

June 26, 2024 | City of Keene, New Hampshire

Municipal Services, Facilities & Infrastructure Committee (MSFI)



Keene Roadway Safety Action Plan



Safe Streets for All Program

- The **foundation** of the Safe Streets for All (SS4A) grant program



Safe Road Users

The Safe System approach addresses the safety of all road users, including those who walk, bike, drive, ride transit, and travel by other modes.



Safe Vehicles

Vehicles are designed and regulated to minimize the occurrence and severity of collisions using safety measures that incorporate the latest technology.



Safe Speeds

Humans are unlikely to survive high-speed crashes. Reducing speeds can accommodate human injury tolerances in three ways: reducing impact forces, providing additional time for drivers to stop, and improving visibility.



Safe Roads

Designing to accommodate human mistakes and injury tolerances can greatly reduce the severity of crashes that do occur. Examples include physically separating people traveling at different speeds, providing dedicated times for different users to move through a space, and alerting users to hazards and other road users.



Post-Crash Care

When a person is injured in a collision, they rely on emergency first responders to quickly locate them, stabilize their injury, and transport them to medical facilities. Post-crash care also includes forensic analysis at the crash site, traffic incident management, and other activities.

Safe Streets for All Program

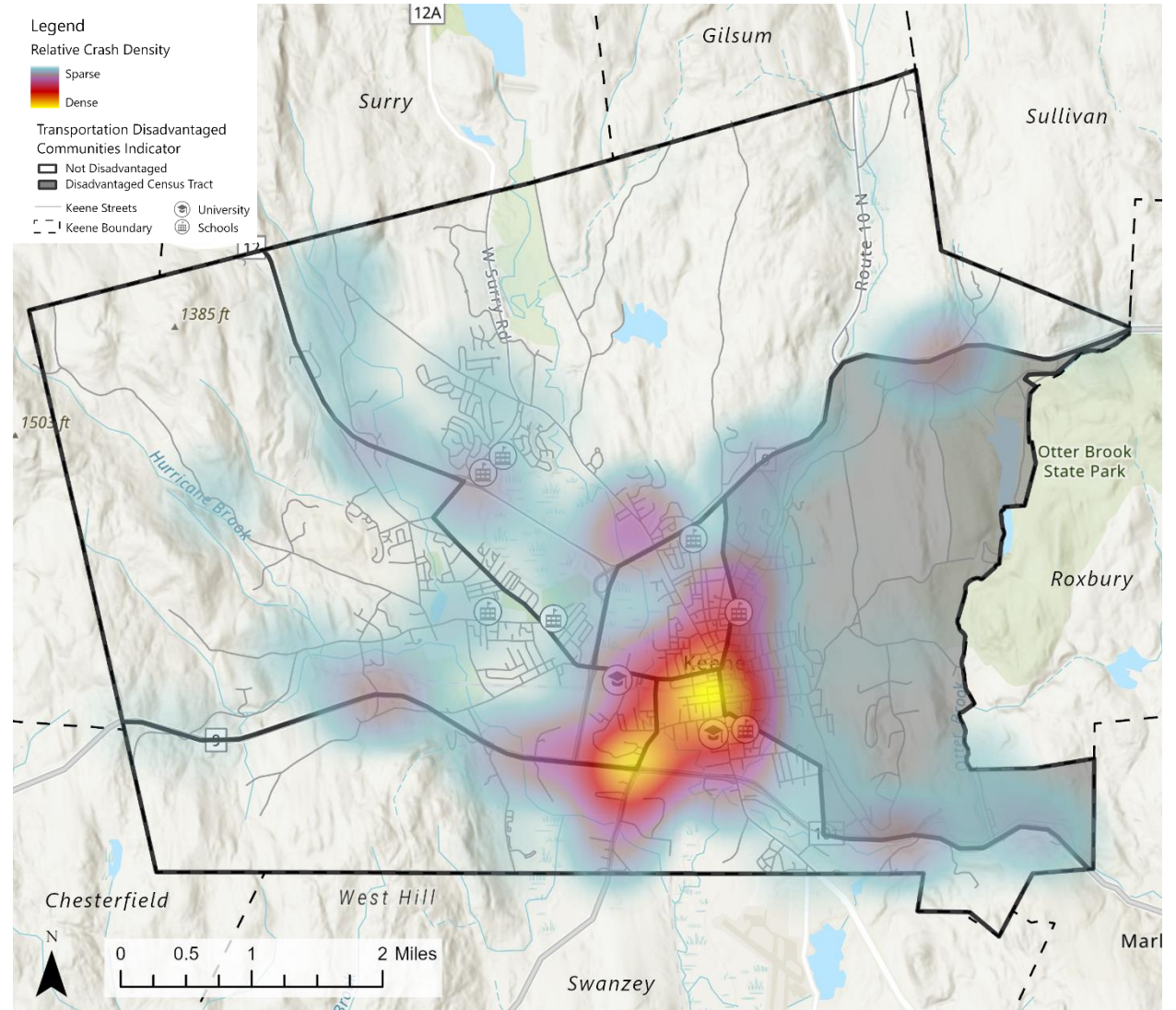
- The **components** of the Safe Streets for All (SS4A) grant program
 - Data Collection and Analysis
 - Project Goal and Objectives
 - Stakeholder Engagement
 - Strategies and Countermeasures
 - Implementation Plan
 - Project Recommendations
 - Prioritization
 - Performance Measures



Source: Federal Highway Safety Administration

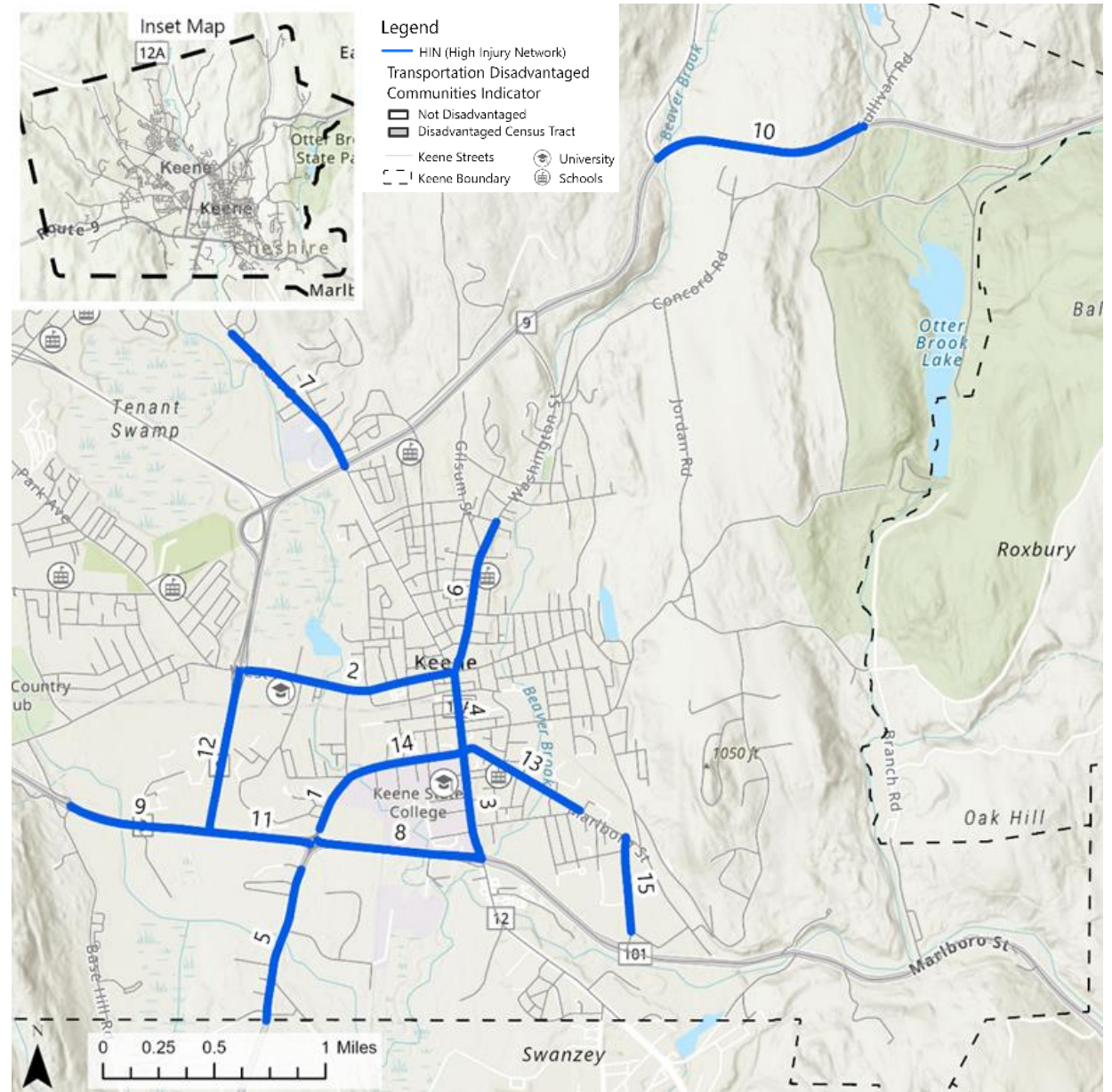
Data Analysis

- **Proactive and Reactive Data Analysis**
- High Injury Network (HIN)
- Crash Trees
- Roadway, Vehicle, Road User Factors
- Disadvantaged Communities



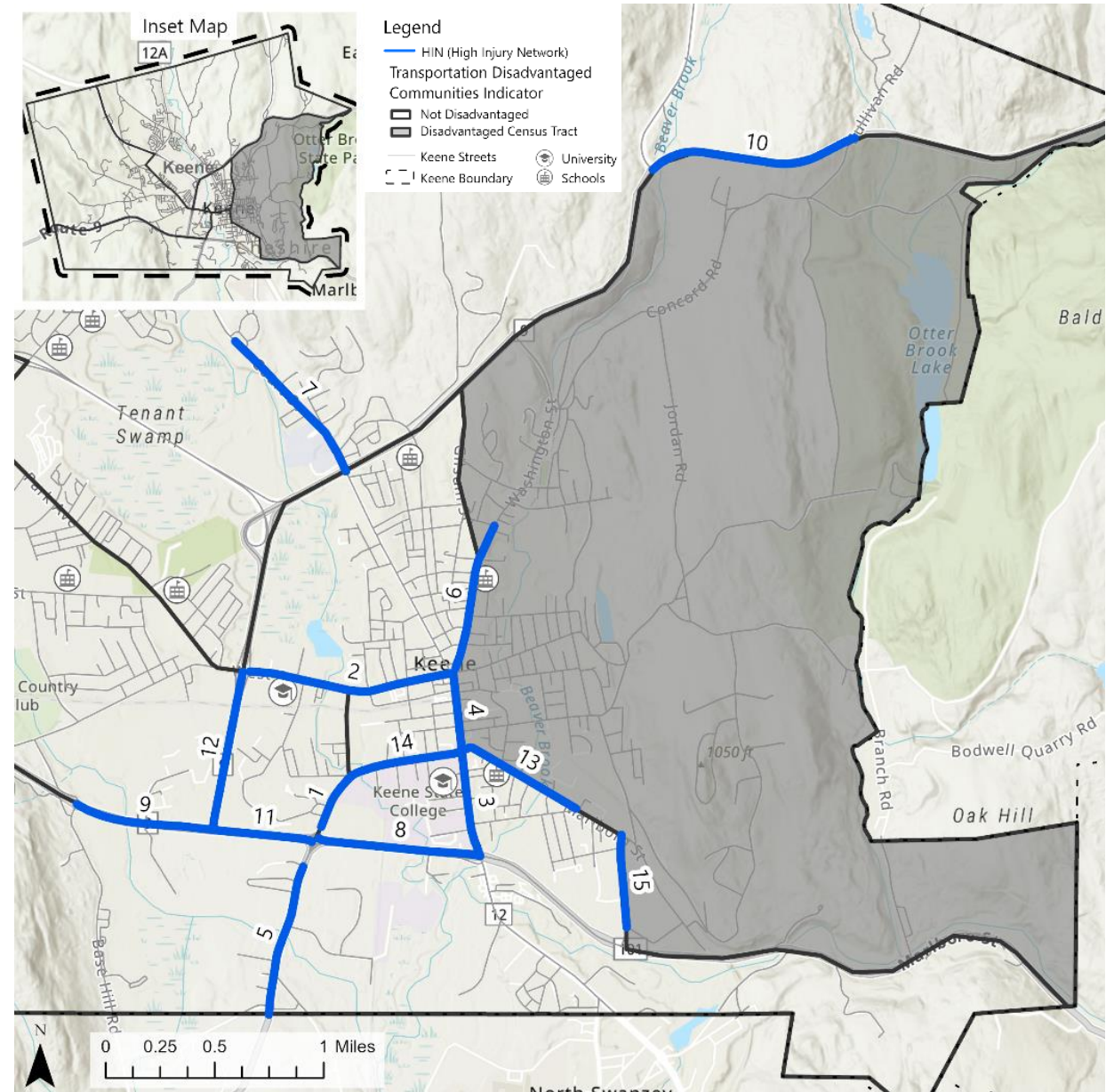
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Goal and Objectives

- What is Safe Streets for All (SS4A) grant program
 - Data Collection and Analysis
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KEENE ROADWAY SAFETY ACTION PLAN

KEENE 4 | KEENE ROADWAY SAFETY ACTION PLAN

GOAL AND OBJECTIVES

GOAL:
The goal of the Keene Roadway Safety Action Plan is to make transportation safety a top priority. Stakeholder collaboration and community engagement will be key to moving towards reducing the number of fatalities and serious injuries by 50% by 2035, working toward 0 by 2045.

OBJECTIVES:

- › Prevent crashes resulting in fatalities and serious injuries.
- › Promote a safe systems approach to transportation in Keene.
- › Engage partners and the public to foster a culture of safety.

7 Keene Roadway Safety Action Plan

Stakeholder Engagement

- Primary components
 - Project web page

www.keenenh.gov/roadsafety

Home / Roadway Safety Action Plan

The City of Keene is developing a comprehensive Roadway Safety Action Plan (RSAP) to reduce fatalities and serious injuries from roadway crashes. This effort is being funded in part by a United States Department of Transportation (USDOT) [Safe Streets and Roads for All \(SS4A\)](#) planning grant.

The RSAP will incorporate the [Safe System](#) approach, which builds and reinforces multiple layers of protection to prevent crashes from happening in the first place and minimize the harm from crashes when they occur. This is a shift from a conventional safety approach because it focuses on both human mistakes AND human vulnerability and designs a system with many redundancies in place to protect everyone. The approach includes the six following principles:

- Death and Serious Injuries are Unacceptable
- Humans Make Mistakes
- Humans Are Vulnerable
- Responsibility is Shared
- Safety is Proactive
- Redundancy is Crucial

Keene's RSAP will contain a series of strategies and actions—including driver, pedestrian, and bicycle infrastructure (see the gallery below for examples) - that align with the five elements that are the foundation of the Safe System approach:

Source: Federal Highway Safety Administration

Stakeholder Engagement

- Primary components
 - Project web page
 - Online survey and input map
 - 14 questions
 - Topics include:
 - ✓ sense of comfort/safety for all transportation modes
 - ✓ barriers to walking/biking
 - ✓ spending priorities
 - ✓ key destinations
 - ✓ Demographics
 - Citywide input map to locate needed safety improvements




Keene Roadway Safety Action Plan Community Survey

Welcome to the Keene Roadway Safety Action Plan Community Survey!

Your responses to the 14 questions below will help the City and the planning consultants better understand key issues for people who drive, bike, walk, or use a wheelchair in Keene. As the Safety Action Plan evolves over the coming months, results of the survey will inform the team's recommendations related to proposed infrastructure projects, safety programs, and project prioritization.

The survey, which runs through April, should take 10-15 minutes to complete and all responses are kept confidential. For additional information about the survey or the planning effort, please contact the City's Project Manager Brett Rusnock P.E. at brusnock@keeneh.gov



CITY OF KEENE
NEW HAMPSHIRE

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Stakeholder Engagement

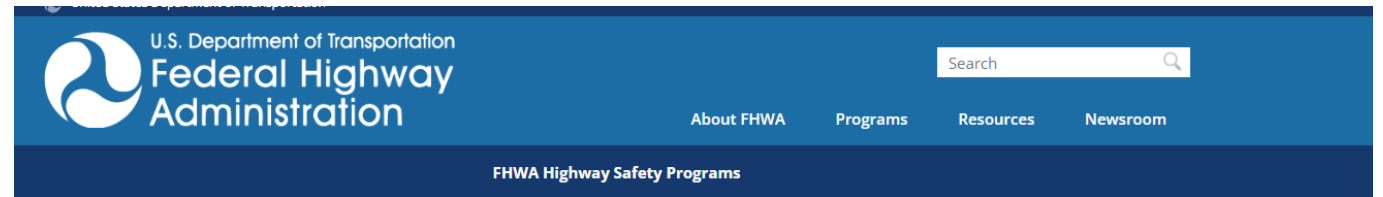
- Primary components
 - Project web page
 - Online survey and input map
 - Road Safety Plan Committee (RSPC) meetings
 - Technical Advisory Committee (TAC) meetings
 - Stakeholder listening sessions
 - Neighborhood meetings
 - Bicycle/Pedestrian Path Advisory Committee
 - Human Services agencies
 - School District - SAU 29
 - Higher Education (Keene State College, Antioch College, River Valley Community College)
 - Major Employers
 - MSFI Committee meetings



Community Meeting #1 at Keene Ice on 4/29/2024

Strategies and Countermeasures

- What is Safe Streets for All (SS4A) grant program
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[Home](#) / [Safety](#) / [Proven Safety Countermeasures](#)

Proven Safety Countermeasures

[Search Safety Proven Countermeasures](#)

[Resources](#)

Proven Safety Countermeasures

FHWA's Proven Safety Countermeasures initiative (PSCI) is a collection of 28 countermeasures and strategies effective in reducing roadway fatalities and serious injuries on our Nation's highways. Transportation agencies are strongly encouraged to consider widespread implementation of PSCs to accelerate the achievement of local, State, and National safety goals. These strategies are designed for all road users and all kinds of roads—from rural to urban, from high-volume freeways to less traveled two-lane State and county roads, from signalized crossings to horizontal curves, and everything in between. Each countermeasure addresses at least one safety focus area – speed management, intersections, roadway departures, or pedestrians/bicyclists – while others are crosscutting strategies that address multiple safety focus areas. [Search Proven Safety Countermeasures.](#)

Speed Management



[Appropriate Speed Limits for All Road Users](#)



[Speed Safety Cameras](#)



[Variable Speed Limits](#)

Pedestrian/Bicyclist



[Bicycle Lanes](#)



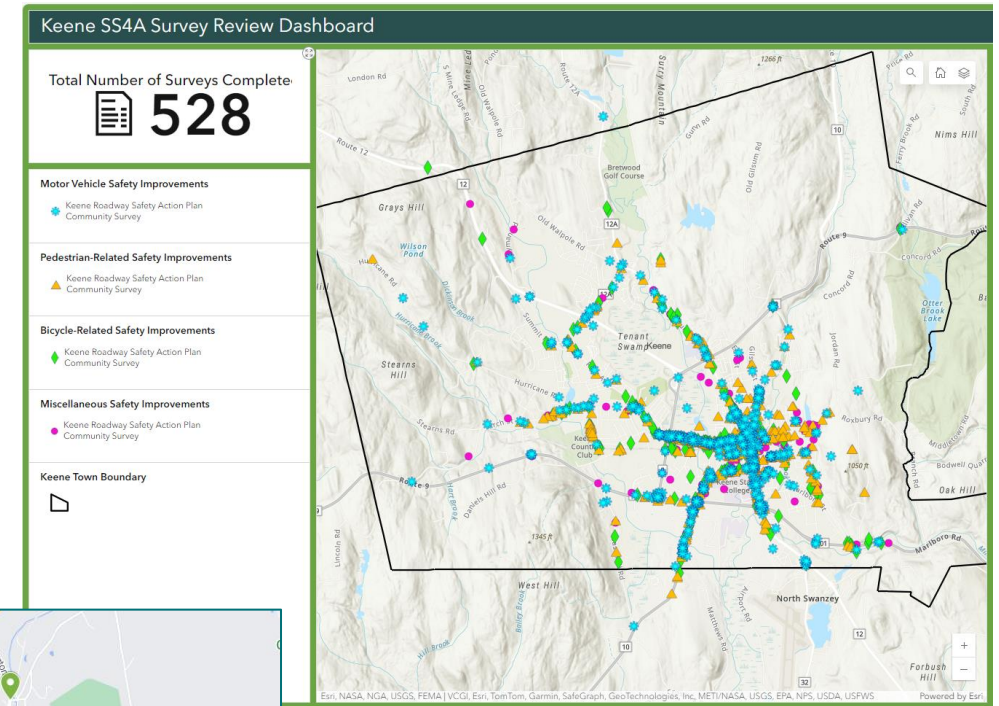
[Crosswalk Visibility Enhancements](#)



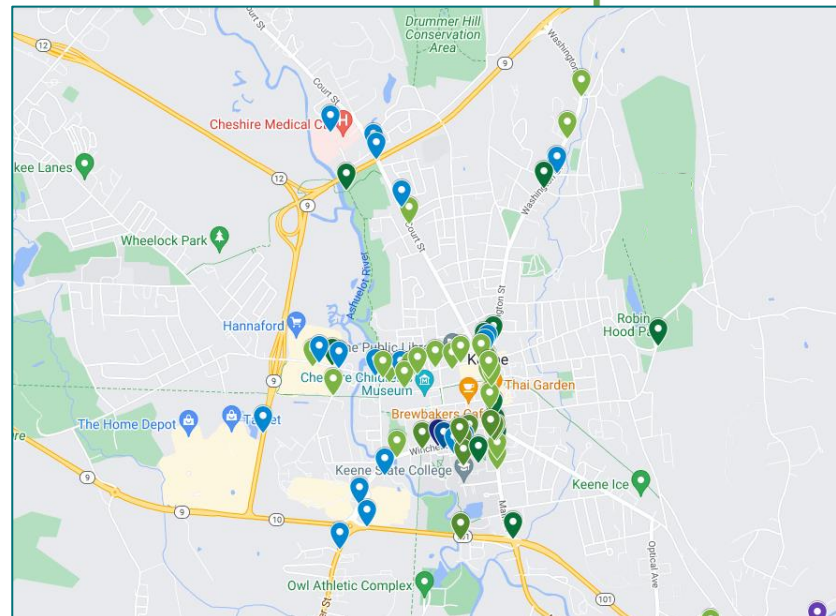
[Leading Pedestrian Interval](#)

Implementation Plan

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Public Survey Responses and Project Suggestions



RSPC, TAC, and Stakeholder Project Suggestions

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 - Project Recommendations
 - Prioritization:
 - Define List of Projects
 - Establish Evaluation Criteria, Weighting, and Scoring Rubric

| EVALUATION CRITERIA | | | |
|---|--|-----------|---------------------------|
| Key Issue | Criteria (up to 5 points each) | Weighting | Max. Weighted Point Total |
| 1: CRASHES | Number of reported KAB crashes within 150 feet of the project recommendation | 2 | 10 |
| 2: HIGH INJURY NETWORK | Recommendation sits within 150 feet of a roadway that is part of the High Injury Network | 1 | 5 |
| 3: CRASH REDUCTION | Demonstrated Crash Reduction Factor for individual recommendation | 1 | 5 |
| 4: EQUITY | Recommendation sits in, or within 150 feet of, a Transportation Disadvantaged census track | 2 | 10 |
| 5: DESTINATIONS | Recommendation sits within ¼ mile of a K-12 school, senior living facility, health care facility, park, recreation center, Housing Authority sites, or homeless shelter. | 3 | 15 |
| 6: COST/BENEFIT ANALYSIS CONSIDERATIONS | | na | na |
| 6a: Project Need/Community Support | Project Need as expressed through the # of comments or project requests made by the public, stakeholders, and/or committee members during the RSAP process | 2 | 10 |
| 6b: Project Cost | Order-of-magnitude cost based on project type, length/scale, and potential engineering challenges | 1 | 5 |
| 6c: Ease of Implementation | Qualitative assessment of the political will, fundraising opportunities, and City staff capacity for implementation | 1 | 5 |
| TOTAL | | | 65 |

DRAFT Evaluation Criteria for Prioritization



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 - Score and Rank Projects (Quantitative and Qualitative Process)

Fatal, Serious and Minor Injury (KAB) Crashes (2014-2022)
All Modes

