of this Plan. The highly valued contributions from the general public were critical in capturing a detailed understanding of the community's needs. This engagement was especially valuable from groups often underrepresented in public outreach processes, including individuals with disabilities, parents of young children, and those lacking access to private motor vehicles.

Focus Group and TAC Meetings

Focus groups play a crucial role in strengthening outreach efforts by offering several key advantages. For this initiative, three focus-group sessions were held to gather input from essential stakeholders. Two online focus-group sessions held on 1/7/25 and 1/8/25 were conducted to gather input from vulnerable road users, including bicyclists and motorcyclists, respectively.

The other focus-group session was held at the NRPC office, with members of the public from Milford, Nashua, Merrimack, and Amherst representing traditionally underserved people, pedestrians, bicyclists, transit riders, first responders, faith representatives, community planning students and advocates, etc. Organizations represented included: Gate City Bike Co-op, Conservation Law Foundation, Nashua Interfaith Council, Nashua Strong Towns, St. John Neumann Church of Merrimack, United Way of Greater Nashua, University of New Hampshire (sustainability and planning student). Also attending were staff representatives from the City of Milford and the City of Nashua (e.g., public health, engineering, sustainability, conservation commission, etc.). The group talked about the importance of community feedback and understanding local perspectives, a focus on inclusive engagement, and the need for transportation access for all. The conversation covered challenges for people walking and gaps in pedestrian infrastructure, limited bicycling infrastructure and infrastructure needed for using bikes for transportation, problems for pedestrians and bicyclists accessing public transportation – as well as difficulties with driver behavior and other road safety concerns.

These sessions were further supplemented by a meeting with the NRPC Transportation Technical Advisory Committee (TTAC) in August 2024.

Public Survey

An online public survey was accessible through the RPC website to enhance outreach efforts by maximizing accessibility, reach, convenience, and feedback transparency, thereby promoting more inclusive and an informed decision-making process during the duration of the planning process.

The survey featured 17 questions that asked participants to help the project team better understand residents' and visitors' experiences when walking, driving, bicycling, or using a mobility device within the four Metropolitan Planning Organizations (MPOs) in New Hampshire. The survey was made available to community members on June 7, 2024, and was open until July 16, 2024.

Respondents were asked to provide information on their demographics, their typical modes of transportation,

and how safe they feel while using different modes of transportation. The survey also included questions about their top road safety concerns related to driver behavior and road conditions, as well as space for respondents to suggest potential safety improvements and share specific safety concerns. A list of the questions and summary of the answers is available in Appendix A.

In addition to the questions, respondents had the option to add markers to an interactive map to highlight locations within the MPOs where they feel unsafe using any mode of transportation and ideas where they would like to see safety improvements. Suggestions for potential improvements included enhancing public transportation, road maintenance and condition, pedestrian-friendly infrastructure, expanding bike lanes, addressing traffic congestion, better signage and pavement markings, or other infrastructure ideas provided by respondents. A total of 1007 individuals completed the online survey, with just over 1,700 markers expressing safety concerns and/or ideas for improvements, as shown in Figures 3-6.

Of the 1,729 individual markers placed:

- 809 (47%) related to motor vehicle safety concerns
- 425 (25%) for pedestrian safety
- 334 (19%) for bicycle safety
- 161 (9%) were in the other safety improvement category

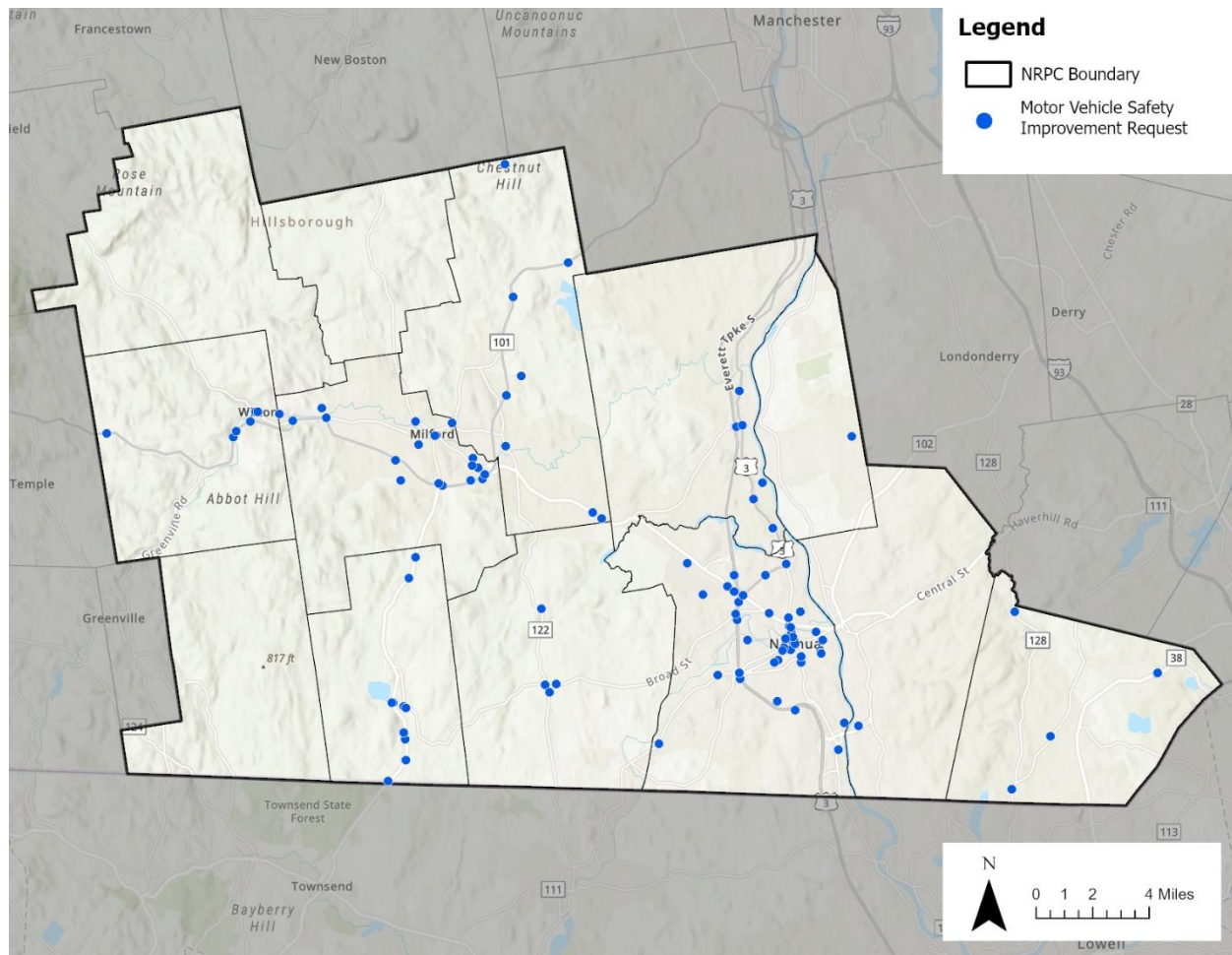


Figure 3: Map of Motor Vehicle Safety Improvement Requests from Survey

Some key takeaways from the motor vehicle input include:

- **Dangerous Intersections:** Many intersections are considered dangerous due to poor visibility, high speeds, and confusing layouts.
- **Speeding Issues:** Speeding is a common concern across various roads. Respondents suggest reducing speed limits and implementing traffic calming measures such as speed bumps and better signage.
- **Traffic Signal Improvements:** There are calls for better traffic signal synchronization and the addition of new traffic signals at busy intersections to improve traffic flow and safety.
- **Roundabouts:** Several respondents suggest the implementation or improvement of roundabouts to enhance safety and reduce congestion.
- **Signage Improvements:** Better signage is needed to guide drivers, especially at confusing intersections and traffic circles. Improved signage can help reduce accidents and improve traffic flow.
- **Visibility Issues:** Poor visibility due to overgrown vegetation, parked cars, and inadequate lighting is a common concern. Respondents suggest trimming vegetation, improving lighting, and removing parking spaces near intersections to enhance sightlines.

- **Road Maintenance:** Many roads are in poor condition and need maintenance, including repaving and fixing drainage issues.
- **Enforcement of Traffic Laws:** There is a need for better enforcement of traffic laws, including speeding, yielding to pedestrians, and obeying traffic signals. Increased police presence and the use of traffic cameras are suggested to deter violations.

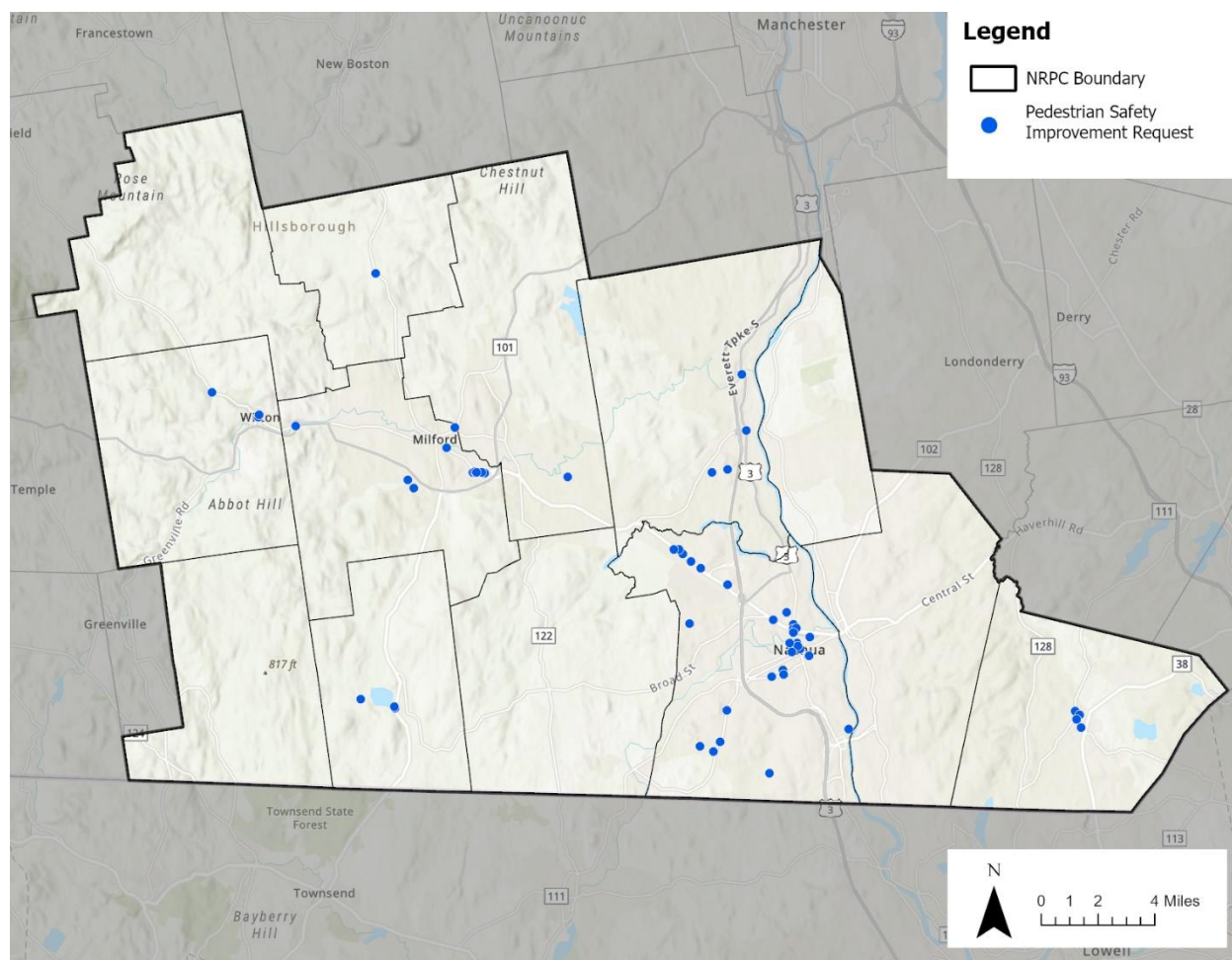


Figure 4: Map of Pedestrian Safety Improvement Requests from Survey

Some key takeaways from the pedestrian input include:

- **Need for More Crosswalks:** There is a significant demand for additional crosswalks in various areas to enhance pedestrian safety.
- **Improved Sidewalks, Winter Maintenance, and Accessibility Enhancements:** Respondents emphasized the need for better-maintained sidewalks, including addressing gaps, repairing existing pathways, and ensuring ADA compliance. Furthermore, maintaining clear sidewalks during winter is crucial for pedestrian safety, as many become impassable due to snow and ice. Additionally, enhancing accessibility for individuals with disabilities which includes installing curb ramps and ensuring sidewalks are navigable for wheelchairs.
- **Better Lighting:** Improved lighting at intersections and along sidewalks is a common request to ensure pedestrian visibility and safety, especially at night.
- **Traffic Calming Measures:** There are calls for implementing traffic calming measures such as speed bumps, narrower roads, and better signage to slow down vehicles in pedestrian-heavy areas.

- **Pedestrian Signals and Signage:** Enhanced pedestrian signals, including countdown timers and flashing signs, are needed to make crossing streets safer for pedestrians.
- **Addressing Dangerous Intersections:** Specific intersections have been identified as particularly dangerous for pedestrians, requiring immediate attention and redesign.
- **Enforcement of Traffic Laws:** Better enforcement of existing traffic laws, such as no-turn-on-red rules and yielding to pedestrians at crosswalks, is necessary to improve pedestrian safety.

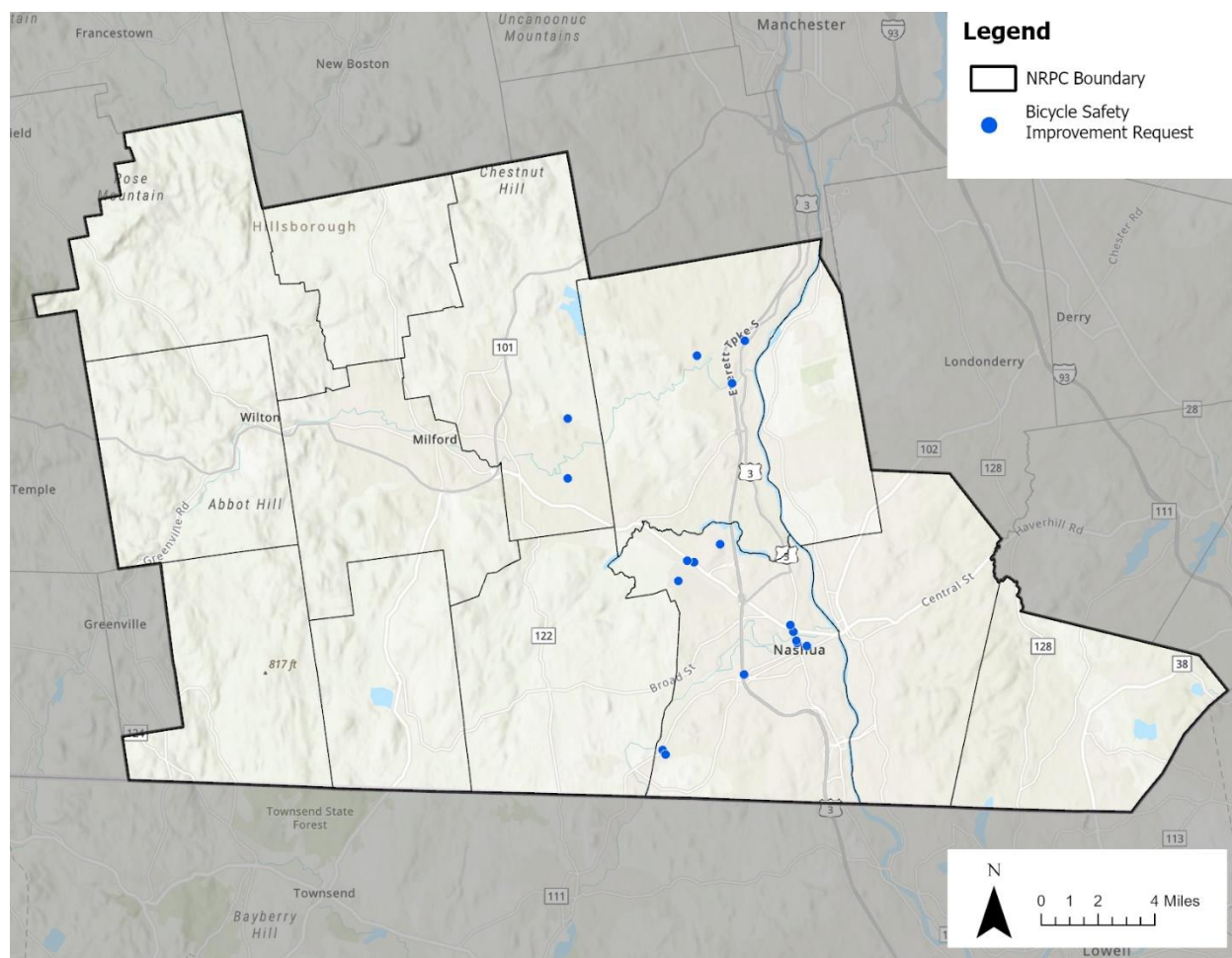


Figure 5: Map of Bicycle Safety Improvement Requests from Survey

Some key takeaways from the bicycle input include:

- **Need for Protected Bike Lanes:** Many respondents emphasized the need for physically separated bike lanes to ensure cyclist safety, as painted lines alone are not sufficient.
- **Improvement of Existing Infrastructure and Integration with Public Transport:** There were multiple calls for the enhancement and extension of existing bike lanes and trails, ensuring continuous routes in cities like Manchester and Nashua. Additionally, respondents emphasized the need for better integration of bike lanes with public transport routes to facilitate seamless multi-modal transportation.
- **Traffic Calming Measures:** Several comments suggested implementing traffic calming measures, such as reducing speed limits and adding rumble strips, to make roads safer for cyclists.
- **Education and Enforcement:** Respondents highlighted the need for better education and enforcement of traffic laws for both motorists and cyclists to improve safety and compliance.
- **Visibility and Signage:** Improved signage to alert drivers to the presence of cyclists and to indicate shared roadways was a common suggestion.

- **Addressing Specific Dangerous Areas:** Many respondents pointed out specific areas that are particularly dangerous for cyclists and need immediate attention, such as busy intersections, roundabouts, and roads with high-speed traffic.
- **Community Engagement and Support:** Encouraging community support and engagement in promoting cycling as a safe and viable mode of transportation was seen as important.

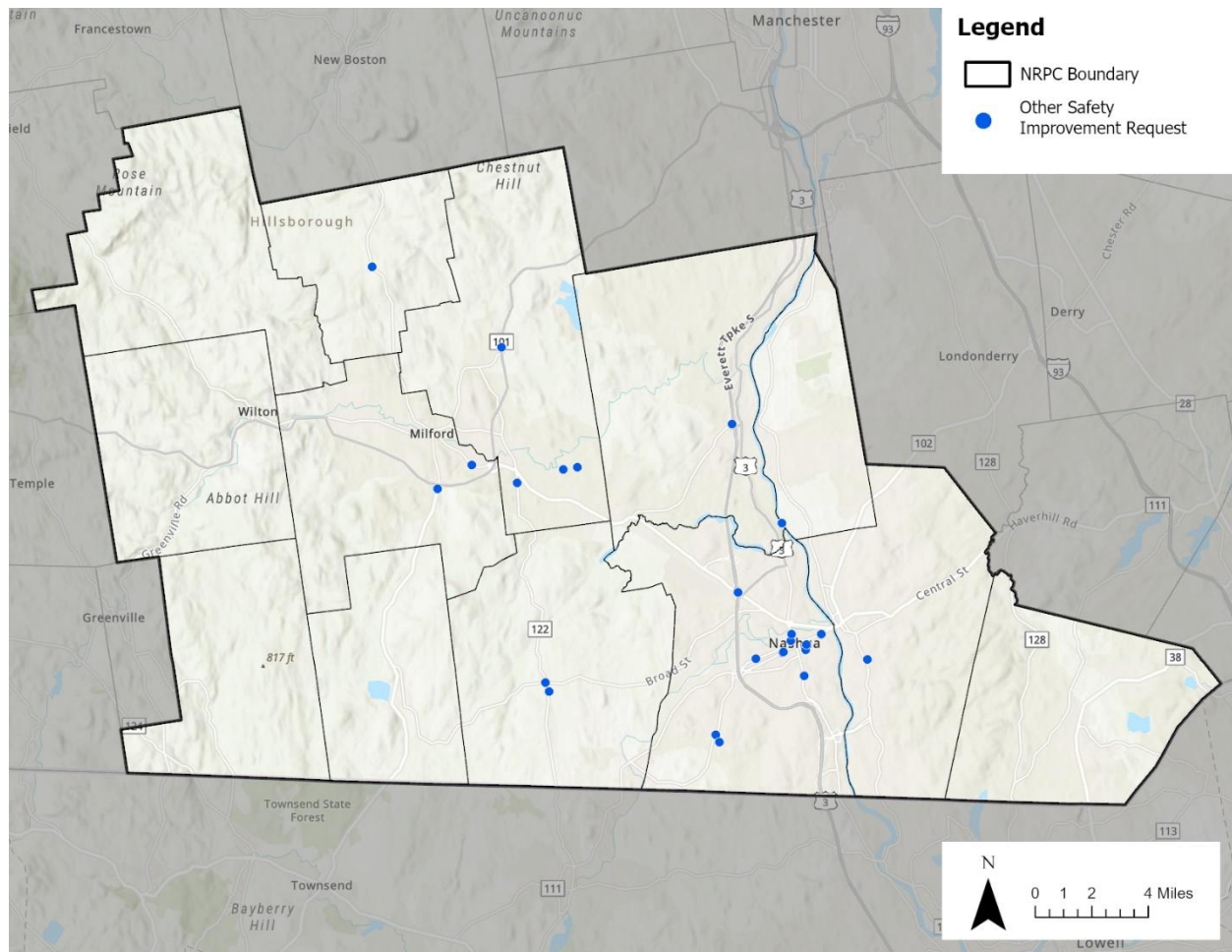


Figure 6: Map of Other Safety Improvement Requests from Survey

Some key takeaways from the other safety input include:

- **Street Lighting:** The need for better street lighting at key intersections and along routes is highlighted to improve visibility and safety for drivers, pedestrians, and cyclists.
- **Secure Bike Parking:** As bike infrastructure expands, there is a call for secure bike racks to reduce the risk of bike theft and encourage more people to cycle.
- **Crosswalk Signage:** There is a demand for improved crosswalk signage and other safety measures in high-traffic areas to prevent accidents and near misses.
- **Public Transit Expansion:** There is a strong call for expanding public transit services, including more frequent buses, longer operating hours, and better connectivity between towns to reduce car dependency and improve pedestrian safety.
- **Traffic Signal Adjustments:** Suggestions include reconfiguring traffic signals during peak hours and implementing adaptive signal timing to improve traffic flow and reduce congestion.
- **Speed Control:** There is a need for better speed enforcement and traffic calming measures, such as speed bumps and stop signs, to ensure safer roads for pedestrians and cyclists.

Public Webpage

For the Roadway Safety Action Plans, a web page was developed and hosted on the Strafford Regional Planning Commission's website to provide comprehensive information about the Roadway Safety Action Plans. This page includes an overview of the Roadway Safety Action Plans and background on the funding source—USDOT's SS4A program. Graphs were included displaying data on fatal and serious injury crashes over the past five years for each of the four MPOs, based on information from the New Hampshire Department of Transportation. Additionally, the page features details regarding stakeholder and committee meetings. To help community members understand the plan's goals, the web page explains the Safe System Approach to transportation safety and its alignment with New Hampshire's SHSP.

Existing Efforts

Local, regional, and state transportation plans were reviewed for relevance to roadway safety and alignment with Safety Action plan goals and strategies. A summary of these reviewed plans relevant to the objectives of this Plan are as follows:

Summary of Relevant State Plans

2022-2006 New Hampshire Strategic Highway Safety Plan

The New Hampshire Strategic Highway Safety Plan (SHSP) is an integral component of the State's Highway Safety Improvement Program (HSIP). This Federal-aid program utilizes funds to implement strategies and countermeasures aimed at reducing fatalities and serious injuries on all public roads. Each State receives HSIP funding and develops a report for how the money will be used on infrastructure related projects that align with the SHSP's Critical Emphasis Areas (CEAs).

The 2022-2026 New Hampshire Strategic Highway Safety Plan (SHSP) is an ambitious initiative aimed at achieving zero fatalities and serious injuries on state roadways. Focus areas include intersection safety, preventing roadway departures, and mitigating distracted and impaired driving through education and stricter enforcement. The plan also addresses speed management, vehicle occupant protection, and safety improvements for vulnerable road users like pedestrians, cyclists, and motorcyclists. Collaboration with local, regional, and national entities is essential, along with community involvement and stakeholder engagement. The SHSP emphasizes a data-driven, adaptable approach for deploying targeted safety interventions and enhancing regional safety efforts. It provides a valuable framework for regional safety action plans by advocating for prioritizing interventions in high-risk areas based on data analysis. The plan develops targeted strategies for each critical emphasis area, tailored to specific regional needs, ensuring continuous improvement through regular reviews and updates based on new data and feedback.

The NRPC Safety Action plan follows a similar data-driven and multidisciplinary process to the SHSP development. In both plans, safety is the top focus, and both have emphasis areas outlining the key crash types and risk, listing specific strategies for addressing the safety problems. Both approaches use the Safe System approach. Through this comprehensive approach, New Hampshire aims to create a safer, more sustainable transportation environment that protects all road users and supports the state's vision of zero traffic-related fatalities and serious injuries.

Critical Emphasis Areas (CEAs)³

The 2022 – 2026 New Hampshire SHSP identified ten emphasis areas, or factors and characteristics that are strongly associated with fatal and serious injury crashes throughout the state, to help prioritize where resources should be directed towards improving the safety of New Hampshire’s transportation network. These ten Critical Emphasis Areas include:



Intersections – The junction of two or more roadways.



Roadway Departure – Crashes involving drivers drifting out of their lanes into opposing traffic or off the roadway.



Distracted Driving – Any non-driving activity that a person engages in while driving that causes inattentiveness or distracts them from the primary task of driving. Four main types of distraction are visual, manual, cognitive, and drowsiness.



Impaired Driving – Driving under the influence of alcohol and/or drugs.



Speed and Aggressive Driving – Speeding is driving above speed reasonable and proper for the roadway conditions.



Vehicle Occupant Protection – Vehicle occupant protection is the proper use of seat belts, child safety restraints, and other vehicle safety features that help to avoid or reduce the severity of injuries that might result from a crash.



Older Drivers – Crashes involving drivers aged 65 and older.



Teen Traffic Safety – Crashes involving drivers 18 and under.



Vulnerable Roadway Users (Motorized) – Crashes involving motorcyclists or other motorized vulnerable roadway users (i.e., scooters or Off-Highway Recreational Vehicles [OHRVs]).



Vulnerable Roadway Users (Non-Motorized) – Crashes involving pedestrians (including wheelchair users), bicyclists, and e-bikes.

³ New Hampshire 2022-2026 Strategic Highway Safety Plan

2022 New Hampshire Highway Safety Plan (HSP)

The New Hampshire Highway Safety Plan (HSP) is a detailed strategy aimed at enhancing the safety of all road users in the state. This plan builds on previous efforts and incorporates updated data and methodologies to address current safety challenges effectively. Developed by the New Hampshire Office of Highway Safety, the plan targets key issues such as speeding, impaired driving, and seatbelt usage, citing increases in speed-related fatalities and impaired driving incidents as critical areas of concern. To address these issues, the HSIP combines education, enforcement, and engineering solutions, including public awareness campaigns, stricter penalties, increased police presence, and roadway improvements. The plan relies on data-driven decision-making to allocate resources effectively, monitor the success of interventions, and make necessary adjustments. Collaboration with local, regional, and national organizations and community involvement is emphasized to align safety efforts and share best practices. Overall, the HSIP provides a thorough framework to improve road safety and foster a safer driving environment statewide.

2023 New Hampshire Bicycle and Pedestrian Plan

The 2023 New Hampshire Bicycle and Pedestrian Plan outlines a comprehensive strategy aimed at enhancing the safety and accessibility of active transportation across the state. Building on previous efforts, the plan integrates recommendations from the Strategic Highway Safety Plan (SHSP) and aims to make all modes of travel, including biking and walking, safer and more convenient for users of all ages and abilities. Key elements include addressing pedestrian fatalities, which accounted for 9% of total roadway fatalities between 2015-2019, enhancing infrastructure, and promoting policies such as Complete Streets in various communities. The plan also stresses the importance of developing a network of bike facilities and addressing gaps in the sidewalk infrastructure to encourage more sustainable and healthy transportation options. Through these measures, the state aims to create a safer and more connected environment for pedestrians and cyclists.

2023 New Hampshire Vulnerable Road User Safety Assessment

The 2023 New Hampshire Vulnerable Road User Safety Assessment (VRUSA) is a crucial initiative focused on enhancing the safety of pedestrians and bicyclists on the state's roads. This assessment is a critical part of New Hampshire's Highway Safety Improvement Program and primarily aims to reduce the rising number of fatal and serious crashes involving these vulnerable groups through data-driven analysis. Mandated by federal guidelines, the VRUSA identifies high-risk areas and proposes targeted strategies and interventions to address these risks. Key actions include improving road design, increasing public awareness, and fostering collaborations among various stakeholders, including local, regional, and national organizations. The assessment also emphasizes continuous improvement and adaptation based on ongoing data collection and feedback, ensuring that New Hampshire's roads become increasingly safer for non-motorists.

2024 New Hampshire Highway Safety Implementation Plan

The 2024 New Hampshire Highway Safety Improvement Program Implementation Plan is a targeted initiative mandated due to the state's failure to meet significant safety performance measures in 2021. It focuses on critical areas such as reducing fatalities and improving safety for all road users, especially vulnerable road users like pedestrians and bicyclists, through data-driven efforts. Developed by the New Hampshire Department of Transportation (NHDOT), the plan integrates strategies across education, enforcement, and engineering solutions to address key safety issues including speeding, impaired driving, and inadequate

seatbelt usage. Emphasizing collaboration, the HSIP involves partnerships with local, regional, and national organizations to enhance safety measures and share best practices. This comprehensive approach ensures continuous improvement, guided by regular updates and feedback based on emerging data.

Summary of Relevant Local & Regional Plans

2023-2026 Nashua Metropolitan Planning Organization Transportation Improvement Program (TIP)

The 2023-2026 Nashua Metropolitan Planning Organization Transportation Improvement Program (TIP) is a strategic plan adopted on February 15, 2023, that outlines the priority transportation projects in the Nashua region. This plan is developed in coordination with the State's Ten-Year Transportation Plan and emphasizes the need for consistency with the Statewide Transportation Improvement Program (STIP). It addresses key transportation challenges by listing federally and state-funded projects aimed at enhancing regional connectivity and safety. The TIP integrates various measures such as improvements in transit services, arterial highways, and safety enhancements, ensuring that the region's transportation infrastructure supports its economic and social needs. Regular amendments and updates are made to reflect changes in priorities and to maintain alignment with environmental regulations, as a result of collaborative efforts among multiple regional planning bodies.

Overall, the FY2023-2026 TIP provides a comprehensive roadmap for improving transportation in the Nashua region. By focusing on project prioritization, financial planning, public involvement, and performance evaluation, the plan aims to create a more efficient, safe, and sustainable transportation network that benefits all residents.

2023-2050 Nashua Region Metropolitan Transportation Plan (MTP)

The 2023-2050 Nashua Region Metropolitan Transportation Plan (MTP) is a forward-thinking strategy developed by the Nashua Regional Planning Commission (NRPC) to enhance the region's transportation network over the next 25 years. Developed in coordination with New Hampshire's Ten-Year Transportation Plan and consistent with the Statewide Transportation Improvement Program (STIP), the MTP addresses key issues such as regional connectivity, safety, and infrastructure improvements for transit services, highways, biking, and walking. The plan utilizes a data-driven approach and emphasizes continuous public involvement, prioritizing projects to support economic growth and improve the quality of life for residents. It also stresses sustainability and multimodal transportation, aiming to create a more efficient, safe, and sustainable transportation system. Through collaborative efforts with various regional planning bodies, the MTP ensures that the transportation network will be resilient and responsive to the future needs of all users, fostering a safer, more economically vibrant Nashua region.

2021 Regional Bicycle, Pedestrian, & Active Transportation Plan

The 2021 Nashua Regional Bicycle, Pedestrian, & Active Transportation Plan is a detailed blueprint aimed at improving and promoting non-motorized travel within the Nashua region. Developed by the Nashua Metropolitan Planning Organization (MPO), this plan is part of broader efforts to enhance active transportation infrastructure and encourage a shift from motorized to human-powered travel. It builds on the goals of previous

plans and the 2021-2045 Nashua Metropolitan Transportation Plan (MTP), focusing on the development and implementation of safe, usable facilities for biking and walking. The plan emphasizes public engagement, regional connectivity, and sustainable transportation, aligning with the city's vision for redevelopment and improved quality of life as outlined in the 2020 Master Plan update. Key strategies include enhancing infrastructure, promoting policies like Complete Streets, and integrating electric vehicle infrastructure to support overall transportation goals.

2024-2025 Unified Planning Work Program (UPWP)

As the Metropolitan Planning Organization (MPO) for the region, the Nashua Regional Planning Commission (NRPC) FY 2024-2025 Unified Planning Work Program (UPWP) is a comprehensive framework outlining transportation planning activities within the Nashua Metropolitan Planning Organization (MPO) region. Aimed at ensuring the maintenance and enhancement of the safety and reliability of the transportation system, this program pursues sustainable revenue sources to address regional transportation needs. The UPWP consolidates all anticipated transportation planning efforts, regardless of their funding sources, into a single document to comply with federal regulations. By integrating project prioritization, financial planning, public involvement, and performance evaluation, the UPWP aims to create an efficient, safe, and sustainable transportation network that caters to the economic and social needs of the region's residents through a collaborative approach.

Data Analysis Background

This Safety Action Plan is driven by a comprehensive data analysis that identified when, where, and how crashes occurred in the Nashua Regional Planning Commission (NRPC) region. Crash data is managed by the Department of Motor Vehicles' DMV VISION Crash Records Management System (CRMS). The NHDOT distributed the crash data to the consultant for analysis. Fatal, serious injury, minor injury, possible injury, and property damage only crashes were analyzed for the period of 2018-2022. The data source for fatal crashes was the federally maintained Fatality Analysis Reporting System (FARS).

This action plan focuses on addressing crashes with the most severe injury outcomes. While this Safety Action Plan is primarily concerned with crashes that result in fatalities and serious injuries, the conducted analysis was expanded to include minor injury, a lower injury threshold, in order to increase the sample size and, therefore, improve the accuracy of observations regarding 5-year crash trends. The analysis for this plan includes a focus on the New Hampshire Strategic Highway Safety Plan (SHSP) Emphasis Areas. This alignment helps the NRPC to focus roadway safety improvement efforts on locations, policies, and programs that have the greatest chance in moving towards zero fatalities and serious injuries by 2050.

General Trends

During the 5-year period from 2018-2022, there were 52 fatal, 242 serious injuries, and 2,233 minor injury crashes in the NRPC region. Figure 7 shows the trend of fatal, serious, and minor injury crashes during the analyzed period.

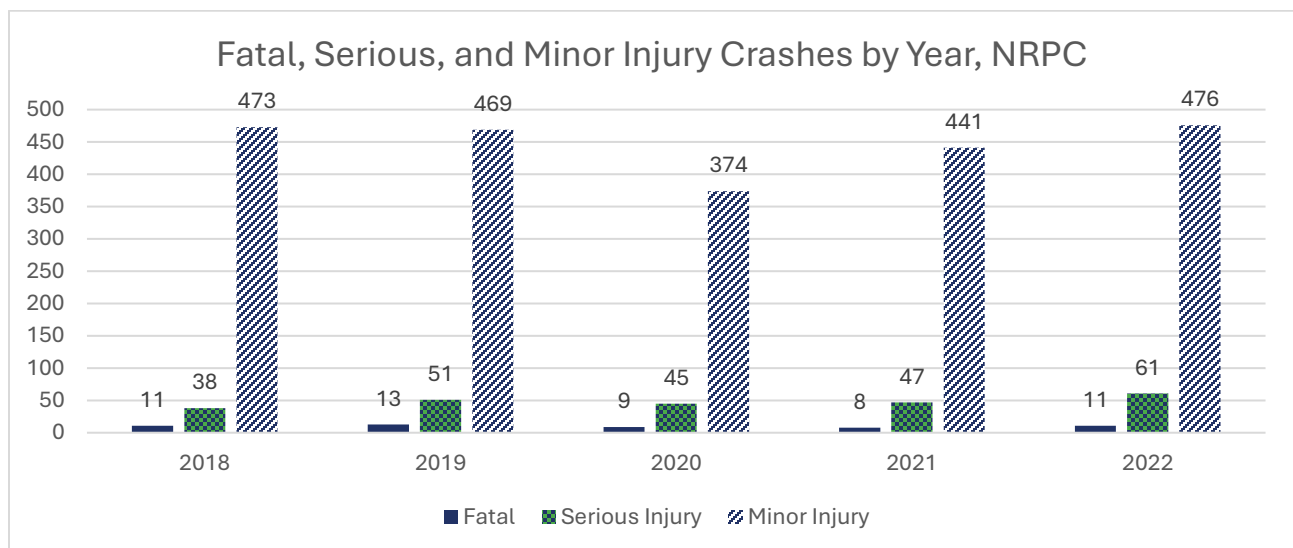
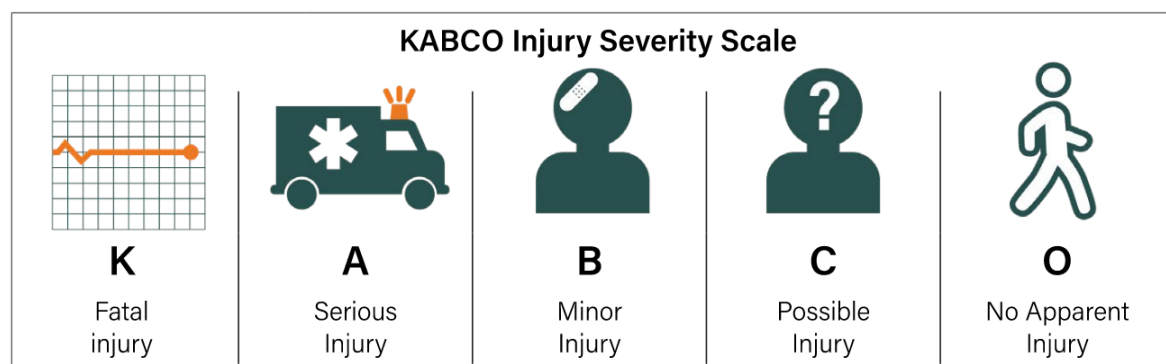


Figure 7: Fatal, Serious, and Minor Injury Crashes by Year, NRPC

Table 1 shows the total number of crashes resulting in all levels of severity – fatal, serious injury, minor injury, possible injury, and property damage only. Total crashes fluctuated over the 5-year period; however, a minor decreasing trend is present. Total crashes peaked in 2019, and in the following year the 5-year low of 3,194 crashes was recorded. COVID-19 related restrictions are a likely explanation for the drop in crashes in 2020. Notably, the percentage of crashes that resulted in a fatal, serious, or minor injury increased over the 5-year period. In 2018, 12.7% of crashes resulted in these injuries and in 2022, the percent of crashes resulting in a fatal, serious, or minor injury rose to 14.5%. Reversing the trend of crashes resulting in these more serious injuries is vital for the Nashua Regional Planning Commission to reach its target goal.

Table 1: Crash Severity Summary, NRPC

Crash Severity	2018	2019	2020	2021	2022	TOTAL
Fatal	11	13	9	8	11	52
Serious Injury	38	51	45	47	61	242
Minor Injury	473	469	374	441	476	2,233
Possible Injury	180	213	158	175	146	872
Property Damage Only	3,422	3,495	2,608	3,042	3,078	15,645
Column Total	4,124	4,241	3,194	3,713	3,772	19,044



Emphasis Area Analysis

Table 2 shows the total crashes recorded during the 5-year period for each New Hampshire SHSP Emphasis Area (as rows) broken down by injury severity (as columns). Please note that the columns do not add up to the 'Total' row shown at the bottom of the table. Crashes can involve multiple emphasis areas at once. The three emphasis areas with the most crashes in the NRPC were:

- Distracted Driving (4,183 crashes)
- Older Drivers (3,592 crashes)
- Teen Drivers (2,185 crashes) recorded the three highest crash totals during the 5-year period.

The 'Percent of Emphasis Area Resulting in KAB' column shows the percent of total crashes for each Emphasis Area that result in a fatality, serious, or minor injury. The three leading Emphasis Areas are Vulnerable Motorized Users – Motorcycles/Mopeds (65%), Vulnerable Non-Motorized Users – Bikes/Peds (56%), and Occupant Protection (27%).

Table 2: Emphasis Area Crash Summary

SHSP Emphasis Area	Fatal Injury (K)	Serious Injury (A)	Minor Injury (B)	Possible Injury (C)	Property Damage Only (O)	Percent of Emphasis Area Resulting in KAB	Percent of Total KAB	Total
Intersections	9	12	176	64	885	17%	8%	1,146
Roadway Departure	35	41	291	101	1,491	19%	15%	1,959
Distracted Driving	3	38	505	218	3,419	13%	22%	4,183
Impaired Driving	8	37	162	42	587	25%	8%	836
Speed and Aggressive Driving	22	11	77	21	356	23%	4%	487
Occupant Protection	29	79	475	163	1,411	27%	23%	2,157
Older Drivers (65+)	10	52	438	196	2,896	14%	20%	3,592
Teen Drivers (18 and Younger)	4	10	243	103	1,825	12%	10%	2,185
Vulnerable Motorized Users – Motorcycles and Mopeds	9	59	156	32	90	65%	9%	346
Vulnerable Non-Motorized Users – Ped/Bikes	4	21	126	34	87	56%	6%	272
Total	52	242	2,233	872	15,645	-	-	19,044

Of the 52 fatal crashes during the 5-year period, 35 (67%) involved a Roadway Departure, 22 (42%) involved Speed and Aggressive Driving, and 29 (56%) involved improper Occupant Protection. As shown in Figure 8, these emphasis areas account for smaller proportions of serious, minor, possible injury, and property damage only crashes. The large disparity shown indicates an overrepresentation for these Emphasis Areas in fatal crashes. Speed and Aggressive Driving were factors in about 2% of non-fatal Roadway Departure crashes, but 49% in fatal crashes. Similarly, improper Occupant Protection were factors in about 10% of non-fatal Roadway Departure crashes, but 49% in fatal crashes. Countermeasure strategies that address these Emphasis Areas can help make significant progress in reaching the target of a 50% reduction in fatal crashes by 2035 and 0 fatal crashes by 2050.

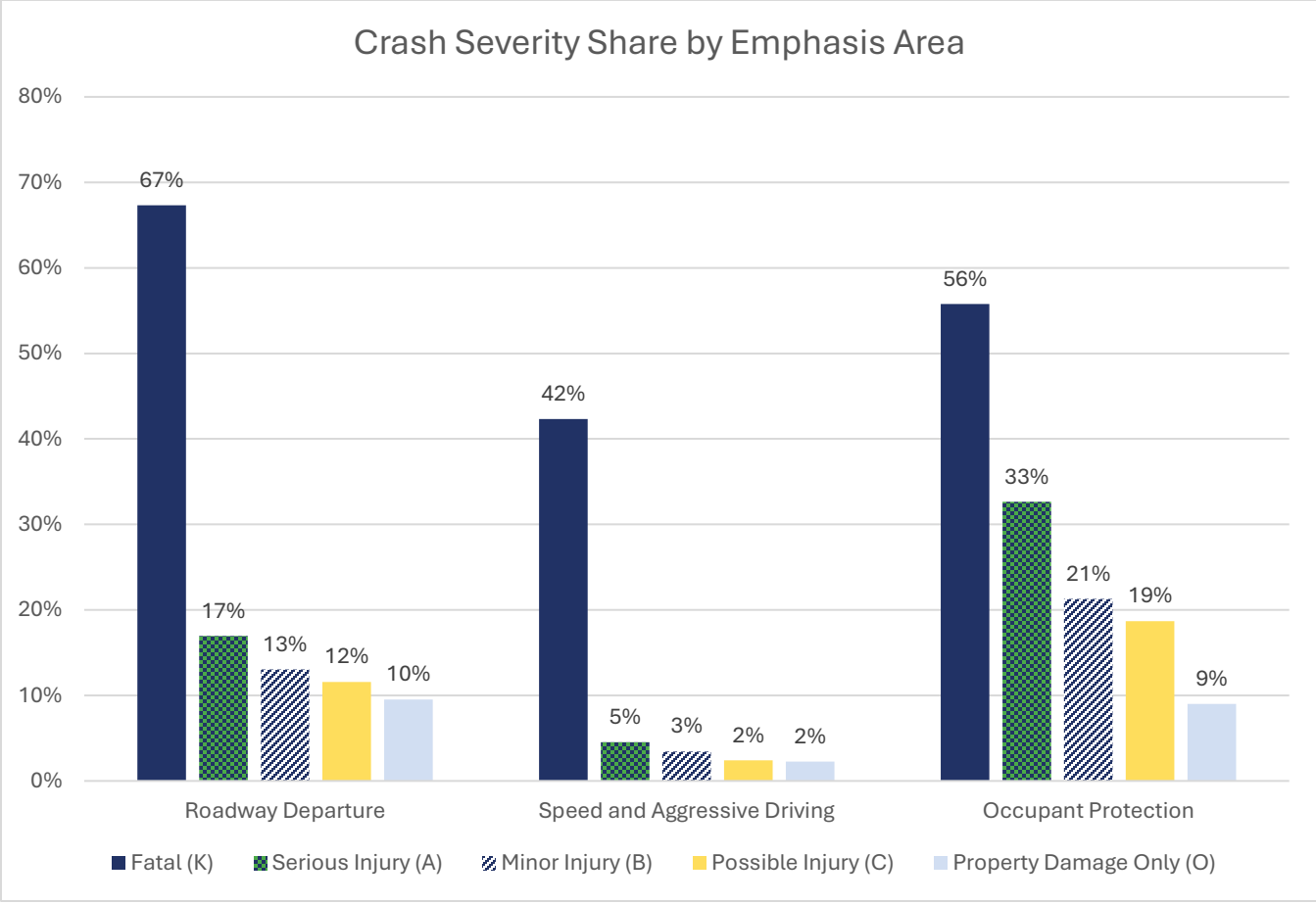


Figure 8: Crash Severity Share by Emphasis Area (Top 3)

Figure 9 shows the remaining 7 Emphasis Areas. Both vulnerable user Emphasis Areas are overrepresented, particularly in fatal and serious injury crashes Figure 9. Distracted Driving, Older Drivers, and Teen Drivers show slight levels of underrepresentation in fatal, serious, and minor injury crashes. Please note that gathering accurate data on Distracted Driving is challenging and thus is likely underreported.

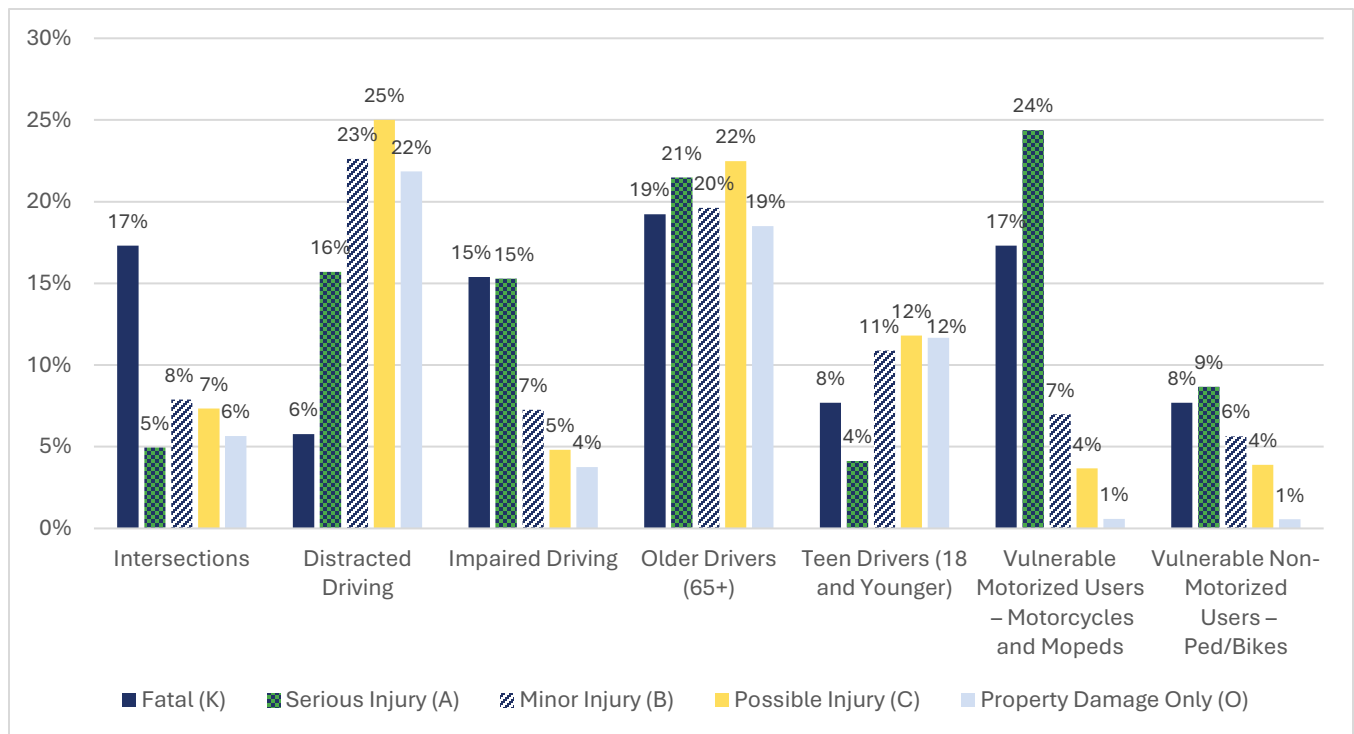


Figure 9: Crash Severity Share by Emphasis Area (Remaining)

Emphasis Area Highlights

The following section highlights crash factors for the following five emphasis areas; Roadway Departure, Occupant Protection, Speed and Aggressive Driving, Vulnerable Motorized Users – Motorcycles and Mopeds, and Vulnerable Non-Motorized Users – Bicycles and Pedestrians. A high percentage of crashes in these Emphasis Areas result in either a fatal, serious, or minor injury.

Roadway Departure

- 35 (67%) of the 52 fatal crashes involved a Roadway Departure during the 5-year period.
- Approximately 19% of all Roadway Departure crashes resulted in a fatal, serious, or minor injury.
- There was a total of 1,959 crashes involving a Roadway Departure during the 5-year period.
- 17 (49%) of the 35 fatal Roadway Departure crashes also involved Speed and Aggressive Driving.
- 10 (29%) of the 35 fatal Roadway Departure crashes occurred on Principal Arterial roads.

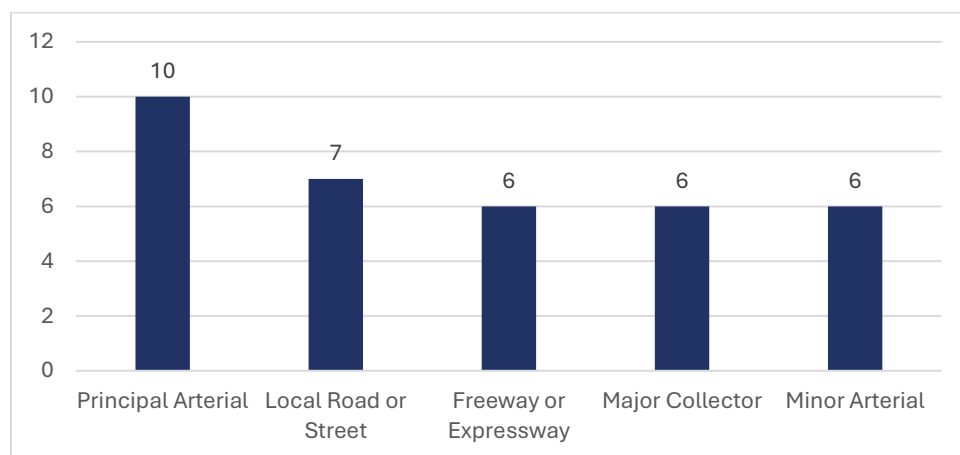


Figure 10: Fatal Roadway Departure Crashes by Road Class

Occupant Protection

- 29 (56%) of the 52 fatal crashes involved improper Occupant Protection during the 5-year period.
- Approximately 27% of all Occupant Protection crashes resulted in a fatal, serious, or minor injury.
- There was a total of 2,157 crashes involving improper Occupant Protection during the 5-year period.
- 17 (59%) of the 29 fatal Occupant Protection crashes involved a Roadway Departure.

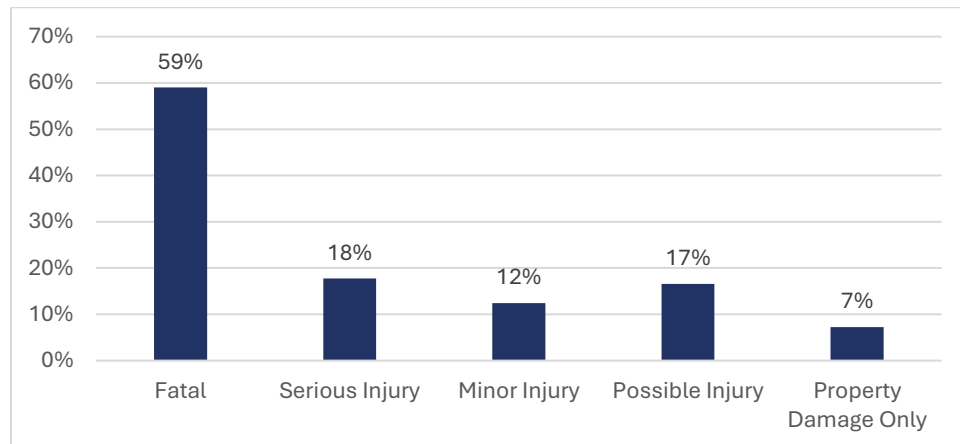


Figure 11: Roadway Departure Involvement in Occupant Protection Crashes

Speed and Aggressive Driving

- 22 (42%) of the 52 fatal crashes involved Speed and Aggressive Driving during the 5-year period.
- Approximately 23% of all Speed and Aggressive Driving crashes resulted in a fatal, serious, or minor injury.
- There was a total of 487 crashes involving Speed and Aggressive Driving during the 5-year period.
- 17 (77%) of the 22 fatal Speed and Aggressive Driving crashes also involved a Roadway Departure.

Vulnerable Motorized Users – Motorcycles and Mopeds

- 9 (17%) of the 52 fatal crashes involved a Vulnerable Motorized User during the 5-year period.
- Approximately 65% of all Vulnerable Motorized User crashes resulted in a fatal, serious, or minor injury.
- There was a total of 346 crashes involving a Vulnerable Motorized User during the 5-year period.
- 5 (56%) of the 9 fatal Vulnerable Motorized User crashes involved a Roadway Departure.
- 5 (56%) of the 9 fatal Vulnerable Motorized User crashes occurred at an intersection. For all other severities, 8% or fewer Vulnerable Motorized User crashes occurred at an intersection.

Vulnerable Non-Motorized Users – Pedestrians and Bicycles

- 4 (8%) of the 52 fatal crashes involved a Vulnerable Non-Motorized User during the 5-year period.
- Approximately 56% of all Vulnerable Non-Motorized User crashes resulted in a fatal, serious, or minor injury.
- There was a total of 272 crashes that involved a Vulnerable Non-Motorized User during the 5-year period.
- 3 (75%) of the 4 fatal Vulnerable Non-Motorized User crashes occurred away from an intersection. Overall, only 6% of Vulnerable Non-Motorized User crashes occurred at an intersection.
- Approximately 24% of all Vulnerable Non-Motorized User crashes involved Distracted Driving.

Crossmatrix Analysis

When a crash occurs, there can be multiple factors that caused the crash. When analyzing crashes to identify trends in Emphasis Area involvement, we acknowledge the same possibility – a crash may involve a young driver who is driving while impaired and is speeding. Stated another way, a single crash can involve multiple Emphasis Areas. Table 3 shows the overlap between Emphasis Areas in crashes that result in a fatal, serious, or minor injury – the percentages listed are in reference to the Emphasis Area in the column header. For example, 28% of Impaired Driving crashes also involved a Roadway Departure.

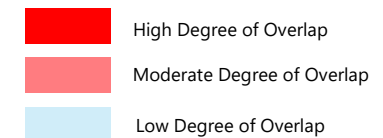
The highest overlap in Table 3 is observed at the intersection of Speeding and Occupant Protection. Approximately 45% of Speeding involved crashes also involved improper Occupant Protection. While this overlap is high, observing the same relationship in the Occupant Protection column shows a disparity. Only 9% of Occupant Protection crashes involved Speeding. This disparity is explained by the percentages shown in the 'Total' row. Speeding crashes only account for 4% of fatal, serious, and minor injury crashes, while Occupant Protection crashes account for 23%. With a lower total (and lower percentage) of crashes involving Speeding, each additional crash that involved improper Occupant Protection will impact and skew the overlap percentage more significantly.

While Speeding may not be a major factor in Occupant Protection crashes, the crossmatrix still reflects that multiple other risk-taking factors are often at play. Occupant Protection crashes often involve Distracted Driving, Impaired Driving, and Roadway Departures. Outreach and media campaigns that target Occupant Protection may also benefit from inclusion of messaging and education on Distracted Driving, and Impaired Driving topics.

The crossmatrix chart shows that Bicycle and Pedestrian Involved crashes account for only 4% of KAB injuries. However, of the 272 crashes that involved a Bicycle or Pedestrian, approximately 56% resulted in a fatal, serious, or minor (KAB) injury. The two Emphasis Areas with the highest overlap are Distracted Driving and Older Drivers. Enforcement of Distracted Driving, particularly during hours where pedestrian traffic is high, may reduce the frequency of Bicycle and Pedestrian crashes. Providing education to Older Drivers that teaches them how to navigate new bicycle infrastructure is recommended. Additionally, providing education that increases their awareness of pedestrians and increasing the visibility of pedestrian crossings, is recommended.

NRPC (KAB) Percentages	<i>Intersections</i>	<i>Roadway Departure</i>	<i>Distracted Driving</i>	<i>Impaired Driving</i>	<i>Speeding</i>	<i>Occupant Protection</i>	<i>Older Drivers (65+)</i>	<i>Teen Drivers (18 and Younger)</i>	<i>Motorcycles and Mopeds</i>	<i>Bikes and Pedestrians</i>
<i>Intersections</i>	-	1%	8%	4%	7%	7%	10%	11%	8%	5%
<i>Roadway Departure</i>	3%	-	12%	28%	17%	15%	9%	6%	12%	1%
<i>Distracted Driving</i>	21%	17%	-	11%	2%	22%	23%	18%	12%	26%
<i>Impaired Driving</i>	5%	16%	4%	-	15%	13%	3%	2%	7%	7%
<i>Speeding</i>	4%	5%	0%	8%	-	9%	1%	6%	8%	0%
<i>Occupant Protection</i>	22%	25%	24%	36%	45%	-	20%	20%	15%	15%
<i>Older Drivers (65+)</i>	25%	13%	21%	7%	6%	17%	-	10%	13%	25%
<i>Teen Drivers (18 and Younger)</i>	15%	4%	9%	2%	15%	9%	5%	-	3%	8%
<i>Motorcycles and Mopeds</i>	9%	7%	5%	7%	17%	6%	6%	3%	-	0%
<i>Bikes and Pedestrians</i>	4%	0%	7%	5%	0%	4%	7%	5%	0%	-
Total	8%	15%	22%	8%	4%	23%	20%	10%	9%	6%

Table 3: Emphasis Area Crossmatrix (KAB Crashes)



Systemic Analysis

The systemic analysis used crash trees to identify multiple factors that are at play in each crash⁴. While the crossmatrix exclusively analyzes Emphasis Area involvement in crashes, the systemic crash tree analysis incorporates several other data fields of interest. For example, road classification, weather conditions, lighting conditions, road curvature, and crash types. It's important to note that the data source for fatal crashes is the Fatality Analysis Reporting System (FARS) which is a national database maintained by National Highway Safety Traffic Administration (NHTSA). Crash trees that analyze fatal crashes may utilize fields that are not available in the NHDOT dataset, which is the data source for non-fatal crashes.

Crash Tree: Fatal Crashes by Location

Figure 12: Intersection Crash Tree analyzes intersection involvement and crash types for all fatal crashes in the NRPC. As shown, approximately 83% of fatal crashes (43 of 52) in the Nashua Regional Planning Commission occurred away from an intersection. Of those 43 crashes, 30 did not involve a collision with another motor vehicle. Potential crash types for non-motor vehicle collisions include fixed object crashes, rollover crashes, and pedestrian or bicycle involved crashes. While intersections are a natural conflict point due to the convergence of multiple roads, they are not where the majority of fatal crashes occurred within the NRPC region. Non-Intersection crashes not including a motor vehicle may involve a vehicle running off the road. Curve warning signing, edge striping, pavement friction treatments, and centerline and shoulder rumble strips are all examples of ways to keep vehicles on the roadway and reduce the potential of the non-intersection crashes that do not involve a collision with another motor vehicle.

⁴ A crash tree is a hierarchical diagram that organizes and visually represents crash data, breaking it down from broad categories to more specific contributing factors.

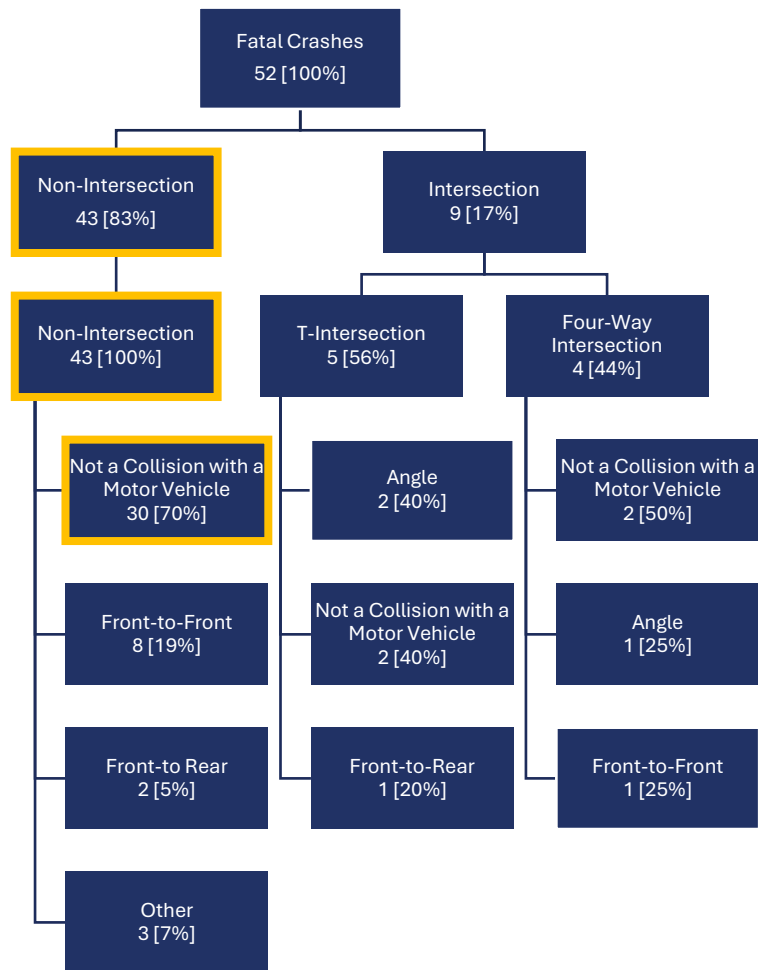


Figure 12: Intersection Crash Tree

Crash Tree: Urban vs Rural Roadway Departure

Figure 13: Urban/Rural and Roadway Departure Crash Tree analyzes fatal crashes based on the environment they occurred in (urban vs rural), the road classification (principal arterial, minor arterial, etc.,) and whether a Roadway Departure was involved. Overall, 67% of crashes involved a Roadway Departure. Principal Arterials, and Freeways and Expressways are the most common road classification for Urban fatal crashes – accounting for 26 of the 46 (57%) of crashes. While these two road types account for the largest share of fatal crashes, they are typically the road types that carry the highest volume of cars, and typically at higher speeds. Of note, however, are the 8 fatal crashes (15%) that occurred on Local Roads or Streets. Approximately 88% of those crashes involved a Roadway Departure.

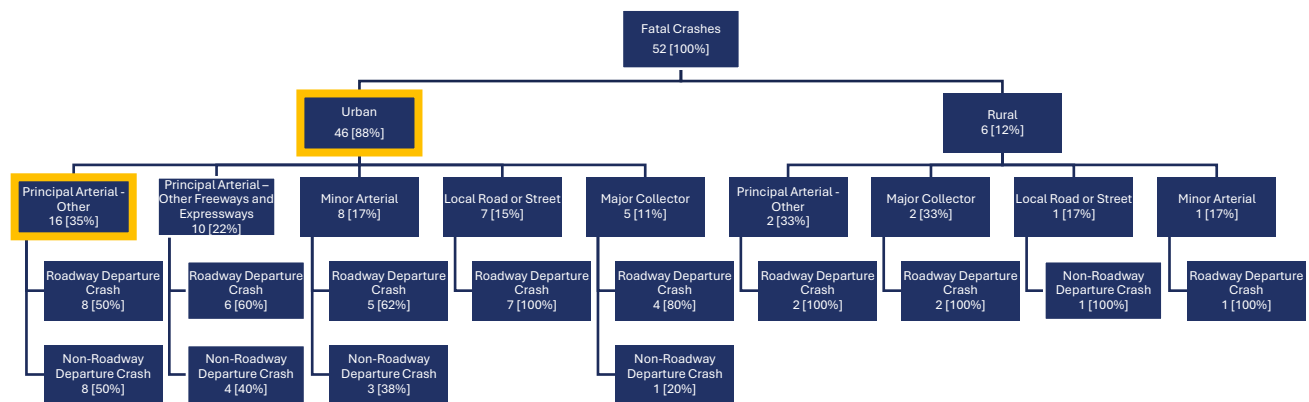


Figure 13: Urban/Rural and Roadway Departure Crash Tree

Crash Tree: Pedestrian and Bicycle Involved Crashes

Pedestrian and Bicycle infrastructure can only provide visibility to users when it is utilized. Painted crosswalks, bike lanes, and other pedestrian and bicycle infrastructure are typically found at intersections. Crossing streets away from an intersection exposes pedestrians to vehicles that are often traveling at higher speeds and are not anticipating the presence of pedestrians. **Figure 14: Ped and Bike Involvement Crash Tree** shows the breakdown of Pedestrian and Bicycle involved fatal, serious, and minor injury crashes based on where the crash occurred. 114 of the 151 Pedestrian and Bicycle involved crashes only involved pedestrians. Pedestrians not utilizing crosswalks may signal that there is not adequate pedestrian infrastructure at intersections, or that the distance from crossing to the next is too great. Introducing mid-block crossings in urban areas, where possible, can provide more frequent access to safe pedestrian crossings. Treating existing crosswalks with high-visibility paint, instituting pedestrian leading intervals which give pedestrians a head-start, thus increasing their visibility to drivers, and increasing pedestrian scale lighting is recommended. Encouraging pedestrians to utilize the proper infrastructure through education and media campaigns is also recommended.

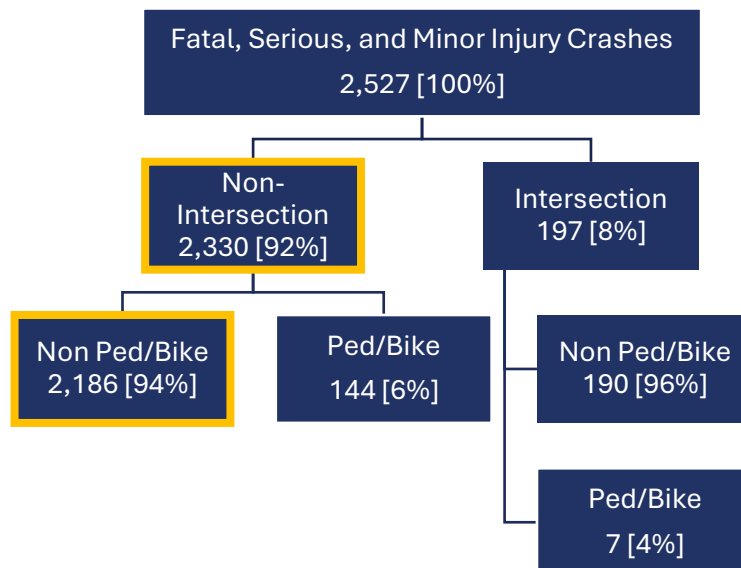


Figure 14: Ped and Bike Involvement Crash Tree

Crash Tree: Pedestrian Crash Locations – Road Classifications

Figure 15: Pedestrian Crash Tree – Functional Classification analyzes road classification in Pedestrian involved fatal crashes in NRPC. A total of 4 fatal crashes involved Pedestrians during the 5-year period. Of those 4 crashes, 2 (50%) occurred on a Principal Arterial – Other roadway, in an urban context. In total, 3 of the 4 crashes occurred in an urban context. Arterial roads are often popular for pedestrian traffic due to a mixture of uses being present, including residential and commercial uses. Still, the roadway design on these streets may be lacking pedestrian infrastructure, for example missing or incomplete sidewalk networks, long crossing distances, unmarked crosswalks, too great of a distance between intersections, and high vehicle speeds. Installing mid-block crossings, pedestrian lighting, filling in sidewalk network gaps and implementing road diets are examples of ways to improve pedestrian infrastructure.

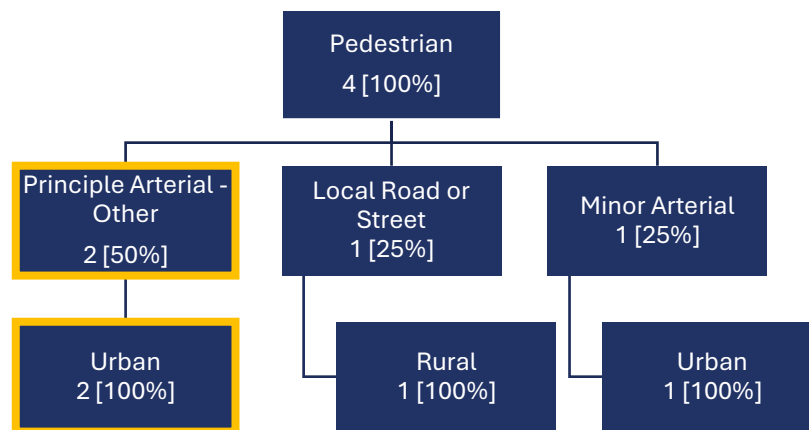


Figure 15: Pedestrian Crash Tree – Functional Classification

Crash Tree: Pedestrian Crash Locations – Intersection Analysis

Figure 16: Pedestrian Crash Tree - Intersections analyzes the lighting conditions for Pedestrian involved fatal crashes in NRPC. A total of 4 fatal crashes involved Pedestrians during the 5-year period. Of those 4 crashes, 3 (75%) occurred at non-intersections. Of the fatal crashes at non-intersection locations, one occurred in daylight conditions, and three occurred in dark-not lighted conditions. Intersections are a natural conflict point due to the convergence of pedestrians and vehicles at the same location; however, they are not where the majority of the fatal crashes including pedestrians occurred. Fatal crashes including pedestrians at non-intersection locations indicates locations where pedestrians are crossing at mid-block crossings or locations that do not have existing or adequate pedestrian infrastructure. Installing mid-block crossings in urban areas where possible, pedestrian lighting, filling in sidewalk network gaps and implementing rectangular rapid flashing beacons (RRFBs) where possible are examples of ways to improve pedestrian infrastructure.

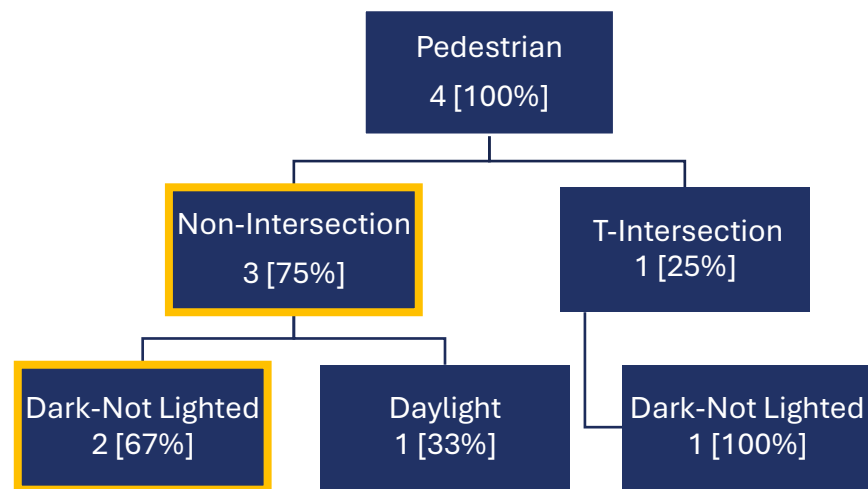


Figure 16: Pedestrian Crash Tree - Intersections

Equity Analysis

The following section summarizes the Equity Analysis for the Nashua Regional Planning Commission. The U.S. Department of Transportation identifies census tracts that face a cumulative burden as a result of underinvestment in transportation, across five measures: Transportation Insecurity, Climate and Disaster Risk Burden, Environmental Burden, Health Vulnerability, and Social Vulnerability. Census tracts are considered Transportation Disadvantaged if the overall index score for a given tract is in the 65th percentile (or higher) when compared to all other U.S. census tracts. Data from the USDOT Equitable Transportation Community (ETC) explorer⁵ were analyzed to identify tracts in the NRPC that were considered Transportation Disadvantaged on a nationwide level.

There are 12 tracts in NRPC that are Transportation Disadvantaged. On average, the disadvantaged tracts face high levels of environmental burden and social vulnerability. Factors that determine environmental burden include hazardous site proximity, high-volume road proximity, and impaired surface water. Factors that determine social vulnerability include disability rates, limited English proficiency, and housing cost burden. Tract 107 in Nashua has among the highest percentile scores in the nation in all categories except Transportation Insecurity.

Table 4: USDOT Transportation Disadvantaged Index Summary, NRPC

Census Tract	Climate & Disaster Risk Burden	Environmental Burden	Health Vulnerability	Social Vulnerability	Transportation Insecurity
Tract 162.04 (Milford)	51	71	47	39	60
Tract 162.03 (Milford)	30	74	8	79	81
Tract 115 (Nashua)	63	54	86	73	48
Tract 108.02 (Nashua)	51	83	10	91	68
Tract 105 (Nashua)	75	88	38	86	52
Tract 122.02 (Hudson)	49	77	23	35	74
Tract 106.00 (Nashua)	67	94	41	77	55
Tract 107 (Nashua)	92	88	97	97	23
Tract 108.01 (Nashua)	72	86	6	87	75
Tract 109 (Nashua)	64	81	20	56	67
Tract 111.02 (Nashua)	69	92	27	61	67
Tract 111.01 (Nashua)	61	66	57	56	62
Average for Disadvantaged Tracts	62	80	38	70	61
Average for NRPC	33	53	29	26	74

⁵ USDOT ETC Explorer – National Results (<https://experience.arcgis.com/experience/0920984aa80a4362b8778d779b090723/page/ETC-Explorer---National-Results/>)

Hot Spot Maps

During the 5-year period, 672 (26%) of the 2,572 fatal, serious, and minor injury crashes occurred in a Transportation Disadvantaged census tract in the NRPC. **Figure 17: Fatal, Serious, and Minor Injury Hot Spots in NRPC** shows “hot spots” where there are relatively large concentrations of fatal, serious, and minor injury crashes (in orange) and “cold spots” (in blue) where lower concentrations exist. Census tracts that are considered “Transportation Disadvantaged” are depicted in gray shading in Figure 17. The highest concentrations of fatal, serious, and minor crashes and disadvantaged census tracts are in Nashua and Hudson. Smaller concentrations are shown in Merrimack and Litchfield, as well as Pelham and Wilton.

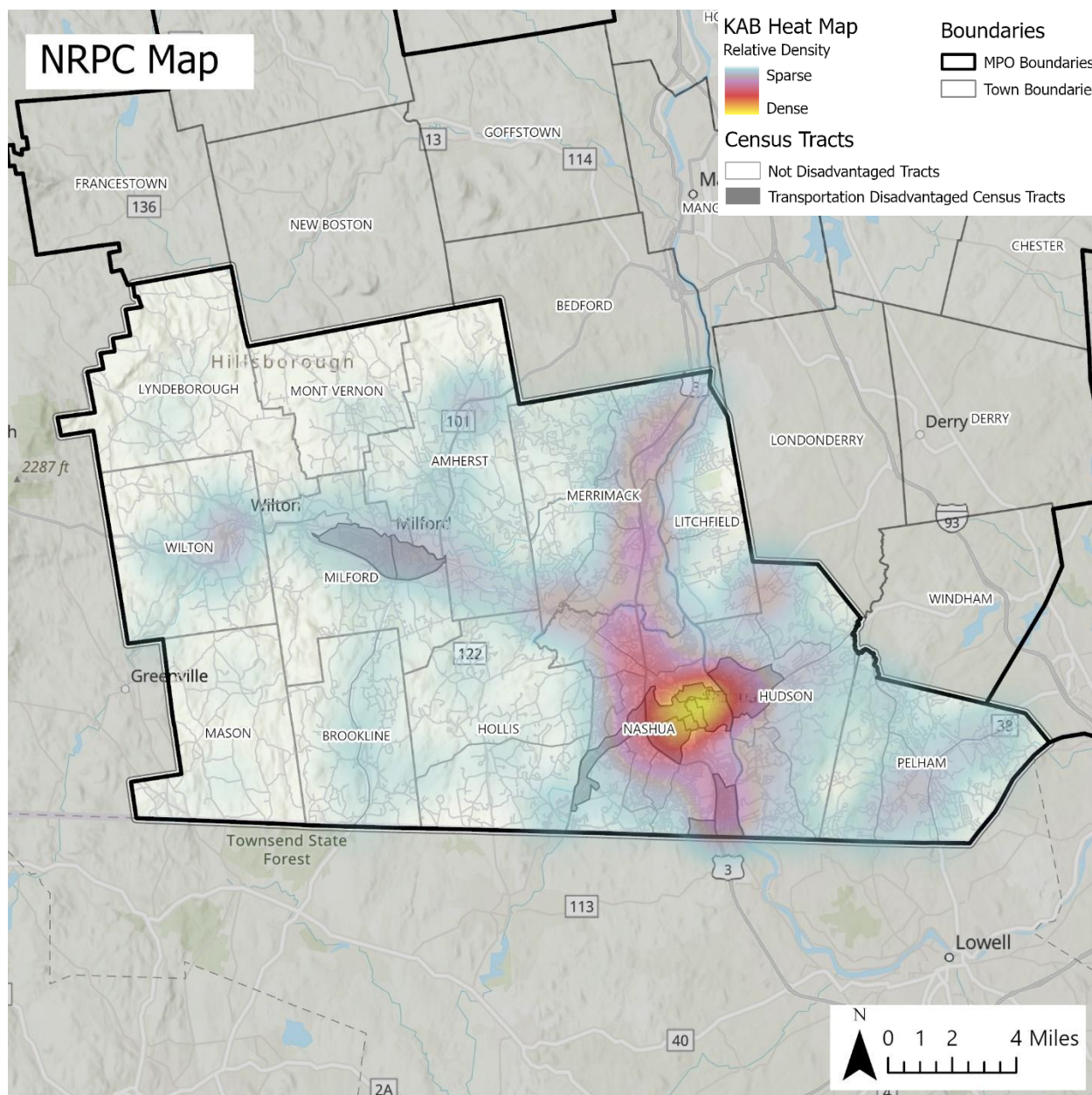


Figure 17: Fatal, Serious, and Minor Injury Hot Spots in NRPC

High Injury Network

Figure 18: High Injury Network and Disadvantaged Census Tracts, NRPC shows the High Injury Network (HIN) corridors for the NRPC. The High Injury Network analysis identifies a small subset of roads where a high proportion of fatal, serious, and minor injury crashes occur. The analysis identifies which road each fatal, serious, or minor injury crash occurred on, and attributes each crash to a specific segment of roadway if it is within 100 feet of the roadway. Crashes with XY coordinates that are greater than 100 feet from a road were excluded from this analysis. Each roadway segment must be at least a half mile in length and have at least six fatal, serious, or minor severity crashes to qualify for the analysis. Crashes are multiplied by the crash cost values shown in Table 5 and divided by the length of the roadway segment. Segments are then ranked from 1 to 50 based on the highest to lowest crash cost scores.

Table 5: Crash Costs for New Hampshire

Crash Severity	Crash Cost
Fatal or Serious Injury	\$1,328,148
Minor Injury	\$111,200

(Source: Crash Costs for Highway Safety Analysis, FHWA)

The HIN accounts for 46% of eligible crashes, and only 8% of the road network.

There was a total of 2,281 fatal, serious, and minor injury crashes plotted within 100 feet of a road segment between 2018 and 2022. Across the 50 corridors that qualify, there were 1,059 crashes. The 63 miles of Minor Arterial Road that make up the HIN account for 63% of all Minor Arterial road miles – similarly, the 46 miles of Principal Arterial on the HIN account for 72% of all Principal Arterial road miles. Across the 150 miles of HIN, Minor Arterials account for 42% of miles, and 36% of crashes. Principal Arterials account for 31% of miles, and 48% of crashes.

Table 6: HIN Summary by Road Classification

Road Types	Total Eligible Crashes	Total Miles	HIN Crashes	% HIN Crashes	HIN Miles	% HIN Miles
Local	491	1,163	43	4%	8	6%
Major Collector	357	145	130	12%	33	22%
Minor Arterial	506	93	382	36%	63	42%
Minor Collector	36	44	0	0%	0	0%
No Functional System	47	255	0	0%	0	0%
Principal Arterial - Other	567	63	504	48%	46	31%
Principal Arterial - Other Freeways and Expressways	277	63	0	0%	0	0%
Grand Total	2,281	1,828	1,059	100%	150	100%

Of the 50 HIN corridors, 15 of them fall within a Transportation Disadvantaged census tract. Like the “hot spot” concentrations shown north of Nashua on major corridors like US-3 (Daniel Webster Highway) and NH-3A (Charles Bancroft Highway), these routes are also identified as HIN corridors. Of the 1,059 crashes that occurred on a HIN corridor, 48% of them were on Principal Arterial roads. Another 36% of crashes occurred on Minor Arterial roads in the NRPC. For the remaining crashes, 12% occurred on Major Collector roads, and 4% occurred on Local roads.

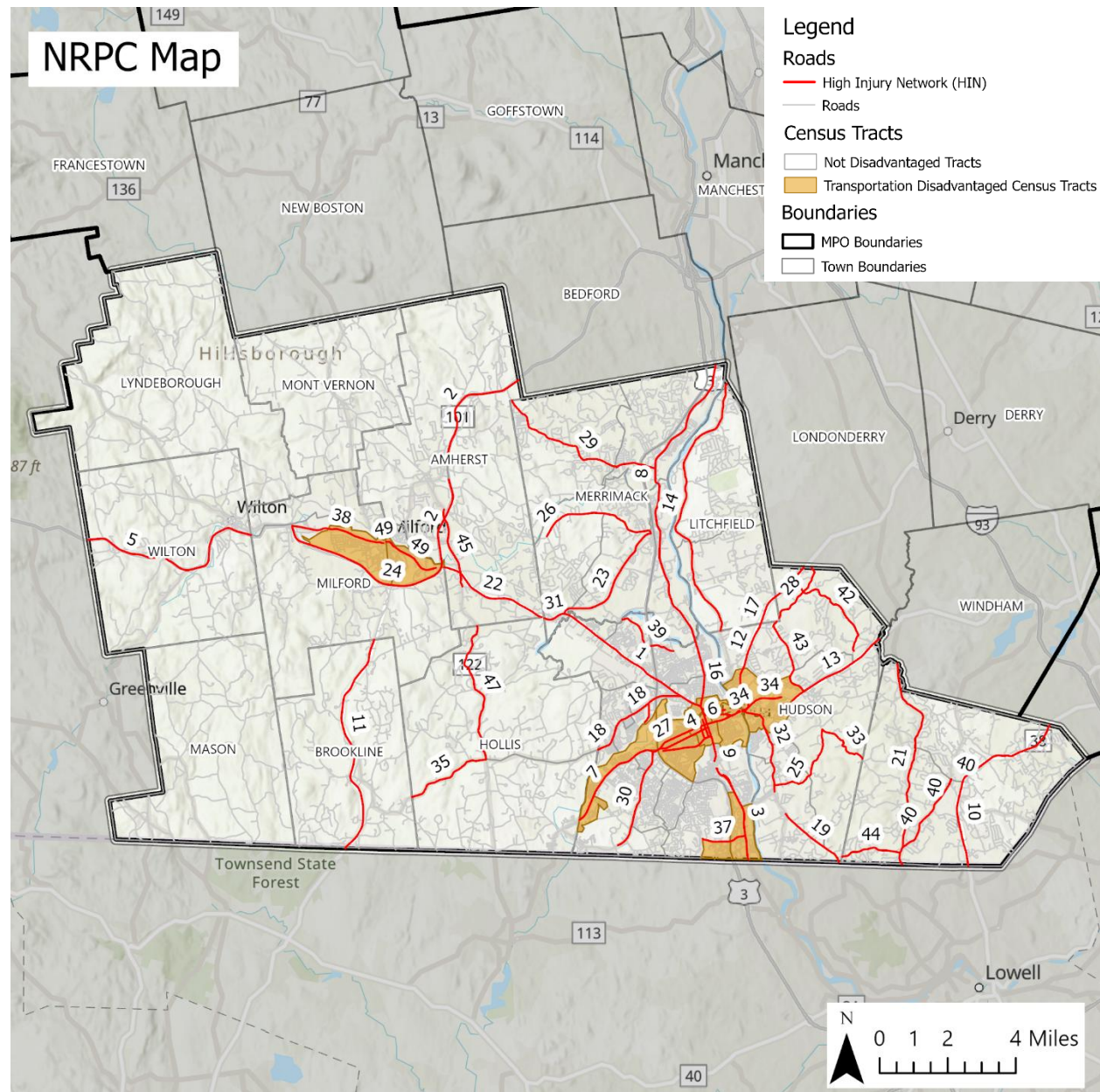


Figure 18: High Injury Network and Disadvantaged Census Tracts, NRPC

Census Data Overrepresentation Analysis

Additional Equity analysis overlaid Transportation Disadvantaged census tracts over data identifying census tracts with higher proportions of the following populations, in comparison to the rest of the Nashua Regional Planning Commission:

- Black, Indigenous, and People of Color (BIPOC) populations
- People with a disability
- People aged 65 and older
- People in poverty
- Zero vehicle households
- Households with limited English proficiency

As shown in the figures that follow, this analysis identified high levels of overlap in downtown Nashua, where there are high percentages of people that identify as BIPOC, persons with a disability, persons in poverty, limited English proficiency, and zero vehicle households. Tracts identified as Transportation Disadvantaged are shown in a black cross-hatch in the following figures.

BIPOC Populations

NRPC Average Rate: 15.84%

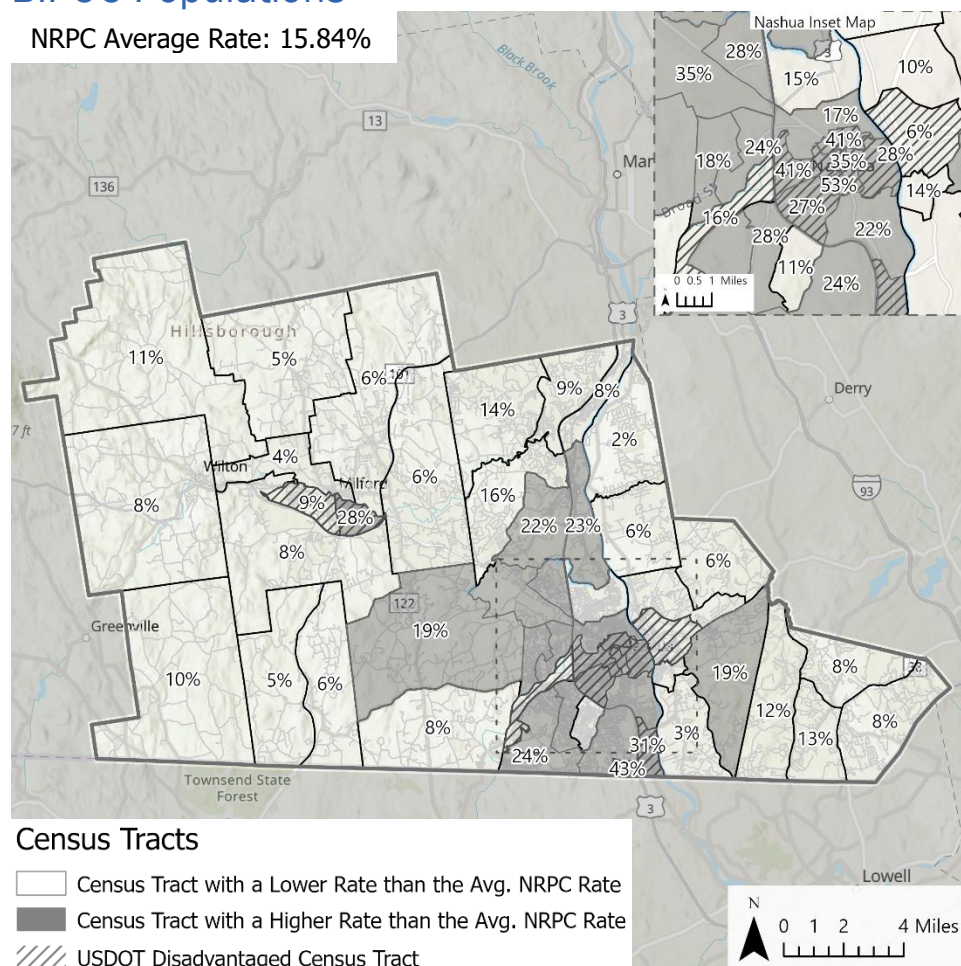


Figure 19: BIPOC Populations by Census Tract

The region wide rate of people who identify as Black, Indigenous, and/or a Person of Color is approximately 16% in the NRPC. Census tract 108.01 in downtown Nashua has the highest rate, at 53% of people identifying as Black, Indigenous, and/or a Person of Color. Several other tracts in downtown Nashua have rates over 25%. Tract 162.03 in Milford, which is Transportation Disadvantaged, has a rate of 28%.

During the 5-year period, approximately 50% of all crashes occurred in a census tract with a higher-than-average rate of people who identify as BIPOC. During the same period 48% of crashes resulting in a fatal, serious, or minor injury occurred in those same tracts.

Persons With a Disability

NRPC Average Rate: 10.9%

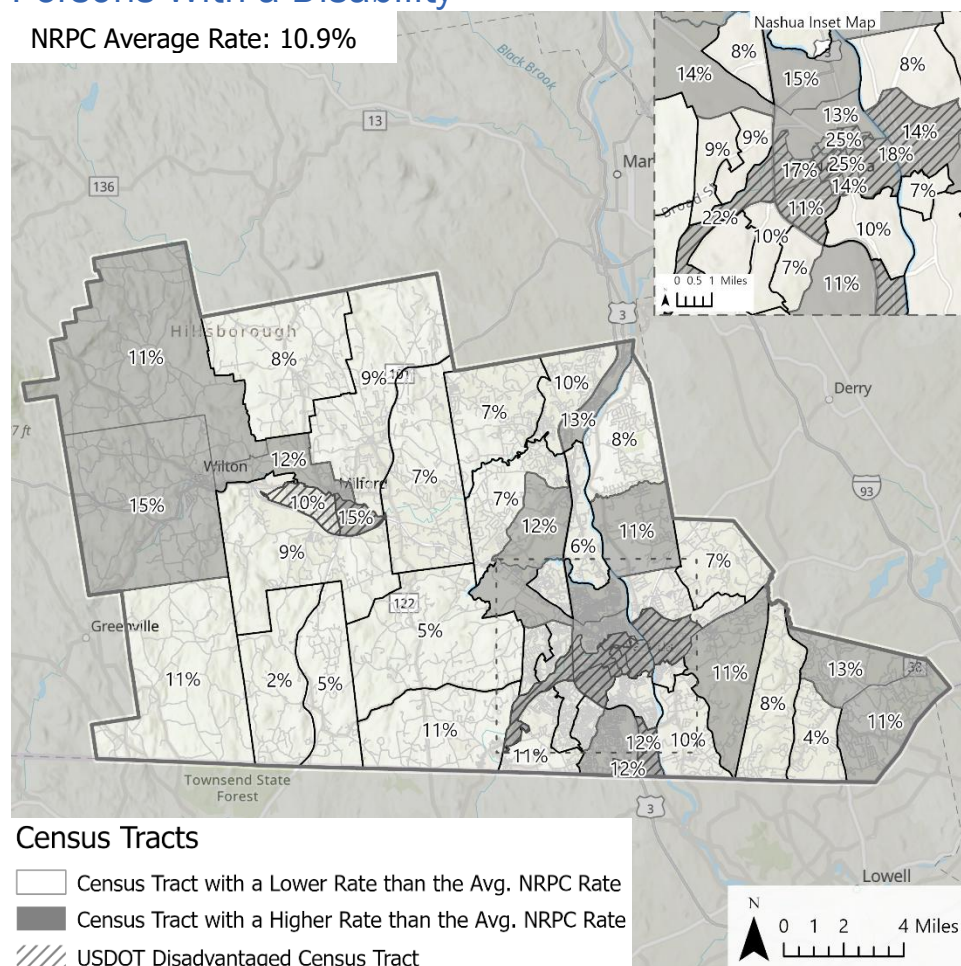


Figure 20: Persons with a Disability by Census Tract

The region wide rate of people with a disability is approximately 11%. Tracts 105 and 107 in downtown Nashua have the highest rates, with approximately 25% of people living with a disability. Approximately 22% of people in tract 115 (Nashua) have a disability. Countermeasures should be selected with the consideration that people in these census tracts may have unique needs. Outreach is important in determining the nature of those needs. For example, visual impairments (blind, impaired vision), auditory impairments (deaf, impaired hearing), and ambulatory impairments (difficulty walking) may require different safety improvements.

Persons Aged 65 and Older

NRPC Average Rate: 16.79%

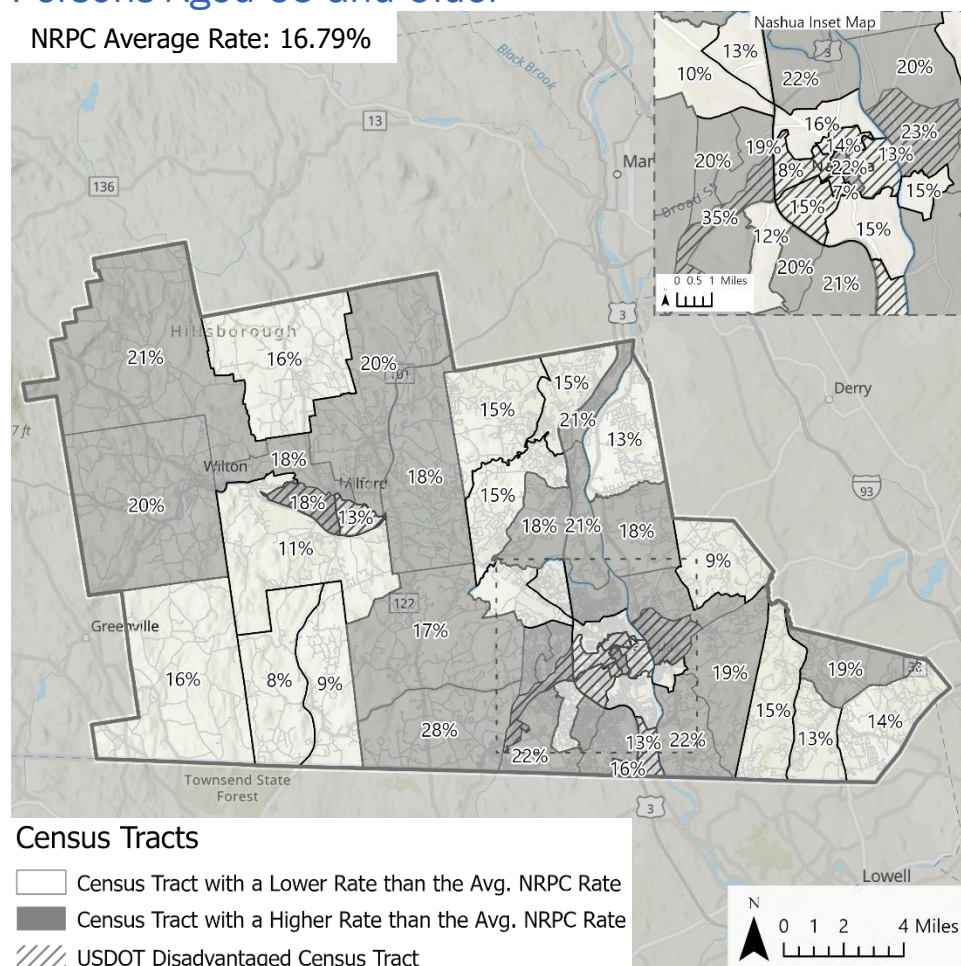


Figure 21: Persons Aged 65 and Older by Census Tract

Approximately 17% of people are aged 65 or older in the Nashua Regional Planning Commission. Tract 171.01 in Hollis has the highest rate, with 28% of people aged 65 or older. As we age, we can become more susceptible to injury, reaction time can become slower, and safe driving abilities can be reduced. It's important to note that, while everyone ages, aging does not affect everyone's abilities in the same ways. When considering safety improvement countermeasures, NRPC should consider how the needs of older drivers differ from other driver groups in the region.

During the 5-year period, 47% of all fatal, serious, and minor injury crashes occurred in a census tract with a higher-than-average rate of persons aged 65 and older. Approximately 53% of crashes involving older drivers occurred in those same census tracts during the 5-year period (**Figure 22: Older Driver Involved Crashes and Tracts with a High Older Population Rate**). It's important to note that while approximately 17% of the population in the NRPC is aged 65 and older, the percentage of people who are aged 65 and older and have a driver's license may be lower.

NRPC Average Rate: 16.79%

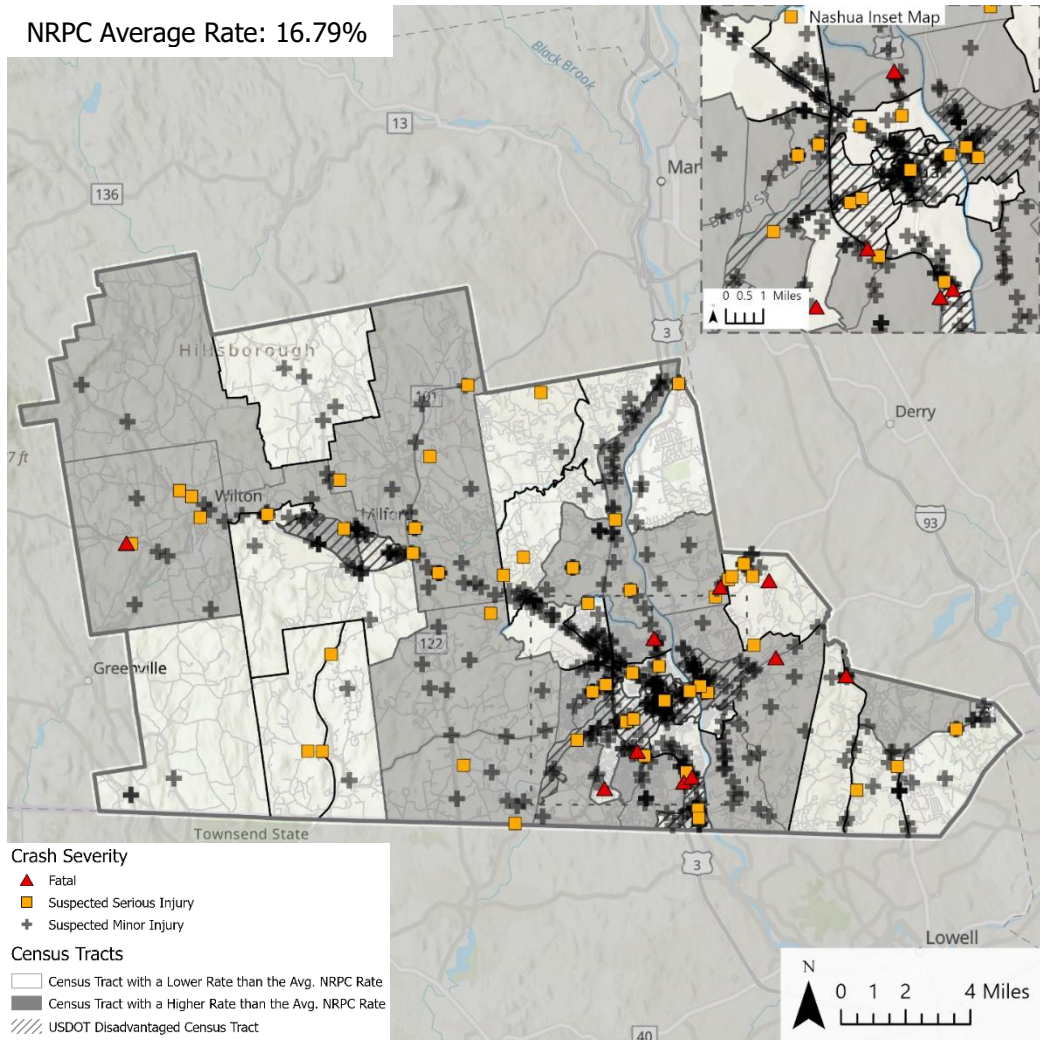


Figure 22: Older Driver Involved Crashes and Tracts with a High Older Population Rate

Persons in Poverty

NRPC Average Rate: 5.1%

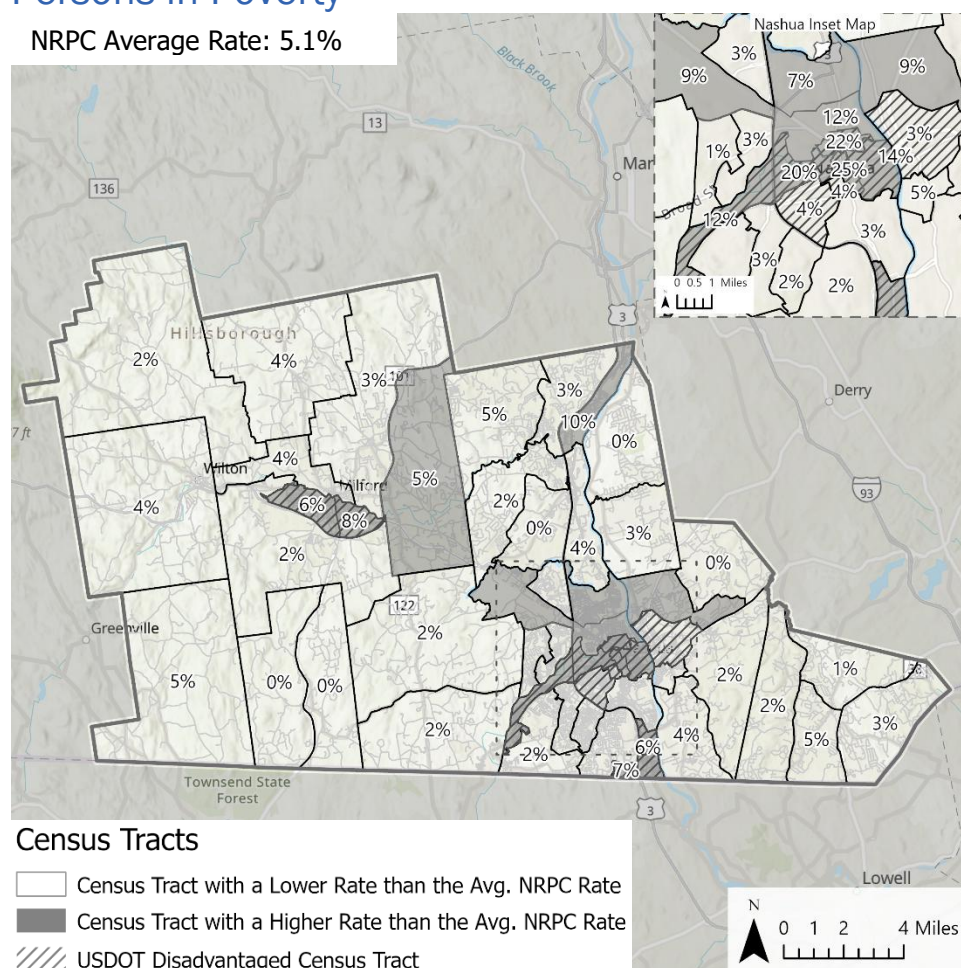


Figure 23: Persons in Poverty by Census Tract

The region wide poverty rate is approximately 5%. The three census tracts with the highest poverty rates in the region are all within downtown Nashua. Tract 108.02 (20%), tract 105 (22%), and tract 107 (25%) are all Transportation Disadvantaged census tracts. Countermeasure recommendations in census tracts with higher rates of poverty should be selected with the consideration that households in poverty are more likely to use transportation modes other than cars for some or all of their trips. Countermeasures should emphasize providing safety for pedestrians, bicyclists, and transit users.

During the 5-year period, 34% of all fatal, serious, and minor injury crashes occurred in a census tract with a higher-than-average rate of people in poverty. Approximately 61% of bicycle and pedestrian crashes which resulted in a fatal, serious, or minor injury crash occurred in those same census tracts, highlighting the need for safety countermeasure recommendations which prioritize for bicyclists and pedestrians. **Figure 24: Pedestrian and Bicycle Crashes and Poverty Rate Map** shows bicycle and pedestrian involved crashes overlaid on census tracts with a higher-than-average poverty rate.

NRPC Average Rate: 5.1%

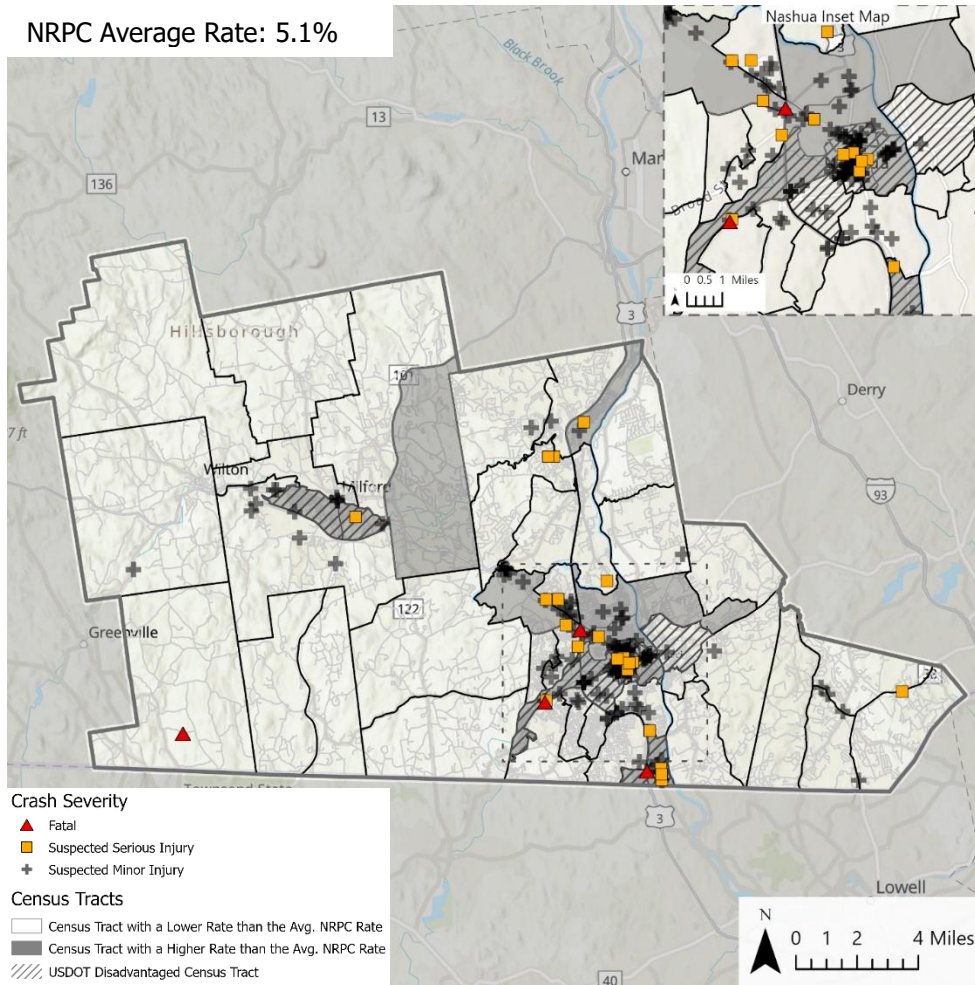


Figure 24: Pedestrian and Bicycle Crashes and Poverty Rate Map

Limited English Proficiency

NRPC Average Rate: 3.48%

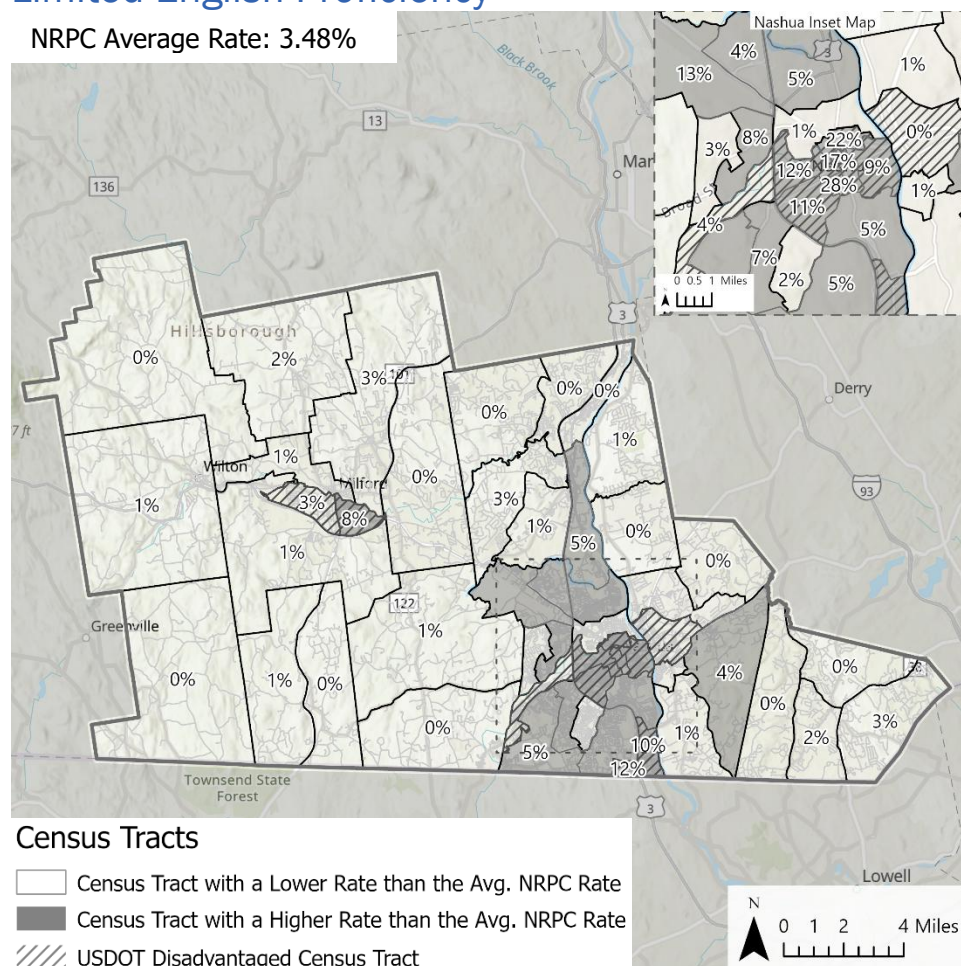


Figure 25: Limited English Proficiency by Census Tract

The region wide rate of persons with limited English proficiency is approximately 4%. Census tracts 108.01 (28%, Nashua) and 105 (22%, Nashua) both have limited English proficiency rates well above the region wide rate. Ensuring that educational materials for road and transportation safety are available in languages other than English is important for bridging the language barrier.

Zero Vehicle Households

NRPC Average Rate: 1.48%

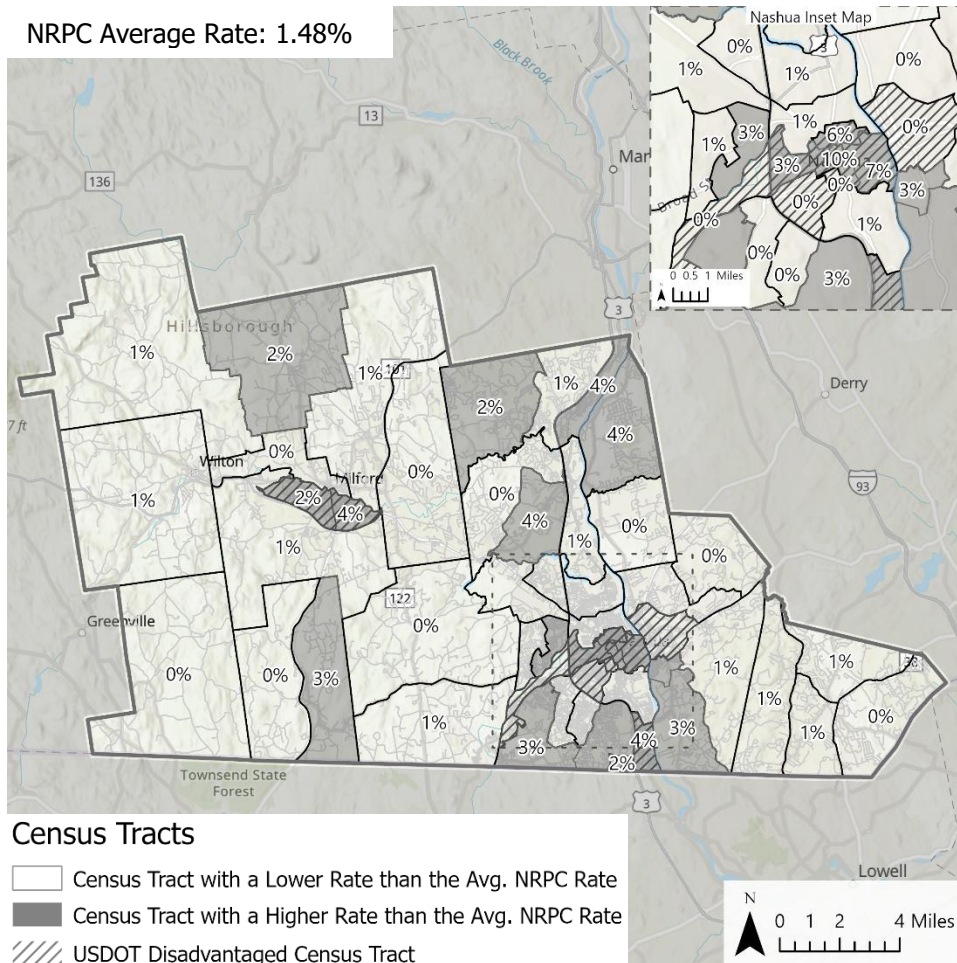


Figure 26: Zero Vehicle Households by Census Tract

Zero vehicle households are households that do not have access to at least one motor vehicle. Approximately 1% of households in the region meet these criteria. While the overall rate of zero vehicle households in the region is low, there are census tracts where a higher percentage of households do not have access to a vehicle. The three tracts with the highest zero vehicle household rates are tract 105 (6%), tract 106 (7%), and tract 107 (10%). All three tracts are in downtown Nashua.

During the 5-year period, 35% of all crashes resulting in a fatal, serious, or minor injury occurred in a census tract with a higher-than-average rate of households without access to a vehicle. Approximately 48% of pedestrian and bicycle involved crashes resulting in fatal, serious, or minor injuries occurred in those same tracts (**Figure 27: Bicycle and Pedestrian Involved Crashes and Zero Vehicle Households Map**).

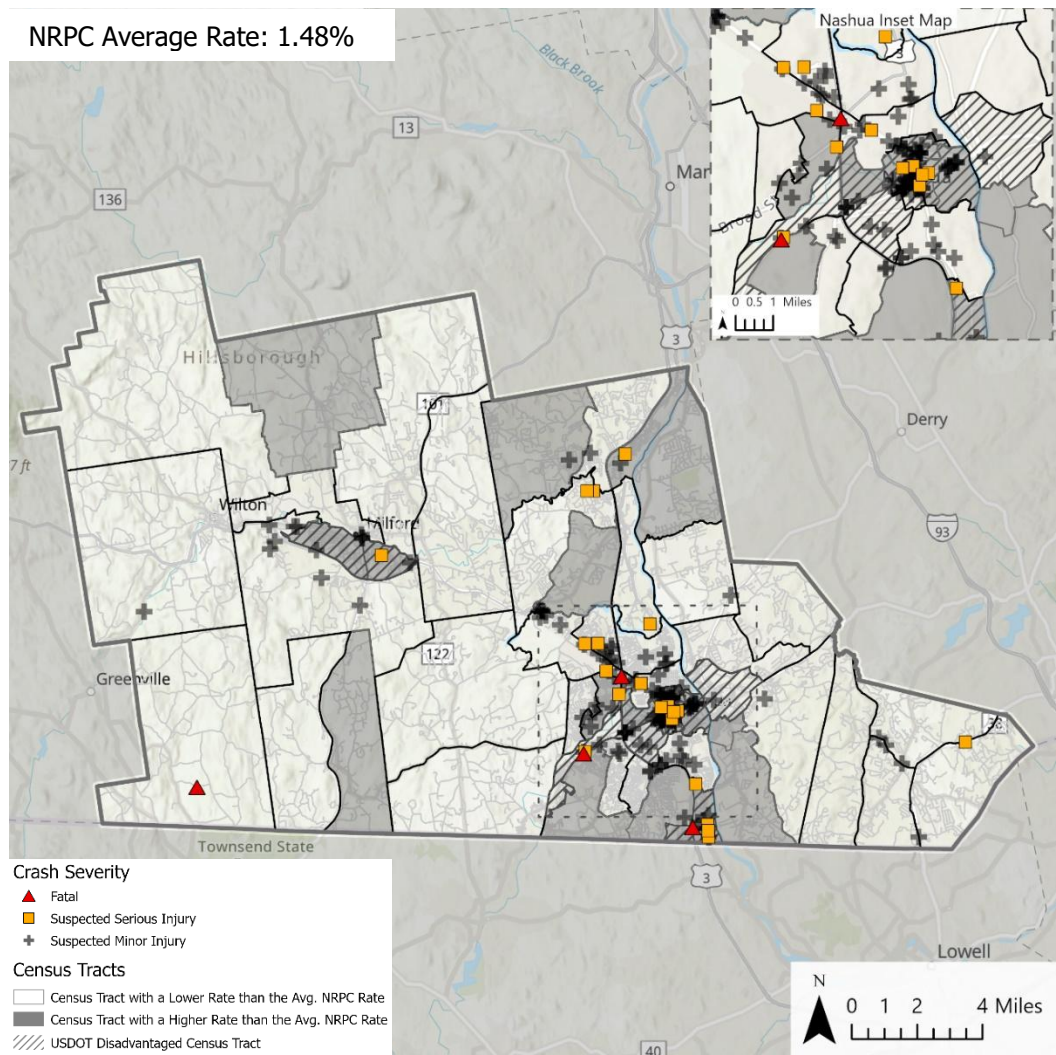


Figure 27: Bicycle and Pedestrian Involved Crashes and Zero Vehicle Households Map

Prioritization of Safety Countermeasure Improvements

Installing safety countermeasures on every road in the NRPC is cost prohibitive. Thus, this chapter prioritizes road classifications and emphasis area crash types that analysis has shown contribute to the greatest share of fatal, serious, and minor injury crashes.

Prioritization by Road Classification

The following section provides safety countermeasure recommendations that are prioritized by road classification, in the following order:

1. Arterial roads (principal and minor)
2. Collector roads
3. Local roads

Roadway classifications are prioritized based on how frequently that classification was found on the High Injury Network (HIN). During the 2018-2022 period, 40% (385) of fatal, serious, and minor injury crashes that occurred on the HIN were on Principal Arterial roads, and 37% (234) were on Minor Arterial roads. Approximately 15% occurred on Collector roads, and 8% occurred on Local roads. Limited access roads -- which include interstates, freeways, and expressways -- were excluded from the high injury network analysis and are excluded from this prioritization. The order in which the road classifications are presented also follows road hierarchy principles -- arterial roads typically carry the highest volume of traffic and provide access to commercial activity centers while being disconnected from dwellings. Collector roads and local roads each carry lower traffic volumes, and are less connected to commercial activity, and provide more direct access to neighborhoods.

Each road classification is presented with two example corridors from the HIN that are representative of corridors with the same classification. Examples of infrastructure focused countermeasure recommendations are then provided. These countermeasure recommendations are not exhaustive. Please see section Strategy Tables for a complete list of actions that may be taken to reduce fatal, serious, and minor injuries.

Arterial Roads

Street Name:	HIN Rank	City	From Street	To Street
Amherst Street	1	Nashua	Northwest Boulevard	Concord Street

Road Classification: Principal Arterial

Context: 4-lane divided low-density commercial corridor with a high driveway density. Eastern portion of corridor is 4-lane undivided.

Countermeasure Recommendations:

- Access management
- Improve lighting along roadways
- Crosswalk visibility enhancements
- Install/repair sidewalks where necessary
- Maintain clear zone
- Pedestrian Hybrid Beacons (PHBs)
- Rectangular Rapid Flashing Beacons (RRFBs)
- Road diet

Street Name:	HIN Rank	City	From Street	To Street
Gibbons Highway	5	Wilton	Old Country Farm Road	Easten Drive

Road Classification: Arterial

Context: Two lane rural regional highway with no clear zone.

Countermeasure Recommendations:

- Maintain clear zone
- Center and edge line rumble strips
- Enhanced delineation for horizontal curves
- Roadside design improvements at curves
- Speed feedback signs
- Wider edge lines
- Improve lighting along roadways
- Systemic stop-controlled intersection improvements

Collector Roads

Street Name:	HIN Rank	City	From Street	To Street
Dracut Road	19	Hudson	River Road	Sherburne Road

Road Classification: Collector

Context: Two lane collector with no shoulder and poor clear zone maintenance. Residential driveways along corridor.

Countermeasure Recommendations:

- Systemic stop-controlled intersection improvements
- Maintain clear zone (especially at intersections)
- Enhanced delineation for horizontal curves
- SafetyEdge
- Wider edge lines
- Roadside design improvements at curves
- Speed feedback signs
- Improve lighting along roadways

Street Name:	HIN Rank	City	From Street	To Street
Temple Street	50	Nashua	Main Street	East Hollis Street

Road Classification: Collector

Context: Two lane downtown collector with a limited one-way portion. Mixture of uses and a narrow cross-section.

Countermeasure Recommendations:

- Improve lighting along roadways
- Crosswalk invisibility enhancements
- Rectangular Rapid Flashing Beacons (RRFBs)
- Bicycle lanes

Local Roads

Street Name:	HIN Rank	City	From Street	To Street
Old Derry Road	28	Hudson	Greeley Street	Near Nashua Road

Road Classification: Local

Context: Two lane rural/large lot suburban residential road with limited clear zone and poor horizontal curve delineation.

Countermeasure Recommendations:

- Enhanced delineation for horizontal curves
- Maintain clear zone
- Widen road width and install edge lines
- Install SafetyEdge
- Centerline and edge line rumble strips
- Roadside design improvements at curves
- Systemic stop-controlled intersection improvements

Street Name:	HIN Rank	City	From Street	To Street
Elm Street	48	Nashua	Pearl Street	Lake Street

Road Classification: Local

Context: Downtown residential

Countermeasure Recommendations:

- Systemic stop-controlled intersection improvements
- Improve lighting along roadways
- Repair and install sidewalks to meet ADA accessibility standards
- Implement curb bump-outs to reduce pedestrian crossing distances
- Enhance visibility of Nashua Heritage Trail Crossing
- Crosswalk invisibility enhancements
- Rectangular Rapid Flashing Beacons (RRFBs)
- Bicycle lanes

Prioritization by Emphasis Area

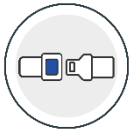
The following section prioritizes safety countermeasure recommendations based on emphasis area involvement. The chosen emphasis areas were overrepresented in fatal, serious, and minor injury outcomes. Prioritization based on road classification versus emphasis area involvement can be seen as two sides of a coin. While prioritizing roads based on road classification is a proactive systemic approach which focuses on entire corridors, analyzing crash outcomes for emphasis area involvement is a reactive approach. Prioritizing safety countermeasures which address emphasis areas which are overrepresented in fatal, serious, and minor injuries will result in the greatest reductions in more severe injury outcomes.



Roadway departure



Speeding and aggressive driving



Occupant protection (seat belt usage)



Impaired driving

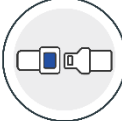


Vulnerable motorized users (motorcycles and mopeds)

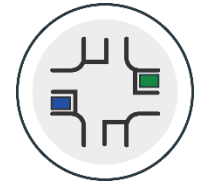


Vulnerable non-motorized users (pedestrians and bicyclists)

Countermeasure	Context	Emphasis Area Addressed
Enhanced delineation for horizontal curves	All contexts	 
Improve lighting along roadways	All contexts	  
Transverse rumble strips	Suburban, rural	 
Centerline and edge line rumble strips	Suburban, rural	
Clear zone management	Suburban, rural	
Appropriate speed limits for all users	All contexts	 
Road diets	All contexts	   
Speed feedback signs	All contexts	 
Widen/pave shoulders	Suburban, rural	
Install Safety EdgeSM treatment	Suburban, rural	
High Friction Surface Treatment	Suburban, rural	  

Countermeasure	Context	Emphasis Area Addressed
Enhanced delineation for horizontal curves	All contexts	 
Speed humps/tables	Urban, suburban, low speed rural	
Adopt an adult seat belt law	All contexts	
Promote seat belt education campaigns	All contexts	
Adopt a motorcycle helmet law	All contexts	
Conduct high visibility enforcement	All contexts	  
Medians and Pedestrian Refuge Islands	Urban, suburban	
Leading Pedestrian Interval	Urban, suburban, rural	
Rectangular Rapid Flashing Beacons (RRFBs)	Urban, suburban	
Crosswalk Visibility Enhancements	Urban, suburban, rural	
Bike Lanes	Urban, suburban	

Strategy Tables



Emphasis Area: Intersections

Emphasis Area Objective: Reduce the frequency and severity of intersection crashes.

Success Metric: Reduce the number of intersection crashes by 50% percent by 2035, working toward 0 by 2050.

Table 7: Intersections

		Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Number	Action									
Strategy 1.1: Systemic application of low-cost countermeasures at intersections										
1.1.1	Reduce left-turn conflicts by reconfiguring intersections with roundabouts, restricted crossing U-turns (RCUT), or median U-turns (MUT).	Cities and Local Agencies, NHDOT	Number of sites	All areas	Urban, Suburban	Safer Roads	HSIP, Federal Discretionary, Municipalities	CMF: 0.8	High	Medium
1.1.2	Improve intersection signage and lighting to improve intersection visibility.	Cities and Local Agencies, NHDOT	Number of sites	All areas	All areas	Safer Roads	NHDOT District, Municipalities	CMF: 0.881 (nighttime)	High	Medium
1.1.3	Add left-turn, right-turn, or center turn lanes at intersections where speeds are too high to turn safely to or from a roadway.	Cities and Local Agencies, NHDOT	Number of sites	All areas	All areas	Safer Roads	Federal Discretionary, Municipalities	CMF varies	Medium	Medium
1.1.4	Convert intersections at town gateways to roundabouts to slow speeds.	Cities and Local Agencies, NHDOT	Number of sites	All areas	All areas	Safer Roads	Federal Discretionary, Municipalities	CMF: 0.473	High	Long

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
1.1.5	Separate left turn lanes and implement protected left turn signal phases.	Cities and Local Agencies, NHDOT	Number of sites	All areas	All areas	Safer Roads	NHDOT District, Municipalities	CMF: 0.78	High	Medium
1.1.6	Implement systemic application of multiple low-cost countermeasures at stop-controlled intersections.	Cities and Local Agencies, NHDOT	Number of sites	All areas	All areas	Safer Roads	NHDOT District, Municipalities	CMF varies	High	Short
1.1.7	Install transverse rumble strips in advance of intersections. Ensure proper outreach has been conducted and coordinate with NHDOT where required.	Cities and Local Agencies, NHDOT	Number of sites	All areas	Rural	Safer Roads	NHDOT District, Municipalities	CMF: 0.903 (rural)	Low	Medium
1.1.8	Prohibit Right-Turn-On-Red and install accompanying signage at locations with high volume pedestrian conflicts.	Cities and Local Agencies, NHDOT	Number of sites	All areas	Urban, Suburban	Safer Roads	NHDOT District, Municipalities	CMF varies	Medium	Short
Strategy 1.2: Improve data collection and analysis practices that relate to intersection safety.										
1.2.1	Perform roadway safety audits on priority intersections or corridors to further identify those roadway features and user behaviors that contribute to severe crashes and select the appropriate countermeasures.	Counties, Cities and Local Agencies, NHDOT	Locations analyzed	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	HSIP, Federal Discretionary, Municipalities	N/A	High	Medium
1.2.2	Develop a process to inventory intersection data including traffic volumes, roadway attributes, and traffic asset data for use in traffic safety evaluations.	Counties, Local and State Police, Cities and Local Agencies	Locations analyzed	N/A	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	HSIP, NHDOT Bureau of Traffic	N/A	Low	Short

		Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Number	Action									
Strategy 1.3: Enhance enforcement activity to address intersection safety.										
1.3.1	Conduct highly publicized and visible enforcement of priority intersections.	State Police, Local Police	Number of hours	All road types	All areas	Safer Road Users	Municipal or State Police	N/A	Medium	Short
Strategy 1.4: Educate drivers on how to navigate new forms of traffic control (e.g., flashing yellow arrow, roundabouts) and train designers and planners on best practices.										
1.4.1	Partner with agencies to develop and market material (e.g., videos, flyers, online material, Public Service Announcements [PSAs]) through various channels, such as social media, town websites, newsletters, email, and chamber of commerce meetings.	Counties, Cities and Local Agencies	Number of clicks	All areas	All areas	Safer Road Users	HSIP, Municipal or State Police, Nonprofit Advocacy Groups	N/A	High	Short
1.4.2	Conduct training with road designers and planners on best practices to address intersection safety.	Counties, Cities and Local Agencies	Number of trainings	All areas	All areas	Safer Road Users	FHWA Technical Assistance	N/A	High	Short
1.4.3	Install signage at high-pedestrian volume locations where Right-Turns-on-Red are permissive alerting drivers to watch for pedestrians.	Cities and Local Agencies, NHDOT	Number of locations	All areas	Urban, Suburban	Safer Road Users	NHDOT District, Municipalities	N/A	High	Short

Emphasis Area: Roadway Departure

Emphasis Area Objective: Reduce the frequency and severity of roadway departure crashes.

Success Metric: Reduce the number of roadway departure crashes by 50% percent by 2035, working toward 0 by 2050.

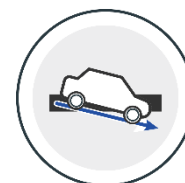


Table 8: Roadway Departure

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 2.1 Implement engineering countermeasures to reduce roadway departure crashes.										
2.1.1	Install centerline, shoulder, or edge line rumble strips. Ensure appropriate outreach has been conducted.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	HSIP, Municipalities	CMF: 0.8 (rural)	Medium	Short
2.1.2	Widen and/or pave shoulders to provide drivers with a recovery area and to increase physical space between drivers and people walking & biking in the shoulder.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	HSIP, Municipalities	CMF dependent on shoulder width	Medium	Long
2.1.3	Install Safety Edge SM when resurfacing roadways.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	HSIP, Municipalities	Not in CMF Clearinghouse	High	Long
2.1.4	Pre-treat road surface and improve road clearance during snow events.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	NHDOT District, Municipalities	Not in CMF Clearinghouse	High	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
2.1.5	Install or widen retroreflective pavement markings on center lines and edge lines.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	NHDOT Bureau of Traffic, Municipalities	CMF: 0.877 (rural)	High	Short
2.1.6	Provide enhanced curve delineation, such as chevrons and pavement markings in accordance with MUTCD criteria.	Cities and Local Agencies, NHDOT	Number of corridors	Curves on Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	NHDOT District, Municipalities	CMF: 0.725 (non-intersection)	Medium	Short
2.1.7	Use High Friction Surface Treatment (HFST) to increase traction through sharp curves prioritizing according to crash rate.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	NHDOT District, Municipalities	CMF: 0.529	Medium	Long
2.1.8	Improve lighting along roadways.	Cities and Local Agencies, NHDOT	Number of corridors	Major collectors and rural minor arterials	Rural, Suburban	Safe Roads	NHDOT District, Municipalities	CMF: 0.68	Medium	Medium

Strategy 2.2 Implement countermeasures and strategies that reduce the frequency or severity of work zone crashes.

2.2.1	Ensure installation of proper sign package, pavement markings, and flagger operations per the Manual on Uniform Traffic Control Devices (MUTCD).	Cities and Local Agencies, NHDOT	Number of work zones	All areas	Rural, Suburban	Safe Roads	NHDOT District, Municipalities	Not in CMF Clearinghouse	High	Short
2.2.2	Promote safety training efforts/programs for work zone personnel and Traffic Incident Management (TIM) responders.	Cities and Local Agencies, NHDOT	Number of work zones	All areas	Rural, Suburban	Safe Roads	NHDOT Safety Section, Municipalities, Trade Associations	N/A	Low	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
2.2.3	Implement variable speed limits at work zones.	Cities and Local Agencies, NHDOT	Number of work zones	All areas	Rural, Suburban	Safe Roads	NHDOT Bureau of Traffic, Municipalities	CMF: 0.92 (urban); 0.684 (rural)	High	Short
2.2.4	Implement temporary pavement markings and pavement conditions during construction.	Cities and Local Agencies, NHDOT	Number of work zones	All areas	Rural, Suburban	Safe Roads	Include in Project Scope of Work Where Applicable.	N/A	Medium	Short
2.2.5	Temporary transverse rumble strips.	Cities and Local Agencies, NHDOT	Number of work zones	All areas	Rural, Suburban	Safe Roads	Include in Project Scope of Work Where Applicable.	CMF: 0.66 (urban and suburban)	High	Short
Strategy 2.3: Implement educational efforts to address roadway departure safety.										
2.3.1	Education involving driving responsibly during winter weather on website/PSAs.	Cities and Local Agencies, Local and State Police	Number of hours	All areas	All areas	Safe Road Users	HSIP, Municipal or State Police, Nonprofit Advocacy Groups	N/A	Low	Ongoing
2.3.2	Use traffic simulator at education events.	Cities and Local Agencies	Number of events	All areas	All areas	Safe Road Users	Municipal or State Police	N/A	Low	Ongoing
2.3.3	Educate drivers about vehicle mechanical failures by promoting vehicle maintenance and upholding annual safety inspections	Cities and Local Agencies, Local and State Police	Number of hours	All areas	All areas	Safe Road Users, Safe Vehicles	NH DMV	N/A	Low	Ongoing

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
2.3.4	Conduct training on roadway departure crash engineering mitigation approaches.	Cities and Local Agencies, Local and State Police	Number of hours	All areas	All areas	Safe Road Users	FHWA Technical Assistance	N/A	Low	Short
Strategy 2.4: Enhance enforcement activity to address roadway departure safety.										
2.4.1	Continue impaired driving enforcement.	State and Local Police	Number of hours	All road types	Rural, Suburban	Safer Road Users	Municipal or State Police	★★★★	High	Ongoing
2.4.2	Continue enforcement of excessive driving speed with an emphasis on winter weather driving.	State and Local Police	Number of hours	All areas	Rural, Suburban	Safer Road Users	Municipal or State Police	★★★★	High	Ongoing
Strategy 2.5: Improve data collection and analysis practices that relate to roadway departure safety.										
2.5.1	Train staff and others on data collection and analysis techniques to improve the quality of information available to explain the reasons for and results of crashes	Cities and Local Agencies, Local and State Police	Number of hours	All areas	All areas	Safer Road Users	FHWA, NHDOT, Regional and Municipal Agencies	N/A	Low	Short
2.5.2	Continue to share data with safety partners to inform knowledge of prevailing issues, including UTVs/ATVs.	Cities and Local Agencies, Local and State Police	Number of partnerships	All areas	All areas	Safer Road Users, Safe Vehicles	FHWA, NHDOT, Regional and Municipal Agencies	N/A	High	Ongoing

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
2.5.3	Perform roadway safety audits on priority corridors to further identify those roadway features and user behaviors that contribute to severe crashes and select the appropriate countermeasures.	Cities and Local Agencies	Number of RSAs	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	HSIP	N/A	High	Medium

Emphasis Area: Distracted Driving

Emphasis Area Objective: Reduce the frequency and severity of distracted driving crashes.

Success Metric: Reduce the number of distracted driving crashes by 50% percent by 2035, working toward 0 by 2050.



Table 9: Distracted Driving

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 3.1: Implement educational efforts to address distracted driving.										
3.1.1	Develop and implement a Distracted Driving Action Plan to advocate for attentive driving.	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS	N/A	Medium	Long
3.1.2	Encourage awareness programs addressing distracted driving. Conduct at least one annual public service announcement by OHS about distracted driving. Reach out to schools to encourage youth to be advocates for attentive driving. Involve the Injury Prevention Center to find ways to involve and partner with schools. Conduct an annual AAA campaign with PSAs that focus on impairment and distraction. Work with the public information officer at the OHS to develop specific messages for different demographics.	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police, Nonprofit Advocacy Groups	N/A	Medium	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
3.1.3	Create a coalition against distracted driving. The coalition's goal will be to support legislation, and further education efforts. Identify additional members for the distracted driving task force. Identify additional types of organizations/agencies for inclusion on the task force. Conduct at least six meetings annually for the distracted driving task force. Involve more community organizations.	Counties, County Police, Cities and Local Agencies	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police, Nonprofit Advocacy Groups	N/A	High	Medium
Strategy 3.2: Enhance enforcement activity to address distracted driving.										
3.2.1	Target periods of enforcement with local/State collaboration (e.g., AM and PM times).	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHDOS OHS, Municipal or State Police	★★★★	High	Medium
3.2.2	Work with legislature to maintain or strengthen distracted driving legislation through education and advocacy. Place topic on Traffic Safety Commission agenda annually. Continue to advocate for maintaining current law. Review current penalties related to hands-free law and identify potential adjustments.	Counties, County Police, Cities and Local Agencies	Number of hours	All areas	All areas	Safe Road Users	NHDOS OHS, Municipal or State Police	N/A	High	Long

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
3.2.3	Identify opportunities involving vehicle-to-infrastructure technology which help to provide drivers information on current status of surrounding infrastructure. Advocate for continued improvement in-vehicle electronics and safety systems to reduce the distraction they may present to the driver.	Counties, Cities and Local Agencies	Number of partnerships	All areas	All areas	Safe Vehicles	This seems to be a national-level issue.	N/A	Low	Long
Strategy 3.3: Improve data collection and analysis practices that relate to distracted driving.										
3.3.1	Work with law enforcement agencies to develop procedures to better identify any role played by driver distraction and consistently record that information on crash reports, regardless of whether that distraction is a citable offense	State, County, and Local Police	Changes to data collection processes	All areas	All areas	Safe Road Users	NHDMV, Municipal or State Police	N/A	High	Medium
3.3.2	Research tools for law enforcement to determine if a motorist was using an electronic device.	State, County, and Local Police	List of potential tools and selection of preferred tool.	All areas	All areas	Safe Road Users	Municipal or State Police	N/A	High	Medium

Emphasis Area: Impaired Driving

Emphasis Area Objective: Reduce the frequency and severity of impaired driving crashes.

Success Metric: Reduce the number of impaired driving crashes by 50% percent by 2035, working toward 0 by 2050.



Table 10: Impaired Driving

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 4.1: Implement educational efforts to address impaired driving.										
4.1.1	Conduct Advanced Roadside Impaired Driving Enforcement (ARIDE) training to train law enforcement officers to observe, identify, and articulate the signs of impairment.	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS	N/A	Medium	Long
4.1.2	Consult with Drug Recognition Experts on best practices to address impaired driving.	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police	N/A	Low	Long
4.1.3	Conduct STOP DWI Program to coordinate local efforts that address impaired driving.	State, County, and Local Police	Number of program events	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police	N/A	Medium	Long

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
4.1.4	Encourage collaboration between local, county, and State police to proactively address the dangers of impaired driving. Engage community-based organizations to reach at-risk populations starting with one community and expand to additional communities. Identify top-five at-risk communities in the State and focus activities at these locations.	State, County, and Local Police	Number of CBOs engaged	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police, Nonprofit Advocacy Groups	N/A	High	Medium
4.1.5	Promote programs that educate the public about the risk and consequences of impaired driving. Post on the OHS' social media sites for the annual Drive Sober or Get Pulled Over Campaign. Host press conferences for the public for the Drive Sober or Get Pulled Over Campaign. Create flyers summarizing risks of impaired driving and distribute to DMV locations and high schools.	State, County, and Local Police, Local Agencies	Number of hours	All areas	All areas	Safe Road Users	NHTSA, NHDOS OHS, Municipal or State Police, Nonprofit Advocacy Groups	N/A	Low	Medium

		Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 4.2: Enhance enforcement activity to address impaired driving.										
4.2.1	Conduct Publicized sobriety checkpoints. Note that the police must follow a protocol that includes judicial authorization for the checkpoint and advance public notice.	State, County, and Local Police	Number of locations	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	NHTSA, NHDOS OHS, Municipal or State Police	★★★★★	High	Short
4.2.2	Conduct High visibility saturation patrols. Coordinate across local jurisdictions.	State, County, and Local Police	Number of events	All areas	All areas	Safe Road Users	Municipal or State Police	★★★★	High	Short
4.2.3	Incorporate additional field sobriety testing, breathalyzer training, and DRE training into both the part-time and full-time police academies. Identify opportunities to incorporate breathalyzer and DRE training.	State, County, and Local Police	Number of trainings	All areas	All areas	Safe Road Users	NHDOS OHS	N/A	High	Short

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
4.2.4	Continue targeted patrols and implement all-hours patrols using drug recognition experts (DREs). Engage community-based organizations to reach at-risk populations starting with one community and expand to additional communities. Identify top-five at-risk communities in the State and focus activities at these locations.	State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	Municipal or State Police	N/A	High	Short
Strategy 4.3: Improve data collection and analysis practices that relate to impaired driving.										
4.3.1	Perform roadway safety audits on priority corridors to further identify roadway features as well as drinking establishment locations that combined with impaired driving that contribute to severe crashes and select the appropriate countermeasures.	Cities and Local Agencies	Number of RSAs	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	HSIP	N/A	High	Medium
4.3.2	Improve collection and use of impaired driving data for effective enforcement. Produce annual mapping that illustrates crash and citation locations related to Impaired Driving incidents.	Cities and Local Agencies, State and Local Police		All areas	All areas	Safer Road Users	NHDOS OHS, NHDOT Safety Section	N/A	High	Medium

Emphasis Area: Speed and Aggressive Driving

Emphasis Area Objective: Reduce the frequency and severity of speed and aggressive driving crashes.

Success Metric: Reduce the number of speed and aggressive driving crashes by 50% percent by 2035, working toward 0 by 2050.



Table 11: Speed and Aggressive Driving

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 5.1: Implement engineering countermeasures to reduce speeding and speed-related crashes and implement roadway designs that are self-enforcing.										
5.1.1	Set appropriate speed limits based on the use of appropriate engineering practices.	Cities and Local Agencies	Number of roads	Major collectors and rural minor arterials	All areas	Safe Roads, Safe Speeds	NHDOT Bureau of Traffic, Municipalities	N/A	High	Medium
5.1.2	Expand the use of context-specific advisory speed signs to advise motorists where traveling at the posted speed is ill-advised.	Cities and Local Agencies	Number of locations	Major collectors and rural minor arterials	All areas	Safe Roads, Safe Speeds	NHDOT Bureau of Traffic, Municipalities	CMF: 0.87	High	Short
5.1.3	Introduce variable speed limits for high temporal speeding events.	Cities and Local Agencies	Number of sites	During morning and evening commutes on major collectors and rural minor arterials	All areas	Safe Roads, Safe Speeds	NHDOT Bureau of Traffic, Municipalities	CMF: 0.71 (urban)	High	Short

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
5.1.4	Increase the use of Radar Speed Feedback Signs to notify drivers of their speeds.	Cities and Local Agencies	Number of sites	Major collectors and rural minor arterials	All areas	Safe Roads, Safe Speeds, Safe Road Users	NHDOT Bureau of Traffic, Municipalities	CMF: 0.95 (rural)	High	Short
5.1.5	Reduce lane widths through re-striping to encourage slower speeds.	Cities and Local Agencies	Number of sites	Major collectors and rural minor arterials	All areas	Safe Roads, Safe Speeds	NHDOT District, Municipalities	CMF dependent on width reduction	High	Short
5.1.6	Install transverse rumble strips to encourage lower speeds. Conduct appropriate outreach in advance of installation.	Cities and Local Agencies	Number of sites	All roads	All areas	Safe Roads, Safe Speeds	HSIP, Municipalities	CMF: 0.66 (urban and suburban)	Low	Medium

Strategy 5.2: Implement educational efforts to address speed-related safety.

5.2.1	Work with Judicial Outreach Liaisons to encourage judicial respect for and support of speeding citations. Develop a handout and presentation for Judicial Outreach Liaisons highlighting dramatic differences in survival rates for vulnerable users when hit by cars traveling at speeds at 20 mph vs. 30 mph vs. 40 mph.	Cities and Local Agencies	Number of distributions	All areas	All areas	Safe Road Users, Safe Speeds	Municipalities	N/A	High	Medium
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Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
5.2.2	Educate the public of the dangers and consequences of speeding. Participate in campaigns like NHTSA's "Obey the Sign or Pay the Fine" and "Stop Speeding Before it Stops You." Illustrate the difference in travel speeds with respect to braking distance and crash survivability.	Cities and Local Agencies, State and Local Police	Number of hours	All areas	All areas	Safe Road Users, Safe Speeds	NHTSA, NHDOS OHS	N/A	Low	Medium
5.2.3	Engage Law Enforcement Liaison in coordinating initiatives that address speeding.	Cities and Local Agencies, State and Local Police	Number of hours	All areas	All areas	Safe Road Users, Safe Speeds	NHDOS OHS	N/A	High	Medium

Strategy 5.3: Enhance enforcement activity to address speed-related safety.

5.3.1	Coordinate with Enforcement Officers to prioritize enforcement of locations with a history of speed-related crashes.	Cities and Local Agencies, State and Local Police	Number of hours	All roads	All areas	Safer Road Users	Municipal or State Police	N/A	High	Short
5.3.2	Use Radar Speed Feedback Signs to notify drivers of reduced speed limits.	Cities and Local Agencies	Number of locations	All roads	All areas	Safe Roads, Safe Speeds, Safe Road Users	NHDOT Bureau of Traffic, Municipalities	CMF: 0.95	High	Short

Strategy 5.4: Improve data collection and analysis practices that relate to speed-related safety.

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
5.4.1	Maintain a database of location of all speeding related tickets and crashes to find speeding corridors.	Cities and Local Agencies, State and Local Police	Conducted or not	All areas	All areas	Safe Speeds	NHDMV, Municipal or State Police	N/A	Medium	Medium
5.4.2	Incorporate the needs of all users when setting speed limits and use data to inform the selection of the speed limit.	Cities and Local Agencies, State and Local Police	Conducted or not	All areas	All areas	Safe Speeds	NHDOT Bureau of Traffic, Municipalities	N/A	High	Medium
5.4.3	Compile data related to driver speed.	Cities and Local Agencies, State and Local Police	Conducted or not	All areas	All areas	Safe Speeds	Municipalities	N/A	High	Medium

Emphasis Area: Vehicle Occupant Protection

Emphasis Area Objective: Reduce the frequency and severity of vehicle occupant protection compliance rates.

Success Metric: Reduce the number of crashes that cite a lack of vehicle occupant protection as a contributing factor by 50% percent by 2035, working toward 0 by 2050.

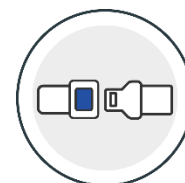


Table 12: Vehicle Occupant Protection

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 6.1: Strengthen seatbelt laws										
Strategy 6.2: Educate residents on seatbelt laws and the importance of using a seatbelt										
6.2.1	Work closely with New Hampshire's Teen Driving Program to increase teen seat belt usage through education campaigns	Counties, Cities, School Districts	Number of campaigns	All areas	All areas	Safer Road Users	NHTSA, NHDOS OHS, Nonprofit Advocacy Groups	★★★	Medium	Varies
6.2.2	Support the enforcement of child restraint laws by conducting mobilization efforts.	Counties, County Police, Cities, Local Police	Number of events	All areas	All areas	Safer Road Users	NHDOS OHS, Municipal or State Police	★★★★★	High	Medium
6.2.3	Partner with corporate stakeholders and other available education resources to promote increased occupant protection	Counties, Cities, Major Employers	Number of partnerships	All areas	All areas	Safer Road Users	Private Entities, NHDOS OHS, Municipal or State Police	★★★	Low	Varies

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
6.2.4	Provide child restraint educational programs and information to parents, guardians, caregivers, and medical personnel (e.g., the New Hampshire Pediatric Society). Partner with schools and annually send a newsletter detailing education programs. Market through social media infant seat checks available at local police, fire, and EMS stations.	Counties, Cities, School Districts	Number of engagement events	All areas	All areas	Safer Road Users	NHTSA, NHDOS OHS, Nonprofit Advocacy Groups	N/A	Medium	Long

Emphasis Area: Older Drivers

Emphasis Area Objective: Reduce the frequency and severity of crashes involving older drivers.

Success Metric: Reduce the number of crashes involving older drivers by 50% percent by 2035, working toward 0 by 2050.



Table 13: Older Drivers

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 7.1: Implement engineering countermeasures to reduce older road user crashes.										
7.1.1	Implement countermeasures from the FHWA Older Driver Highway Design Manual: Increase size and letter height of roadway signs, width of striping, and use retro-reflective signal back-plates; improved signage and acuity, clarity; senior center signage; advance signage.	Counties, Cities	Number of locations	All areas	All areas	Safer Roads, Safer Road Users	HSIP, Federal Discretionary, Municipalities	CMF varies	High	Short
7.1.2	Train staff on the use of the Older Driver Highway Design Manual reference.	Counties, Cities	Number of trainings	All areas	All areas	Safer Roads, Safer Speeds, Safer Road Users	FHWA Technical Assistance	N/A	High	Long

		Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Number	Action									
Strategy 7.2: Implement educational efforts to address older road user safety.										
7.2.1	Implement the CarFit program to promote continued safe driving and mobility among older drivers by focusing attention on safety, comfort, and fit.	Counties, Cities, Bureau of Adult & Aging Services (BAAS)	Locations analyzed	All areas	All areas	Safer Vehicles	NHTSA, NHDOS OHS, Nonprofit Advocacy Groups	N/A	Low	Medium
7.2.2	Work with the state to create a license renewal policy and a referral system to identify older drivers who should not be driving.	State, Counties, Bureau of Adult & Aging Services (BAAS)	Adoption of policy	All areas	All areas	Safer Road Users	NHDMV	★★	High	Medium
7.2.3	Conduct AARP Smart Driver program to help drivers over 55 refresh their driving skills.	Counties, Cities, Bureau of Adult & Aging Services (BAAS)	Number of programs	All areas	All areas	Safer Road Users	Nonprofit Advocacy Groups	★★★★	Medium	Medium
7.2.4	Conduct Coffee with Cops campaigns to build relationships between road users and law enforcement.	Counties, Cities, County Police, Local Police, Bureau of Adult & Aging Services (BAAS)	Number of campaign events	All areas	All areas	Safer Road Users	Municipal or State Police	N/A	Low	Medium

Emphasis Area: Teen Traffic Safety

Emphasis Area Objective: Reduce the frequency and severity of crashes involving teen drivers.

Success Metric: Reduce the number of crashes involving teen drivers by 50% percent by 2035, working toward 0 by 2050.



Table 14: Teen Traffic Safety

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 8.1: Implement engineering countermeasures to reduce crashes involving young drivers.										
8.1.1	Improve lighting and visibility of signage.	Counties, Cities and Local Agencies	Number of lighting fixtures installed		All areas	Safe Roads	HSIP, SS4A	CMF varies	High	Medium
8.1.2	Upgrade appropriate existing signs and pavement markings (e.g., retroreflective signs, reflective strips on signposts, add flashing lights to existing signs).	Counties, Cities and Local Agencies	Number of upgrades		All areas	Safe Roads	HSIP, SS4A	CMF varies	High	Short
Strategy 8.2: Implement educational efforts to address younger road user safety.										
8.2.1	Implement awareness campaigns to promote safe driving habits by young drivers, including staying alert, using a seat belt, driving at appropriate speeds, not driving distracted.	Counties, Cities and Local Agencies, County Police, Local Police	Number of	All areas	All areas	Safe Road Users	Municipalities, SS4A	N/A	Medium	Long

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
8.2.2	Increase parental involvement in teen driving and training by maintaining a web-based parent toolbox for educational information and other links to resources. Include an emphasis on driving as a responsibility rather than simply a right.	Counties, Cities and Local Agencies	Number of clicks	All areas	All areas	Safe Road Users	Municipalities , SS4A	★★★	Medium	Short
8.2.3	Target educational outreach to novice teen drivers by continued educational outreach to high schools, peer to peer educational outreach materials, and educational material to include in drivers' education courses on vehicle maintenance and inspection for young drivers. Promote and encourage funding opportunities through State, local, and private entities for driver's education classes to allow greater access for all students.	Counties, Cities and Local Agencies, School Districts	Number of events, number of promotional materials given out	All areas	All areas	Safe Road Users	Municipalities , SS4A	N/A	Medium	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 8.3: Enhance enforcement activity to address younger road user safety.										
8.3.1	Increase enforcement of driving laws.	Counties, Cities and Local Agencies, County Police, Local Police	Number of hours	All areas	All areas	Safer Road Users	NH DMV	N/A	High	Medium
8.3.2	Enforce graduated licensing laws.	Counties, Cities and Local Agencies, County Police, Local Police	Number of hours	All areas	All areas	Safer Road Users	NH DMV	★★	High	Short
Strategy 8.4: Improve data collection and analysis practices that relate to younger road user safety.										
8.4.1	Evaluate age-related crashes to determine contributing factors in crashes involving young drivers.	Counties, Cities and Local Agencies	Adoption of practice	All areas	All areas	Safer Road Users	Municipalities , SS4A	N/A	High	Medium

Emphasis Area: Vulnerable Road Users Motorized: Motorcycles and Mopeds

Emphasis Area Objective: Reduce the frequency and severity of crashes involving motorized vulnerable road users.

Success Metric: Reduce the number of crashes involving motorized vulnerable road users by 50% percent by 2035, working toward 0 by 2050.



Table 15: Vulnerable Road Users Motorize: Motorcycles and Mopeds

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 9.1: Implement engineering countermeasures to reduce vulnerable user crashes.										
9.1.1	Install signing to make motorists aware of OHRVs in regions where OHRVs are prevalent, and particularly in those regions where they are permitted to operate on public roads.	Counties, Cities and Local Agencies	Number of signs installed	All roads	Rural, Suburban	Safe Roads, Safe Road Users	HSIP, SS4A, NHDOT District, Municipalities	N/A	High	Short
Strategy 9.2: Implement internal and external educational efforts to address vulnerable user safety.										
9.2.1	Create a pamphlet of what has changed in laws over the last 20 years to be given to drivers when they renew their license.	Counties, Cities and Local Agencies	Number distributed	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	★★	Low	Varies
9.2.2	Focus messaging and outreach to motorcyclists aged 45 years and older, including rules of the road, impairment issues, and distraction.	Counties, Cities and Local Agencies	Number of hours	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	Medium	Medium
9.2.3	Encourage and incentivize defensive driving courses for new motorcycle drivers.	Counties, Cities and Local Agencies	Number of attendees	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	★★	Medium	Varies

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
9.2.4	Renew and refresh campaigns emphasizing benefits of helmet use.	Counties, Cities and Local Agencies	Number of campaigns	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	High	Medium
9.2.5	Increase use of news media and social media to draw attention to training and safe motorcycle operation.	Counties, Cities and Local Agencies	Number of clicks	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	High	Long
Strategy 9.3: Improve data collection and analysis practices that relate to vulnerable user safety.										
9.3.1	Perform roadway safety audits on priority corridors to further identify those roadway features and user behaviors that contribute to severe crashes and select the appropriate countermeasures.	Counties, Cities and Local Agencies	Number of RSAs	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	NHDOT District, Municipalities	N/A	High	Medium
9.3.2	Develop a process to inventory motorcycle and moped data including traffic volumes, roadway attributes, and traffic asset data for use in traffic safety evaluations.	Counties, Cities and Local Agencies	Adoption of new process	All areas	All areas	Safe Roads	NHDOT District, Municipalities	N/A	High	Medium

Emphasis Area: Vulnerable Road Users Non-Motorized: Pedestrians and Bicyclists

Emphasis Area Objective: Reduce the frequency and severity of crashes involving non-motorized vulnerable road users.

Success Metric: Reduce the number of crashes involving non-motorized vulnerable road users by 50% percent by 2035, working toward 0 by 2050.



Table 16: Vulnerable Road Users Non-Motorized: Pedestrians and Bicyclists

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
Strategy 10.1: Implement engineering countermeasures to reduce vulnerable user crashes.										
10.1.1	Prioritize pedestrian and trail crossing improvement and installation projects. Improve road geometry (narrow lanes, reduce curb radii, provide refuge islands, bike lanes) signage, signals, and pavement markings at pedestrian and trail crossing locations.	Cities and Local Agencies	Number of crossings installed each year	Locations with high pedestrian volumes	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	CMF dependent on improvements	High	Medium
10.1.2	Improve road geometry (narrow lanes, reduce curb radii, provide refuge islands, bike lanes) to improve pedestrian and bicyclist safety.	Cities and Local Agencies	Number of improvements implemented	All areas	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	CMF dependent on improvements	High	Dependent on improvements
10.1.3	Implement sidewalk, trails, and lighting infrastructure improvements.	Cities and Local Agencies	Number of improvements implemented	All areas	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	CMF dependent on improvements	High	Dependent on improvements

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
10.1.4	Install pedestrian hybrid beacons.	Cities and Local Agencies	Number of improvements implemented	Pedestrian crossings	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	CMF: 0.883 (urban and suburban)	Medium	Medium
10.1.5	Institutionalize and implement complete streets practices.	Cities and Local Agencies	Number of improvements implemented	All areas	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	CMF dependent on improvements	High	Ongoing
10.1.6	Improve early and frequent coordination with municipal residents and staff to identify needed safety improvements and align them with upcoming Notice of Funding Opportunities.	Cities and Local Agencies	Amount of funding received	All areas	All areas	Safe Roads	HSIP, SS4A, NHDOT District, Municipalities	N/A	Low	Long

Strategy 10.2: Implement internal and external educational efforts to address vulnerable user safety.

10.2.1	Develop consistent pedestrian and bicyclist safety outreach materials such as print materials and messaging for social and other media types as well as schools.	Cities and Local Agencies	Number of students walking and rolling to school	All areas	All areas	Safe Road Users	Safe Routes to School, Municipalities, Non-Profits	★★	Medium	Short
10.2.2	Create age-appropriate safety curriculum (pre-drivers ed), which would include vehicular passenger, pedestrian, and bicycle safety for middle and high-school students.	Cities and Local Agencies	Number of events	All areas	All areas	Safe Road Users	Safe Routes to School, Municipalities, Non-Profits	★★★	Low	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
10.2.3	Work with State police and local law enforcement to develop and implement in-service training for officers on bicycle and pedestrian laws and enforcement techniques.	Cities and Local Agencies, and State, County, and Local Police	Number of hours	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	Medium	Medium
10.2.4	Create and disseminate educational materials to promote awareness of bicycles, pedestrians, and e-bikes. Partner with agencies to develop and air PSAs on the rights and responsibilities of non-motorized users and drivers in their interactions, including 3-foot law, 4-foot law, and 5-foot law as dependent on speed. Create education materials on the 3-foot rule, 4-foot rule, and 5-foot rule. Continue outreach to encourage the use of bicycle helmets.	Cities and Local Agencies	Number of hours	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	Low	Short

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
10.2.5	Expand consideration of vulnerable roadway users' needs in infrastructure design and funding. Continue to provide staff training on current best practices for safe pedestrian and bicycle design in roadway infrastructure projects. Work with engineers and planners to use the LTS concept to design, construct, and maintain roadway infrastructure for vulnerable road users.	Cities and Local Agencies	Number of new considerations	All areas	All areas	Safe Road Users	Municipalities	N/A	High	Medium
Strategy 10.3: Improve data collection and analysis practices that relate to vulnerable user safety.										
10.3.1	Perform roadway safety audits on priority corridors to further identify those roadway features and user behaviors that contribute to severe crashes and select the appropriate countermeasures.	Cities and Local Agencies	Number of RSAs	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	NHDOT District, Municipalities	N/A	High	Medium
10.3.2	Develop a process to inventory pedestrian and bicyclist data including traffic volumes, roadway attributes, and traffic asset data for use in traffic safety evaluations.	Cities and Local Agencies, NHHS, NHDOT	Adoption of new process	All areas	All areas	Safe Road Users	NHDOT District, Municipalities	N/A	High	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
10.3.3	Develop and implement a method (e.g., bicycle level of traffic stress) for using these data as criteria for Improving performance-based planning by incorporating bicycle level of traffic stress to reduce injury and fatality rates for non-motorized users. Provide access to level of traffic stress (LTS) results and access to Strava data and use the combination to close gaps in the network. Connect low LTS streets where Strava indicates that there's demand to do so.	Cities and Local Agencies	Adoption of new process	All areas	All areas	Safe Roads, Safe Road Users, Safe Speeds	NHDOT District, Municipalities	N/A	High	Medium
10.3.4	Increase pedestrian and bicycle safety-focused coordination with State and local agencies on data collection, data sharing, and enforcement. Improve collection, use, and analysis of data needed for pedestrian and bicycle safety and programming. Develop an interagency effort to better document crash injuries among non-motorized road users combining crash reports with hospital patient data.	Cities and Local Agencies, NHDOT, NHDOS	Adoption of new process	All areas	All areas	Safe Road Users, Post-Crash Care	NHDOT District, Municipalities	N/A	High	Medium

Number	Action	Proposed Lead Agency (and partners)	Activity Performance Metric	Application	Land Use Context	Safe System Element	Potential Funding Sources	Rating	Priority	Implementation Time Frame
10.3.1	Perform roadway safety audits on priority corridors to further identify those roadway features and user behaviors that contribute to severe crashes and select the appropriate countermeasures.	Cities and Local Agencies	Number of RSAs	All areas	All areas	Safe Speeds, Safe Roads, Safe Road Users, Safe Vehicles, Post Crash Care	NHDOT District, Municipalities	N/A	High	Medium



Implementation Resources

This Safety Action Plan equips NRPC with a solid foundation to initiate safety improvement strategies. Various funding opportunities are available depending on the specific actions planned. The MPO may seek state or federal funding to support additional planning efforts, implement safety infrastructure projects, or enhance multimodal transportation options. By identifying and understanding its safety needs through this plan, the MPO is well-positioned to pursue a range of specialized grant programs.

U.S. Department of Transportation Transit, Safety, and Highway Funds – Pedestrian and Bicycle Funding Opportunities

This detailed table includes potential eligibility for pedestrian and bicycle activities and projects under U.S. DOT surface transportation and funding programs.

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf?u=092922

New Hampshire Highway Safety Improvement Program (HSIP)

This is the core Federal-aid program with the purpose of achieving significant reductions in traffic fatalities and serious injuries. This includes infrastructure-related projects, selected and justified by proven data-driven approaches. The program currently has \$9,000,000 available annually and the Project Selection Process is a data-driven process that consists of three steps starting with an eligibility determination, then prioritization of selected projects, and finally optimization of the prioritized list of eligible projects within the annual budget. This is done in conjunction with the HSIP committee consisting of NHDOT staff, FHWA staff, MPO, RPC and a Local agency representative.

<https://www.dot.nh.gov/about-nh-dot/divisions-bureaus-districts/highway-design/highway-safety-improvement-program-hsip>

Safe Streets and Roads for All (SS4A) Grant Program

This is a five-year grant program that funds regional, local, and tribal initiatives through grants to prevent roadway deaths and serious injuries. After completing Planning projects applicants can pursue Demonstration and Implementation projects.

<https://www.transportation.gov/grants/SS4A>



Transportation Alternatives Program

The goal of the federally funded Transportation Alternatives Program (TAP) is to provide choices for non-motorized users that are safe, reliable, and convenient. TAP grants often help fund off-road bike and pedestrian facilities. TAP grants are currently awarded on a four-year cycle, provide up to 80% of project funding and require a local match.

<https://www.dot.nh.gov/projects-plans-and-programs/programs/transportation-alternatives-program>

Active Transportation Infrastructure Investment Program (ATIIP)

The Active Transportation Investment Program (ATIIP) is a new competitive grant program created by Section 11529 of the Bipartisan Infrastructure Law enacted as the Infrastructure Investment and Jobs Act (Pub.L.117-58) to construct projects to provide safe and connected active transportation facilities in active transportation networks or active transportation spines.

FHWA will award Planning and Design grants for eligible applicants to develop plans for active transportation networks and active transportation spines. Projects seeking Planning and Design grants must have planning and design costs of at least \$100,000 to be eligible.

FHWA will award Construction grants to eligible applicants to construct projects to provide safe and connected active transportation facilities in an active transportation network or active transportation spine. Projects seeking Construction grants must have total costs of at least \$15 million to be eligible.

https://www.fhwa.dot.gov/environment/bicycle_pedestrian/atiip/

Recreational Trails Program

Recreational Trails Program (RTP) is a competitive grant program that offers funding for quality public trail projects throughout New Hampshire. Limited grants are available for motorized, non-motorized and diversified trails. Eligible projects include maintenance and restoration of existing trails, purchase and lease of trail construction and maintenance equipment, construction of new trails, development and rehabilitation of trailside and trailhead facilities and trail linkages. RTP funds come from the Federal Highway Trust Fund and the program in New Hampshire is administered by the Bureau of Trails under the NH Department of Natural & Cultural Resources.

<https://www.nhstateparks.org/find-parks-trails/find-trails-maps-clubs/grants/recreational-trails-program>



Congestion Mitigation & Air Quality (CMAQ)

CMAQ is a Federal program, administered by the NHDOT Bureau of Planning and Community Assistance, that specifically provides financial assistance for air quality improvement and congestion mitigation projects. Project may include transit investments, and infrastructure improvements that improve traffic flow. They also fund transportation-focused bicycle and pedestrian improvements that will result in a reduction in single-occupant vehicle travel. CMAQ grants are currently awarded on a four-year cycle, provide up to 80% of project funding and require a local match.

<https://www.dot.nh.gov/projects-plans-and-programs/programs/congestion-mitigation-and-air-quality-cmaq-program>

Rebuilding American Infrastructure with Sustainability and Equity (RAISE) Grant Program

RAISE is a federally funded grant program that focuses on critical transportation projects, such as roads, rail, transit, and ports, with significant local or regional impacts. It emphasizes improving infrastructure in historically underserved communities, enhancing safety, economic strength, and environmental sustainability. The program is part of President Biden's Bipartisan Infrastructure Law, which has increased funding to address underinvestment in infrastructure and create economic opportunities across the U.S. State and local governments, tribal governments, transit agencies, and port authorities can apply for these grants.

<https://www.transportation.gov/RAISEgrants>

Safe Routes to School

This initiative aims to make it safer and easier for students to walk and bike to school. Established in 2005, it focuses on improving infrastructure, such as sidewalks, crosswalks, and bike lanes, and promoting safety education and community engagement. The program seeks to reduce traffic congestion, enhance student safety, and encourage physical activity, contributing to healthier communities. It involves collaboration between schools, local governments, and community organizations to create a supportive environment for students and families.

https://www.fhwa.dot.gov/environment/safe_routes_to_school/



Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program

The Strengthening Mobility and Revolutionizing Transportation (SMART) Grant Program is a federally funded initiative established under the Bipartisan Infrastructure Law. It provides \$100 million annually from 2022 to 2026 to fund demonstration projects that utilize advanced smart community technologies to improve transportation efficiency and safety. The program is divided into two stages: Stage 1 focuses on planning and prototyping, while Stage 2 supports the implementation of successful projects. Eligible public sector agencies, including state and local governments, can apply for these grants to address real-world transportation challenges through innovative technology solutions.

<https://www.transportation.gov/grants/SMART>



Coordination and Evaluation

In addition to securing funding, successfully implementing a safety action plan by an MPO requires close coordination among various stakeholders, including local governments, transit agencies, law enforcement, public health officials, and community organizations, to ensure broad input and backing. Moving the plan from planning to implementation is essential to reduce fatalities and serious injuries in the region. This section provides a process to guide implementation of the plan and evaluate success.

It is crucial to maintain active communication channels through regular meetings, workshops, and updates to align goals and strategies among all parties. Additionally, develop educational programs to inform stakeholders about safety best practices and emphasize the importance of incorporating safety into transportation planning.

Data Collection and Evaluation

Assessment of the plan will encompass both process and outcome evaluations. Process evaluation will entail examining each action in the plan to determine if progress has been achieved. Outcome evaluation will focus on assessing the impact of the activities. For certain projects, such as those specific to particular sites, it is relatively simple to gauge the safety impact by comparing pre-construction and post-construction crash statistics. In other cases, multiple activities may collectively influence changes in crash frequency. For instance, a reduction in impaired driving crashes might result from a combination of educational and enforcement initiatives. Due to the interconnected nature of various safety activities in the region, fatalities and injuries will be used as the benchmark for annual progress in each emphasis area. The NRPC will utilize crash data gathered by regional police departments and managed by the NHDOT for outcome evaluations. Additionally, changes in traffic volumes, crash severity, and crash characteristics will offer valuable insights into the effectiveness of safety countermeasures. The NRPC will build upon the foundational analysis of the initial plan and enhance it with new data. For evaluating process outcomes, the NRPC will collect information on metrics such as activities conducted, projects completed, and people engaged. An annual report summarizing the process and outcomes of the various strategies and actions will be produced, aligning with the annual compilation of crash data.

Public Reporting

The Regional Safety Plan Committee (RSPC) should be established to support the plan's goals and implementation process. This internal committee, comprising members from within the MPO area, can offer valuable advice and assistance for the action items outlined in the safety action plan. If an RSPC cannot be assembled, dedicating a portion of the Transportation Technical Advisory Committee (TTAC) meetings to discussing the safety action plan can serve as an effective alternative. This includes reviewing crash statistics, assessing the implementation status of actions, recommending the re-prioritization of safety priorities, and identifying potential funding opportunities to support the implementation of strategies and actions. Additionally, the committee will coordinate with NHDOT to ensure alignment with the State's safety priorities. Feedback from the committee will be incorporated into the annual progress report.



Public Education and Awareness

The NRPC will keep the public informed about the plan's implementation via public meetings organized by the RSPC and through regular updates on the plan's website, where the report will also be posted. Periodic messages will be shared on NRPC's website and social media channels to remind the public about roadway safety and to announce notable upcoming events or projects. Additionally, NRPC may conduct surveys periodically to gauge public awareness of the plan's implementation and to gather feedback on emerging roadway safety issues.

Integration with the Plan

The NRPC acknowledges that some strategies in the plan may require several years for full implementation, and the benefits, such as a reduction in fatal and serious injury crashes, may not be immediately apparent. The plan is considered a living document and will undergo continuous review. Similar to the New Hampshire SHSP, a comprehensive update is expected to be completed every five years, or as deemed necessary by the NRPC. However, updates to individual strategies and actions may occur more frequently to reflect ongoing progress and any new policies that influence implementation. The NRPC will take the lead in updating the plan, with support from various stakeholders. Feedback from public reporting and engagement activities will be integrated into these updates.

APPENDIX A: Survey Results

Question 1

How do you typically get around for daily travel or errands? Select up to three of the following options that best represent your typical ways to get around:

96%	Drive myself in a car or truck	868✓
33%	Walk	301✓
17%	Bicycle	149✓
6%	Get a ride	58✓
3%	Motorcycle	30✓
2%	Public bus	22✓
2%	Electric scooter/bicycle	16✓
1%	Walk with a Mobility Aid (walker, cane, etc.)	13✓
1%	Other	9✓
1%	Taxi/Uber/Lyft	8✓
0%	Use a wheelchair	4✓
0%	Paratransit (public rides offering assistance)	0✓
902 Respondents		

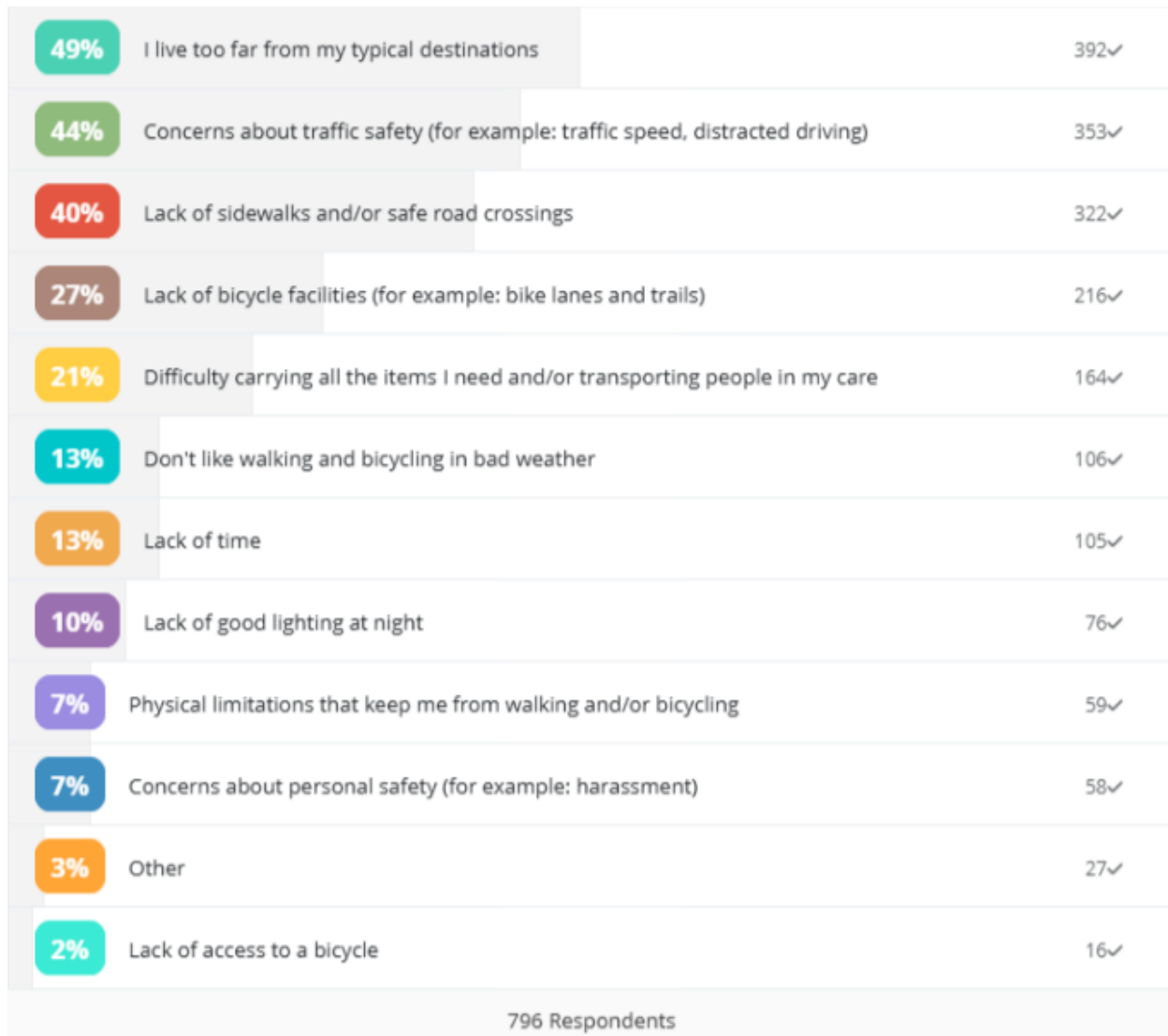
Question 2

How safe do you feel while traveling in each of the following ways:

	Not Safe At All	Somewhat Safe	Fairly Safe	Mostly Safe	Very Safe	N/A
Driving Personal Vehicle	3% Not Safe At All	13% Somewhat Safe	18% Fairly Safe	39% Mostly Safe	26% Very Safe	1% N/A
Carpool	2% Not Safe At All	7% Somewhat Safe	9% Fairly Safe	14% Mostly Safe	7% Very Safe	62% N/A
Motorcycle	12% Not Safe At All	5% Somewhat Safe	4% Fairly Safe	3% Mostly Safe	1% Very Safe	75% N/A
Public Transit (Bus, Vanpool, etc.)	3% Not Safe At All	5% Somewhat Safe	7% Fairly Safe	10% Mostly Safe	7% Very Safe	68% N/A
Walking	12% Not Safe At All	25% Somewhat Safe	25% Fairly Safe	23% Mostly Safe	9% Very Safe	7% N/A
Walking with Mobility Aid (wheelchair, walker, cane, etc.)	6% Not Safe At All	3% Somewhat Safe	2% Fairly Safe	2% Mostly Safe	1% Very Safe	86% N/A
Bicycle (or similar self-powered vehicle)	23% Not Safe At All	21% Somewhat Safe	11% Fairly Safe	6% Mostly Safe	3% Very Safe	37% N/A
Electric scooter/bicycle	10% Not Safe At All	7% Somewhat Safe	3% Fairly Safe	1% Mostly Safe	1% Very Safe	78% N/A
Other (please specify in the comments below)	2% Not Safe At All	1% Somewhat Safe	2% Fairly Safe	1% Mostly Safe	1% Very Safe	93% N/A
865 responses						

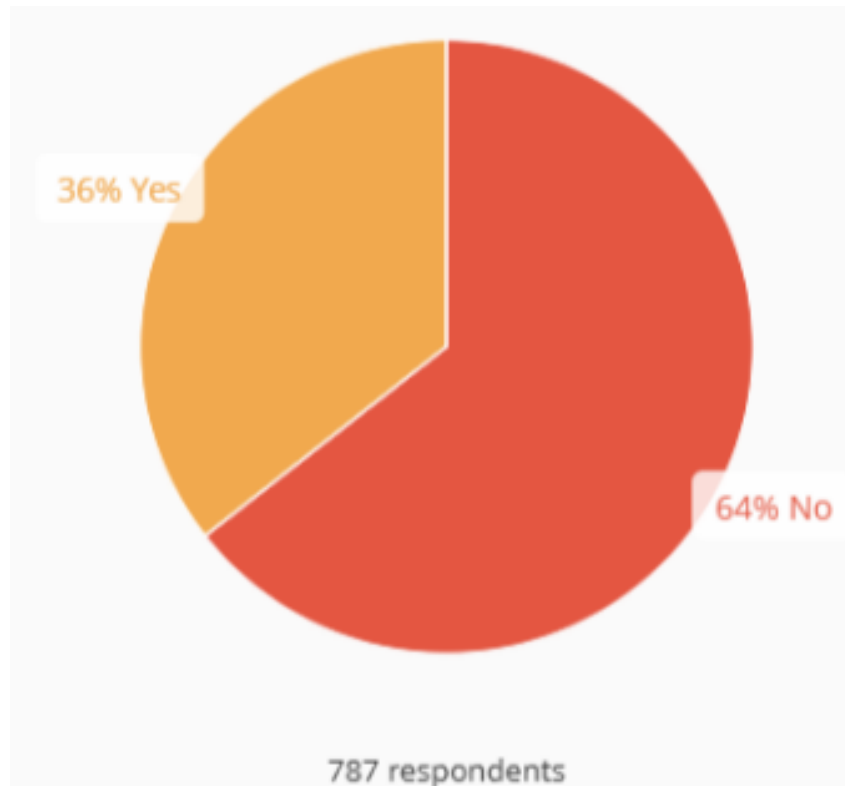
Question 3

If you drive regularly for most or all of your trips, what prevents you from walking or bicycling more often?
(Select your top 3 barriers to walking or biking)



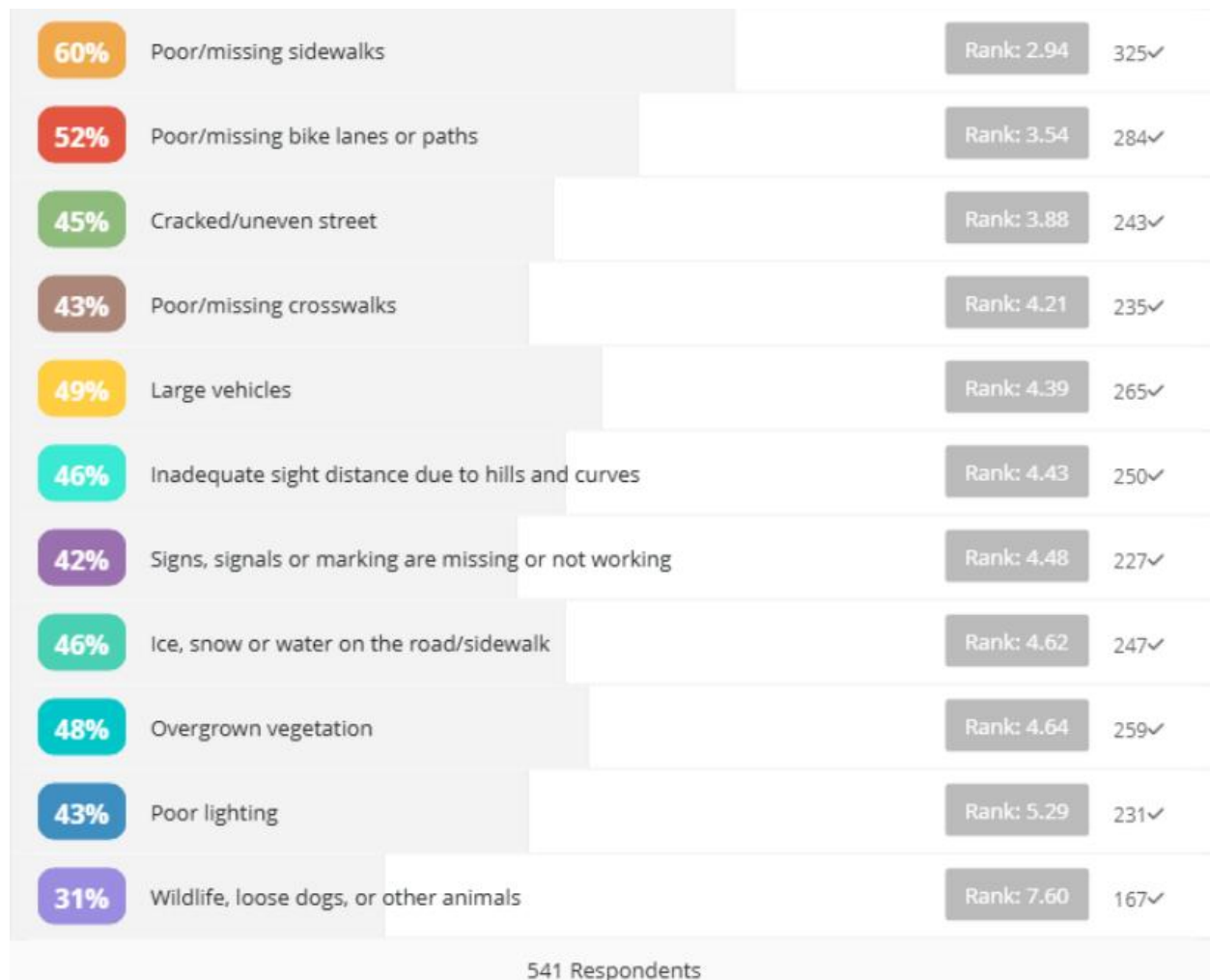
Question 4

Have you or someone you know been involved in a traffic crash within the region of this study.



Question 5

What are your top road safety concerns that have to do with conditions of the road? Please rank the following according to your experience, from highest to lowest priority to improve safety, with 1 being the highest priority:



Question 6

What are your top road safety concerns that have to do with driver behavior? Please rank the following according to your experience, from highest to lowest priority to improve safety, with 1 being the highest priority:

81%	Distracted or erratic driving (e.g. texting while driving, etc.)	Rank: 2.08	443✓
74%	Speeding	Rank: 2.58	406✓
72%	Aggressive driving	Rank: 2.69	393✓
59%	Drivers passing too close to walkers or bicyclist on the road	Rank: 3.37	326✓
51%	Drivers not stopping for people walking across the street	Rank: 3.65	282✓
51%	Impaired driving (drunk driving, etc.)	Rank: 3.89	278✓
13%	Other	Rank: 4.91	70✓
548 Respondents			



Questions 7-10

For questions 7-10, respondents were asked to identify their priorities for safety improvements related to regional transportation. They were instructed to mark up to three locations for each category of improvement on digital maps, indicating where they desired enhancements in:

- Motor Vehicle Safety
- Pedestrian Safety
- Bicycle Safety
- Any Additional Safety Improvements Not Addressed Previously

Note: These maps can be viewed in the Public Survey section of the Action Plan and are not included here.

Questions 11-13

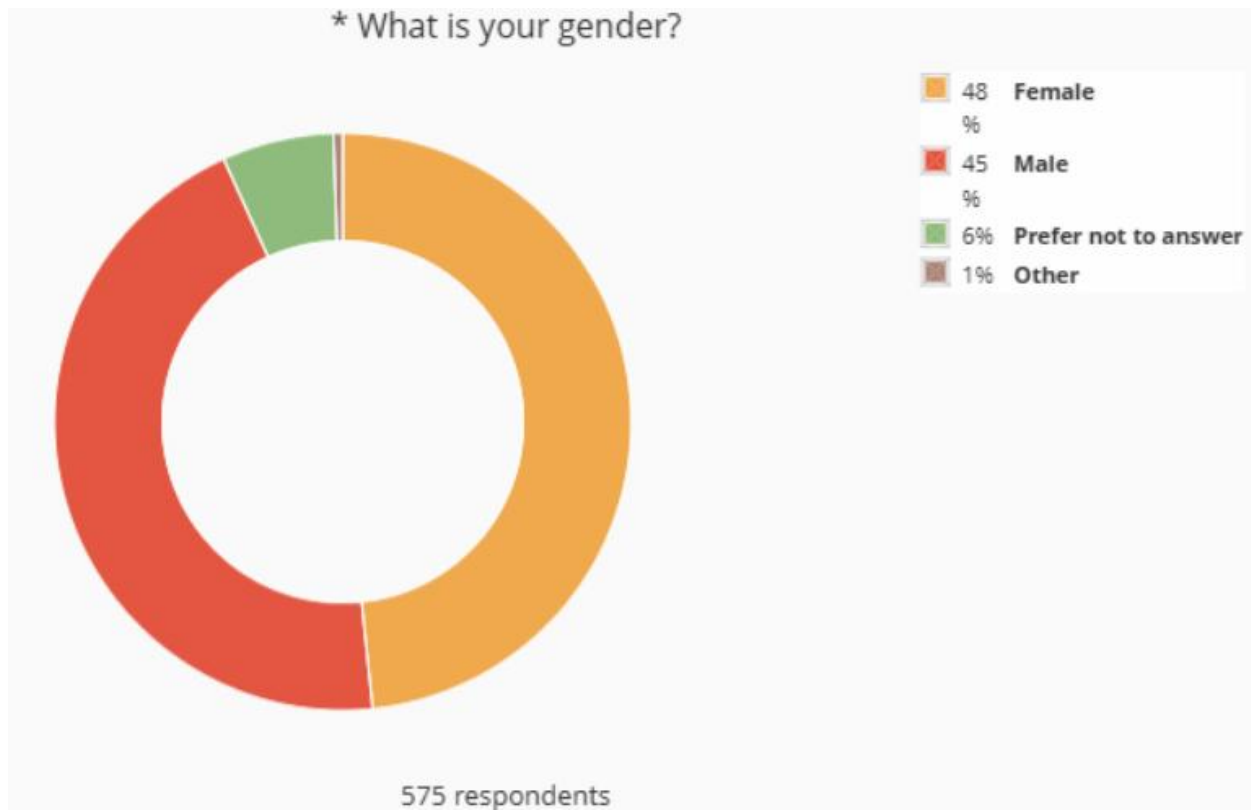
For Questions 11-13, respondents were asked to provide written responses to the following questions:

- Do you have any other specific safety concerns you want to share with the project team?
- Do you have any suggestions for improving road safety in your community that you would like to share?
- Are there any recent infrastructure improvements that have already contributed to your ability to walk or bike more safely and easily?

The responses varied which made it impractical to include them all in this appendix. However, the insights gained were crucial in developing the Strategy Tables within this Action Plan.

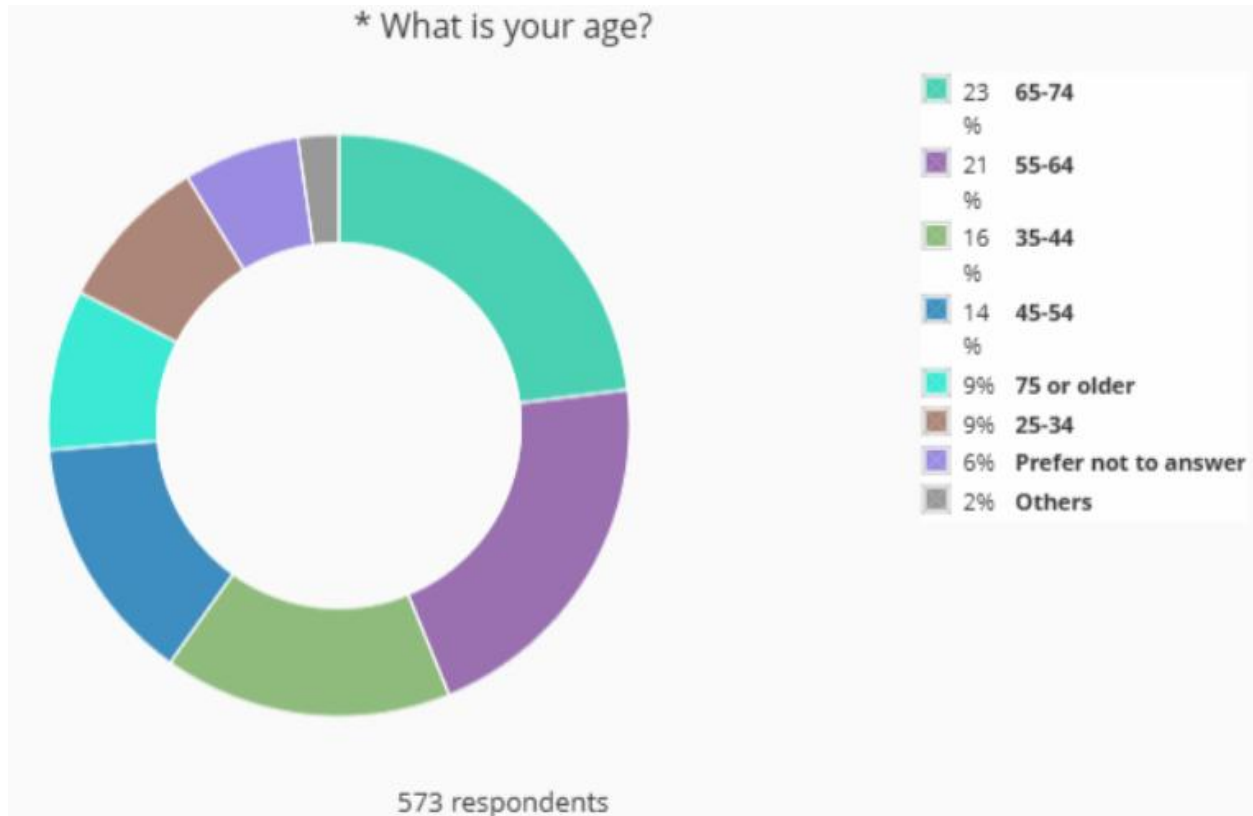
Question 14

What is your gender?



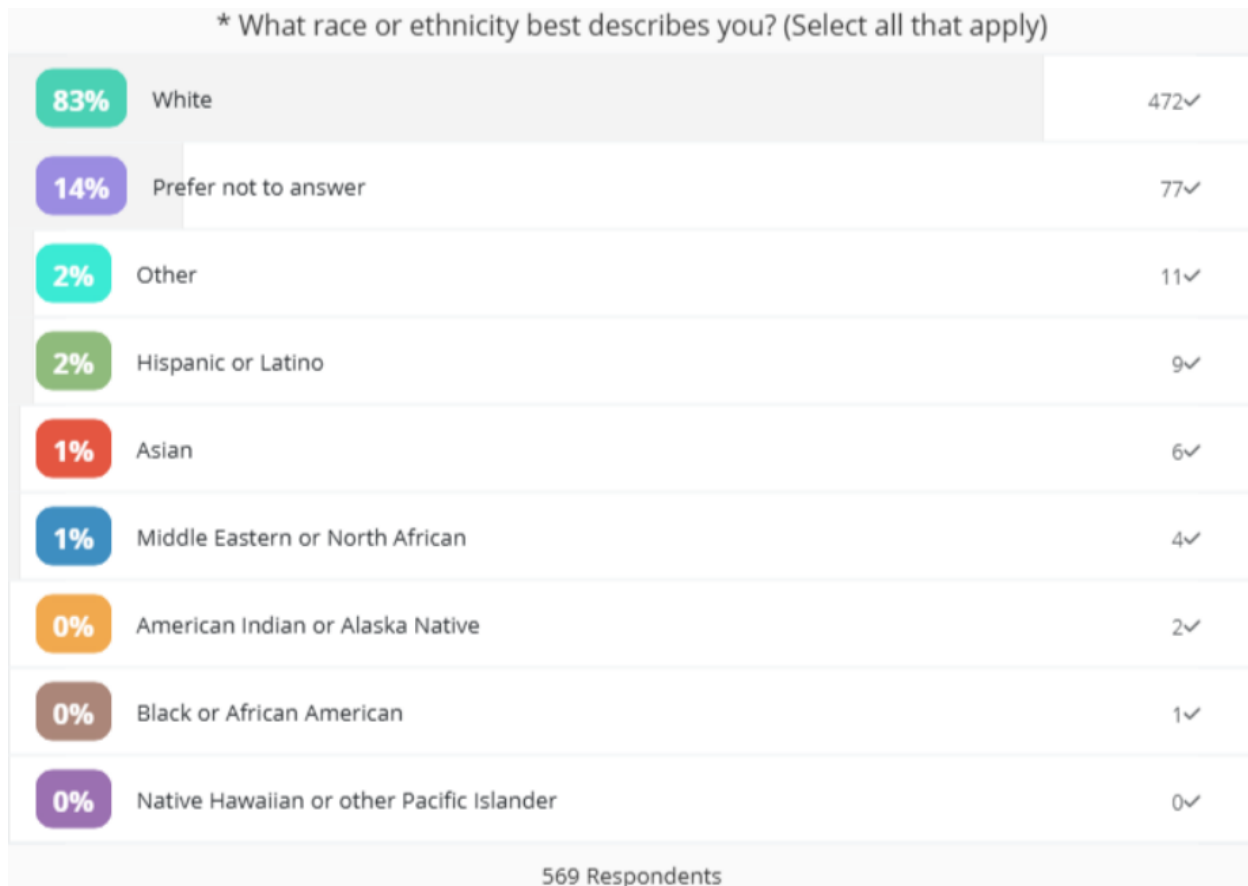
Question 15

What is your age?



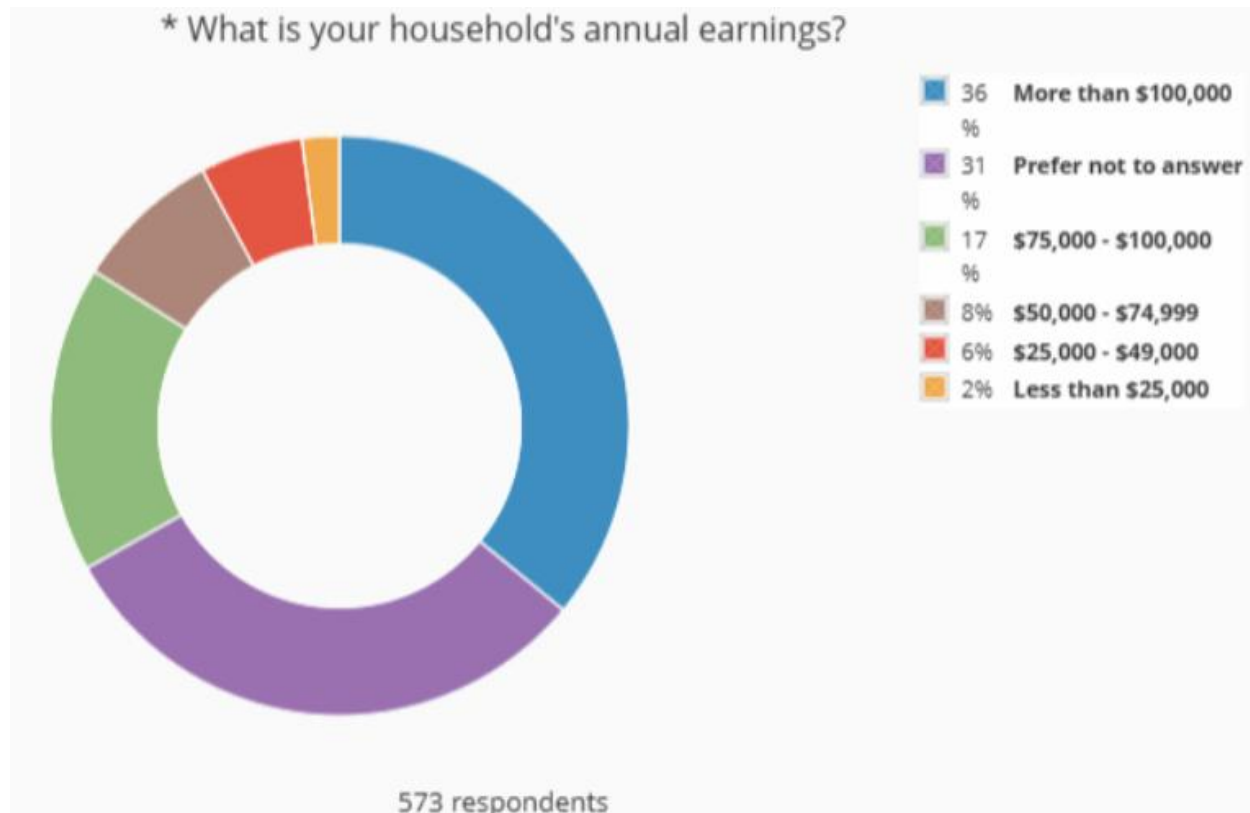
Question 16

What race or ethnicity best describes you? (Select all that apply)



Question 17

What is your household's annual earnings?



An aerial photograph of a suburban neighborhood, featuring several large houses with green roofs and white siding, surrounded by lush green trees. The image is overlaid with a series of green and blue rays that radiate outwards from the center, creating a sunburst effect. The rays are semi-transparent, allowing the underlying image to be visible.

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