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# Newtown Safety Action Plan

Prepared for



**Town of Newtown**

45 Main Street, Newtown, CT 06470

Prepared by



In Partnership with



## Executive Summary

In recent years, the increasing frequency of motor vehicle crashes resulting in fatalities or serious injuries has led to widespread concern about methods to keep local roadways safe for all road users. To address these ongoing safety challenges, the Town of Newtown, Connecticut, has secured federal funding under the USDOT's Safe Streets and Roads for All (SS4A) discretionary grant program to develop a Safety Action Plan that directly addresses safety-related needs and deficiencies within the town's roadway network. This Safety Action Plan strives to ensure that all road users, whether they be motorists, bicyclists, or pedestrians, can safely utilize the town's roadways without harm through the implementation of data-driven, evidence-based, and actionable interventions, created through rigorous analysis of Newtown's streets in previous years. The foundation of this action plan is the Safe System Approach, which strives to alter perceptions on traffic safety, improve safety for all road users, and eliminate all traffic fatalities and serious injuries entirely through a "Vision Zero" resolution. This plan also involved a rigorous analysis of crashes at select intersections and roadways within Newtown, supplemented by the development of a High Injury Network and data collected from Newtown residents. To ensure the safety of Newtown's roadways in the future, this plan has prioritized projects, interventions, and actions for direct implementation to improve safety throughout the Town of Newtown. Ultimately, this Safety Action Plan establishes a framework for eliminating roadway fatalities and serious injuries, ensuring that Newtown's streets remain safe and accessible for all road users.

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## List of Acronyms

**AAA-** American Automobile Association

**ADA-** Americans with Disabilities Act

**ATESD-** Automated Traffic Enforcement Speed Device

**BIL-** Bipartisan Infrastructure Law

**BLS-** Bureau of Labor Statistics

**CPI-** Consumer Price Index

**TDOT-** Connecticut Department of Transportation

**CMF-** Crash Modification Factor

**CPI-** Consumer Price Index

**CRSMS-** Connecticut Roadway Safety Management System

**CTCDR-** University of Connecticut Crash Data Repository

**DSFS-** Dynamic Speed Feedback Signs

**EPDO-** Equivalent Property Damage Only

**FHWA-** Federal Highway Administration

**HIN-** High Injury Network

**MTP-** Metropolitan Transportation Plan

**HSM-** Highway Safety Manual

**NRSS-** National Roadway Safety Strategy

**PHB-** Pedestrian Hybrid Beacon

**POCD-** Plan of Conservation and Development

**RSA-** Road Safety Audit

**SHSP-** Strategic Highway Safety Plan

**SRTS-** Safe Routes to School

**SS4A-** Safe Streets for All

**USDOT-** United States Department of Transportation

**WestCOG-** Western Connecticut Regional Council of Governments

**VRU-** Vulnerable Road User

## Introduction

*Roadway crashes resulting in deaths and serious injuries have historically been deemed an unavoidable consequence of mobility. In recent years, this notion has been challenged as states and cities across the country strive to alter safety perceptions to eliminate traffic fatalities and serious injuries entirely.*

## Municipal Overview

Newtown, Connecticut, located in Fairfield County, is part of the Greater Danbury and New York metropolitan areas. Located southwest of Hartford and northeast of NY, Newtown is Connecticut's fifth-largest town by area. Rich in historic charm, Newtown features a picturesque Main Street with vibrant colonial architecture, a central flagpole, and landmarks including Edmond Town Hall and the Cyrenius H Booth Library. The town is rich in natural beauty, offering access to Paugussett State Forest, Lake Zoar, and miles of hiking trails. Newtown's population as of 2024 is approximately 28,029, reflecting slight growth since 2020.

A variety of local and regional roadways serve Newtown. I-84 is the main highway through Newtown, running east-west, connecting Newtown to Danbury to the west and Waterbury to the east. Major exits in Newtown include Exit 9 (Route 25), Exit 10 (Church Hill Road/Route 34), and Exit 11 (Wasserman Way/Route 34). U.S. Route 6 runs concurrently with I-84 for a portion of Newtown, where the interstate is separated, and follows local roads. Connecticut Route 25 connects Monroe and eventually leads to Bridgeport to the south, terminating in Newtown at the intersection of Route 6. Connecticut Route 34 runs from Newtown through Sandy Hook towards New Haven. Lastly, Wasserman Way (State Road 490) is a short connector road linking I-84 (Exit 11) to Route 34 and the Fairfield Hills area.

Consistent with the increasing trend of roadway injuries and fatalities across the country, Newtown has experienced a total of 472 crashes resulting in injury or fatality between January 2020 and August 2025, per the University of Connecticut Crash Data Repository.

## Safe Streets for All

The Safe Streets for All Program (SS4A), established under the Bipartisan Infrastructure Law (BIL) in 2021, provides discretionary funding of up to \$5 billion over five years (2022-2026). The program funds regional, local, and tribal initiatives through grants to reduce and prevent fatalities and serious injuries on United States roadways. The SS4A grants are broadly divided into two categories: planning and demonstration grants, which provide funds to develop, complete, or supplement a Safety Action Plan, and implementation grants, which provide funds to implement projects and strategies identified in an Action Plan to address roadway safety problems. In 2025, the Town of Newtown, Connecticut, was awarded a grant to develop a Safety Action Plan. The goal of this Action Plan is to create a holistic, well-defined strategy to prevent roadway fatalities and serious injuries within Newtown's roadway network.

## Safe System Approach

In 2022, the United States Department of Transportation (USDOT) released its National Roadway Safety Strategy (NRSS), which simultaneously adopted the Safe System Approach. Through the Safe System Approach, responsibility for roadway safety is shared among all roadway users, transportation system managers, law enforcement, emergency responders, and vehicle manufacturers. The Safe System Approach recognizes that humans are inherently vulnerable beings and that a safe and successful transportation network must be designed and operated with human vulnerability at the forefront. Redundancy across the transportation system is key to reducing crashes. All parts of the system should be strengthened so that, if one part fails, the others continue to protect roadway users.

The Safe System Approach was founded on six key principles that guide how transportation agencies and communities work to eliminate fatalities and serious injuries: **The principles**

**are:**

- Death and Serious Injuries are unacceptable
- Humans make mistakes
- Humans are vulnerable
- Responsibility is shared
- Safety is proactive

- Redundancy is crucial

In addition to the six principles of the Safe System Approach that guide cultural changes, five elements further share the responsibility to promote a holistic and integrated approach to transportation safety across the system. **The Safe System Elements are:**

- Safer people
- Safer vehicles
- Safer speeds
- Safer roads
- Post-crash care

This approach differs from traditional road safety practices, which aim to modify human behavior and prevent all crashes. The Safe System approach refocuses transportation system design and operation on anticipating human mistakes and lessening impact forces to reduce crash severity, ultimately saving lives.

## **Vision Zero**

Vision Zero is a strategy aimed at eliminating all traffic fatalities and serious injuries while promoting safe, healthy, and equitable mobility for all. It was first implemented in Sweden in the late 1990s and has since gained widespread acceptance worldwide. Throughout the United States, over 1,600 communities have implemented a Vision Zero Goal or Resolution. As a multidisciplinary approach, Vision Zero brings together a wide range of stakeholders to address the complex challenges in transportation safety. In the past, collaboration among local traffic planners, engineers, policymakers, residents, and other interest groups has not been the norm. Vision Zero acknowledges that many factors contribute to safe mobility, including roadway design, speeds, road user behavior, technology, and government policies.

In 2021, a Vision Zero Council was established by the Connecticut General Assembly as part of Public Act 21-28, a landmark transportation safety bill. The Council is an interagency work group tasked with developing statewide policy to eliminate transportation-related fatalities and serious injuries involving pedestrians, bicyclists, transit users, motorists, and passengers. Several municipalities, such as West Hartford, Torrington, Stamford, and

Westport, have already adopted Vision Zero resolutions. Newtown is currently adopting its own Vision Zero Resolution as an integral requirement of the SS4A process.

### **Project Goals**

The goals of this project are to use data-driven analysis and community feedback to identify high-crash locations within Newtown, develop effective safety strategies, and prioritize opportunities to reduce fatal and serious injury crashes for all road users. This Safety Action Plan will serve as a framework for monitoring progress towards achieving a Vision Zero resolution on Newtown's roadways. This plan will also help Newtown pursue future funding through the SS4A program and other local, state, and federal grant opportunities to improve safety for all roadway users, regardless of travel mode.

## Public Involvement/Engagement

*To develop and sustain a transportation system that prioritizes the safety of all road users, whether they be motorists, bicyclists, or pedestrians, Newtown's vibrant community and its municipal leaders have committed themselves to eliminating all traffic fatalities and serious injuries on its roadways through a Safety Action Plan and Vision Zero Resolution.*

### Engaging Stakeholders

Community involvement and public participation are fundamental aspects of the safety planning process. Throughout the course of this project's outreach process, communication between the project team, the residents of Newtown, and municipal personnel has been so that the public stays informed and involved in ongoing efforts.

To reach a wide range of local stakeholders and the public, the project team's approach included engaging the public through various channels of communication, while promoting a survey available in both digital and written formats. This survey was disseminated through local media sources, public presentations, and social media platforms. The results of these efforts included over 400 online survey submissions and 15 written submissions. All data gathered from this process was supplied to the municipal traffic engineer. This data, collected from the community itself, guided Newtown's Comprehensive Safety Action plan in its preliminary phases.

### Survey Results

Survey results conclude that when considering traffic calming measures, the public was relatively equally concerned about speeding, stop sign violations, pedestrian safety, traffic signals, and distracted driving. Data was provided that identified dangerous intersections and roadway segments in



Newtown, along with specific concerns associated with previously identified roadways and intersections. Survey data also provided the public's top three dangerous roadways/intersections.

On October 25, 2024, a Facebook post was made announcing a dedicated project webpage associated with the Town's police department. Shortly afterwards, the project team was interviewed for an article posted by the Newtown Bee on November 1<sup>st</sup> and 3<sup>rd</sup>. To reach Newtown's aging demographic, a presentation was provided to Friends of Newtown Seniors in February 2025. In the following weeks, the Newtown Bee posted an additional article informing the public of the safety plan's progress. In June of 2025, a second social media update was posted on Facebook, Instagram, and X. On July 17, 2025, an additional social media update was posted, using the same mobile apps. September 2025 involved a formal meeting with the Newtown Borough Board, sharing an update on the Safe Streets for All program and its intent to reduce and eliminate fatal and serious injury crashes. Throughout November, additional social media posts were disseminated, along with a podcast interview, a media interview, and a presentation at Newtown's Senior Center. Lastly, a presentation for Newtown's Legislative Council was provided in a public session focusing on the SS4A process and ongoing efforts with this Safety Action Plan.

## **Survey Analysis**

To gather community input, a survey was disseminated among residents, providing relevant insights into safety perceptions and high-crash locations across Newtown's comprehensive roadway network. This survey provided qualitative data to supplement crash-based data, gathered from the University of Connecticut Crash Repository Database. This chapter will review relevant insights gathered from Newtown's vibrant community.

## **Major Takeaways from the Survey**

Survey data concluded that Newtown residents valued traffic calming efforts for the categories of speeding, stop sign violations, pedestrian safety, traffic signals, and distracted driving relatively equally. However, distracted driving was noted as the top concern

amongst other categories for traffic calming efforts.

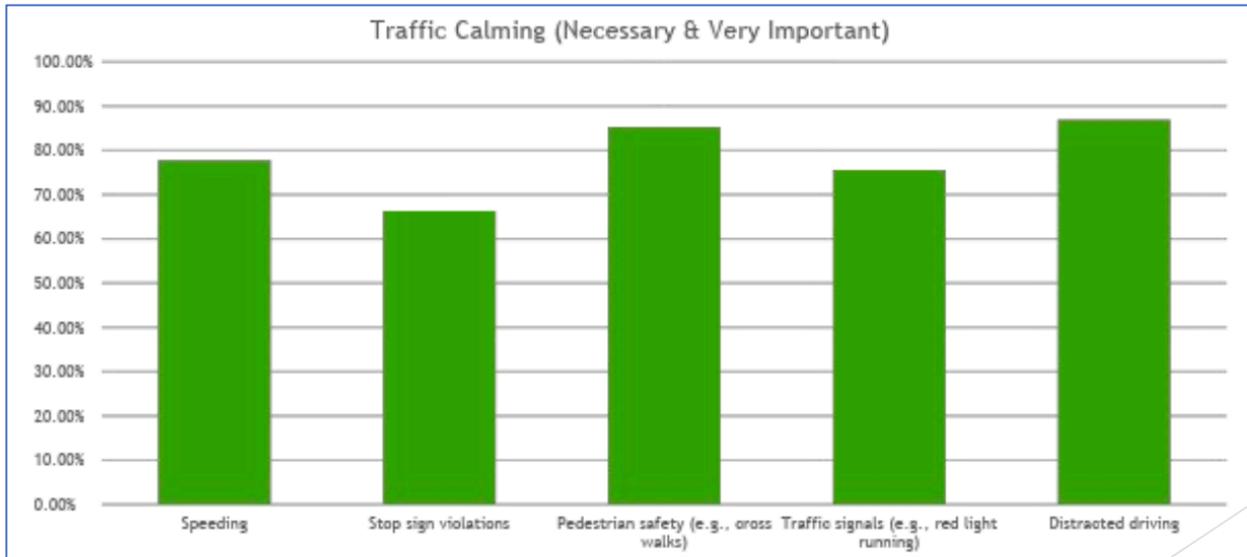


Figure 1: Feedback from Residents

**Figure 1** below reviews qualitative data gathered from the survey. Residents were asked to respond to questions including safety concerns with the flagpole, pedestrian and bicycle safety, and general concerns with overall safety.

# General Comments from the Survey

Table 1: Survey Qualitative Data

Traffic Compliance and Law Enforcement
<ul style="list-style-type: none"> <li>• Survey input finds that most drivers do not fully stop at stop signs.</li> </ul>
Pedestrian and Bicyclist Safety
<ul style="list-style-type: none"> <li>• Interest in implementing measures to increase pedestrian and bicyclist safety, including curb extensions, raised pedestrian crossings, and improved lighting at crossings.</li> <li>• Lack of signage at crosswalks was also identified as a concern, such as near the Edmond Town Hall.</li> <li>• Interest in high visibility crosswalks around Town.</li> <li>• Residents shared that they do not feel safe crossing the street at the center of Town.</li> <li>• Flashing lights indicating pedestrian crosswalks and/or a refuge island would be helpful at locations in the Borough of Newtown.</li> </ul>
Speeding
<ul style="list-style-type: none"> <li>• Community input expressed concerns regarding speed bumps around Town.</li> <li>• Speeding and aggressive driving have been identified as a recurring concern amongst residents.</li> <li>• Interest in removing speed bumps on Queen Street was expressed.</li> </ul>
Safety Concerns with the Flagpole
<ul style="list-style-type: none"> <li>• The flagpole is a clear traffic obstacle for young and new drivers, posing a significant safety hazard.</li> <li>• Curb extensions at the flagpole have been identified as a new potential project, as well as high visibility crosswalks and sidewalks.</li> <li>• Increased speed control on Main Street is unsafe for pedestrians.</li> <li>• Line of sight issues with larger buses near this location.</li> </ul>

## Locations of Concern

Survey data also identifies the top twenty locations of concern on Newtown’s roadway network, ranked by most dangerous, second most dangerous, and third most dangerous, as presented in **Table 2**. This data will be reviewed in conjunction with crash data to inform the development of a high injury network (HIN). This is a prioritized list of dangerous road segments and intersections throughout the Town, determined through analysis of crash-based quantitative data and the findings from the community survey.

*Table 2: Survey Locations of Concern*

<b>Location</b>	<b>Most Dangerous</b>	<b>Second Most Dangerous</b>	<b>Third Most Dangerous</b>
RT-25/Main Street	101	93	73
Currituck Road	45	54	29
Flagpole	41	51	34
Church Hill Road	17	21	25
RT-34	15	23	17
RT-302	20	28	27
Toddy Hill Road	11	14	5
Button Shop Road	8	5	2
Hattertown Road	8	15	9
Elm Drive	5	6	6
RT-6	5	3	3
Key Rock Road	4	6	8
Walnut Tree Hill Road	4	3	5
West Street	4	4	1
Wasserman Way	3	6	10
Obtuse Road	3	2	3
Mile Hill Road	3	11	12
Pole Bridge Road	3	2	2
Botsford Hill Road	3	8	6

## Walk Audit

On August 22<sup>nd</sup>, 2025, a walk audit was conducted in Newtown, Connecticut, focused on evaluating pedestrian safety, accessibility, and overall walkability in predetermined locations. To better understand the current conditions of Newtown's roadways, this walk audit aimed to evaluate these areas by observing sidewalk condition, intersection safety, accessibility features, and overall pedestrian experience. The findings of this walk audit have been directly incorporated into Newtown's SS4A Safety Action Plan. In attendance at this walk audit were individuals of various backgrounds, including members of Newtown's police department, the town engineer, public works personnel, and private civil engineering consultants. This walk audit's locations are outlined below.

- **Location 1:** Sandy Hook Area: Church Hill Road (US-6) from I-84 Ramp to Glenn Road/Riverside Ave
- **Location 2:** Church Hill Road (US-6) from Flagpole Boulevard to Glover Avenue, from Queen Street to South Main Street
- **Location 3:** Mile Hill Road to Trades Lane to South Main Street
- **Location 4:** CT-34 and Jordan Hill Road.



Figure 2: Walk Audit

## **Existing Efforts**

*A review of various government plans and documents was completed to ensure alignment with larger statewide and regional initiatives related to roadway safety. This Safety Action Plan will build upon larger projects to ensure Newtown, Connecticut, reaches its Vision Zero Resolution.*

### **State Plans and Documents**

#### **CT Strategic Highway Safety Plan (2022-2026)**

Connecticut's Strategic Highway Safety Plan (SHSP) is a statewide, data-driven, comprehensive, and multidisciplinary transportation plan emphasizing education, enforcement, engineering, and emergency response. Connecticut's SHSP provides the framework to collaborate and prioritize safety needs and investments, striving to reduce injuries and fatalities on the state's roadways. This Safety Plan highlights specific performance measures, including fatalities, fatality rate, serious injuries, serious-injury rate, and non-motorized fatalities. Connecticut's SHSP emphasizes infrastructure, driver behavior, and pedestrian safety, identifying key strategies to mitigate roadway fatalities and serious injuries at intersections, reduce roadway departures, and address impaired, aggressive, and distracted driving. Connecticut and other states have been developing and updating their SHSPs regularly since 2005, resulting in more focused, accountable, and effective transportation outcomes. This document also describes the SHSP update process, stakeholder engagement, and additional safety emphasis areas.

#### **CTDOT Vulnerable Road User Safety Assessment (2022-2026)**

The Connecticut Vulnerable Road User (VRU) Safety Assessment is an amendment to the Strategic Highway Safety Plan (SHSO), providing an assessment of fatal and serious injury crashes that involve a pedestrian, bicyclist, or person on a personal conveyance device. This document evaluates the needs and priorities of VRUs through extensive collaboration with federal, state, local, and municipal agencies, prioritizing safety investments and mitigating safety concerns. In response to increasing numbers of roadway fatalities and serious injuries, this document analyzes crash trends based on severity, crash period, crash time, location, and the characteristics of select roadways as a basis for understanding the current safety conditions of Connecticut's roads. After providing a narrative review of

ongoing crash and safety trends, this document suggests data-driven strategies to improve the safety of all road users in Connecticut.

### **CTDOT ADA Self-Evaluation and Transition Plan (2024)**

The Americans with Disabilities Act (ADA) of 1990 prohibits discrimination against individuals with disabilities in all walks of life. The Connecticut Department of Transportation has updated its ADA Transition Plan to document the state's commitment to equitable and accessible transportation options for all who require them. Updating this ADA Transition Plan involves detailed personnel education, conducting ADA compliance inventories, and utilizing the Transportation Enterprise Database to manage data and asset inventories. The 2024 update of the ADA Transition Plan involves several additions, including a CTDOT District Map and updated policies, procedures, schedules, regulations, and standards related to ADA accessibility in transportation.

### **CT National Recreational Trails Program (2011)**

A critical source of funding for trail projects around the state has been the Recreational Trails Program (RTP), which provides grants to state governments, local governments, and organizations for construction, maintenance, and educational projects on trails around the United States. Trails and greenways positively impact communities by providing recreation and transportation while influencing economic and community development. The benefits of promoting trails include preserving open spaces, encouraging physical fitness and healthy lifestyles, and creating new opportunities for outdoor recreation, all while protecting the environment and culturally and historically valuable areas. This document includes a status report and a reference to the program's goals: ensuring the continuity and linkage of trail systems around the state, developing areas for all trail users in the state, ensuring public participation in and support of state trail programs, ensuring construction and maintenance of trails in an environmentally sound manner, and utilizing trails as an educational venue.

### **CT Active Transportation Plan (2019)**

The Active Transportation Plan is an evidence-based, action-oriented plan designed to meet the needs of pedestrians and cyclists in Connecticut. CTDOT is committed to ensuring

residents can safely walk and bike, promoting healthier lives, more vibrant and active communities, and a more sustainable environment. This plan highlights the wide range of changes being developed by the Connecticut Department of Transportation, designed to incorporate aspects of active transportation facilities into ongoing and future transportation projects. This plan outlines CTDOT's future goals, categorized into programs and infrastructure investment, while presenting construction projects to be initiated over the next six years to improve roadway safety. This plan also includes detailed strategies and actions for policies, programs, and infrastructure improvements tailored to the needs of pedestrians and bicyclists.

## **Regional Plans and Documents**

### **WestCOG Regional Transportation Safety Plan**

In accordance with the Connecticut Statewide Safety Plan, the WestCOG Regional Transportation Safety Plan serves as a strategic roadmap to help the Western Connecticut Region and its 18 member municipalities increase and alter safety awareness and perceptions for all road users, including motorists, bicyclists, and pedestrians. Developed through extensive local input from 18 individual municipalities, this data-driven, multimodal, and multidisciplinary plan uses the four E's of transportation safety: engineering, enforcement, education, and emergency response as its foundation. This plan identifies the region's high-frequency crash locations and emphasis areas, outlining actionable countermeasures and strategies to reduce crashes. It also helps the region prioritize potential projects and secure safety-related funding.

### **WestCOG Complete Streets Prioritization Plan**

WestCOG's Complete Streets Prioritization Plan includes a list of Complete Streets projects categorized by the project's municipality, the related project number, and its description, funding programs, project status, estimated funds, and the appropriate complete streets element.

### **WestCOG Plan of Conservation (2020-2030)**

The Western Connecticut Plan of Conservation and Development (POCD) was developed in compliance with Section 8-35a of the Connecticut General Statutes, which requires each

Council of Governments to create and maintain a new plan every ten years. This plan must include an overview of the geographic area's general use, encompassing land use, housing, transportation, and public utilities. The Regional Plan of Conservation and Development has multiple functions, including providing advice on Responsible Growth strategies, coordinating water and sewer utilities between towns, marketing the region as a coordinated jurisdiction, assisting private investments, addressing regional input to state plans and along municipal boundaries, and meeting the mandate for land use/transportation coordination. This document provides an overview of the region's existing conditions, including infrastructure, housing, natural resources, demographic trends, ties to the concept of regionalism, land use, and economic priorities.

## **Local Plans and Documents**

### **Town of Newtown: Plan of Conservation and Development (2025)**

The Newtown Plan of Conservation and Development (POCD) serves as a strategic guide for the management of Newtown's land use and infrastructure investments throughout the span of the next decade. Analysis of Newtown's existing resources, constraints, and future projects has guided the creation of a vision for Newtown's physical layout, economic and safety concerns, and quality of life for its residents. Its goals lie in creating a more sustainable and efficient future through the direct integration of policies and objectives to address evolving trends and by enhancing and improving living standards for long-standing residents and newcomers. This plan will consider factors of demographic trends and population growth, economic development, housing costs, employment, land use, and transportation trends while incorporating feedback from residents to align this plan with the community's needs and goals. Guided by a foundational vision statement, this plan outlines several key objectives and recommendations that address its essential components, ultimately improving the quality of life for all Newtown residents.

### **Engineering Study of the Flagpole and Main Street Intersection**

This Intersection Improvement Study was prepared to provide the Town of Newtown with a recommended concept plan to improve the overall safety and operational characteristics of the existing STOP-controlled intersections of Main Street and Church Hill Road/West

Street #2 and Main Street at West Street. To address overall safety concerns regarding this intersection, this study was developed to assist the Town in developing a recommendation to modify the intersection layout, traffic control devices, lane arrangements, and pedestrian facilities to enhance safety. This report provides a description of the existing roadway network, highlighting roadways, traffic volume, traffic field observations, and crash history. To plan for the future, this report provides forecasted traffic volumes categorized by year, as well as alternative concept plans considered during the planning and development process. The findings of this study were prepared for the Town of Newtown, including a Concept Plan to improve the overall safety and operational characteristics of the evaluated STOP-controlled intersection.

## Safety Analysis

The crash data was collected from the University of Connecticut's Crash Data Repository (CTCDR) website for the years 2019-2023. CTCDR data is based on the information from the crash report recorded by the law enforcement officer who filed the report. This chapter provides an overview of key information gathered through analysis of this crash data. Crashes on freeways are not included in this analysis.

### Crash Data Overview

Between 2019 and 2023, approximately 1,184 lives were lost on Connecticut roads. The rate of fatalities increased steadily from 2019 to 2022 before declining by 14% in 2023. More than 20% of the fatalities involved pedestrians or cyclists. Serious injury crashes decreased by 4% in 2020 compared to the previous year, but then increased again by 5% in 2021. Since 2021, the number of serious injury crashes has remained relatively stable. The CTCDR records indicate that between 2020 and 2025, 145 fatal crashes occurred in the Western Connecticut Council of Governments (WestCOG) region. Of these, 9 occurred on Newtown's streets. During the same period, 19,767 serious injury crashes occurred in the Western Connecticut region. Of these serious injury crashes, 663 occurred in Newtown's municipal limits.

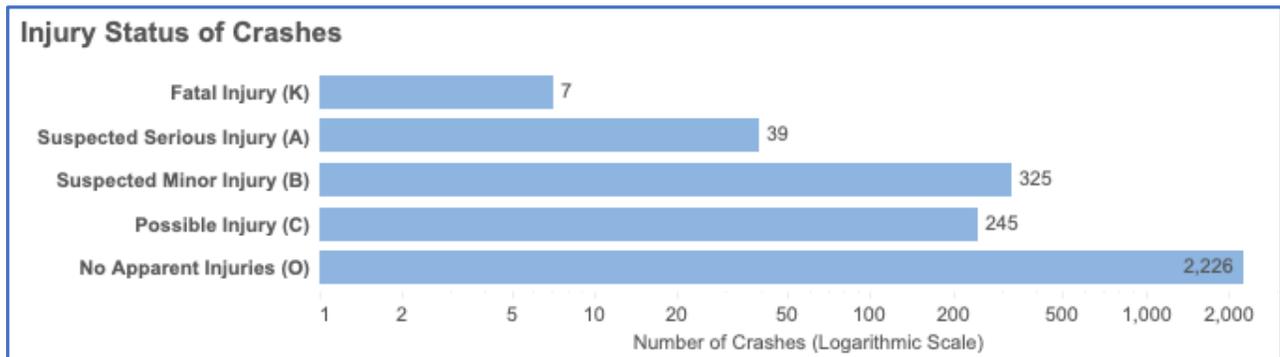


Figure 3: Crash Data 2020-2025 (CTCDR)

Crash Severity	Crashes	% of All Crashes
Fatal Injury (K)	7	0.25%
Suspected Serious Injury (A)	39	1.37%
Suspected Minor Injury (B)	325	11.44%
Possible Injury (C)	245	8.62%
No Apparent Injuries (O)	2,226	78.33%
<b>Grand Total</b>	<b>2,842</b>	<b>100.00%</b>

Figure 4: Crash Severity Percentage (CTCDR)

## Crash Trends Involving School Zones

Ensuring safe travel to and from school is a core priority for Newtown’s community. School zones experience a unique combination of high pedestrian activity, inconsistent driver behavior, and concentrated peak-hour traffic, creating conditions in which even minor roadway design or operational issues can lead to elevated safety risks. Analysis of recent crash data reveals a pattern of speeding, failure to yield, and distracted driving that disproportionately impacts these areas, particularly during morning arrival and afternoon dismissal periods. **Figure 5** depicts the location of school zones in Newtown, whereas **Figure 6** depicts school zones in reference to crash history.

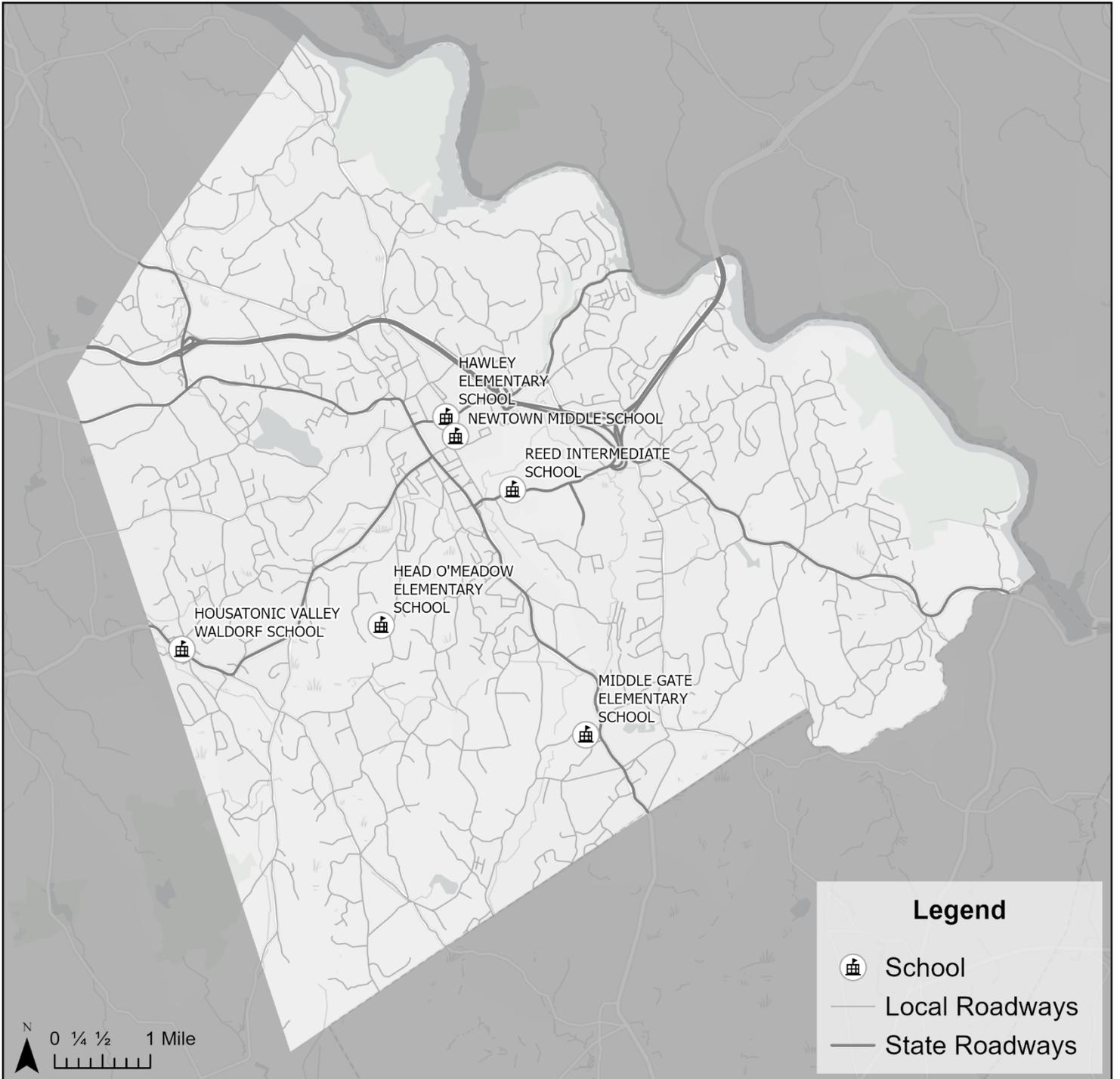


Figure 5: Newtown School Zones

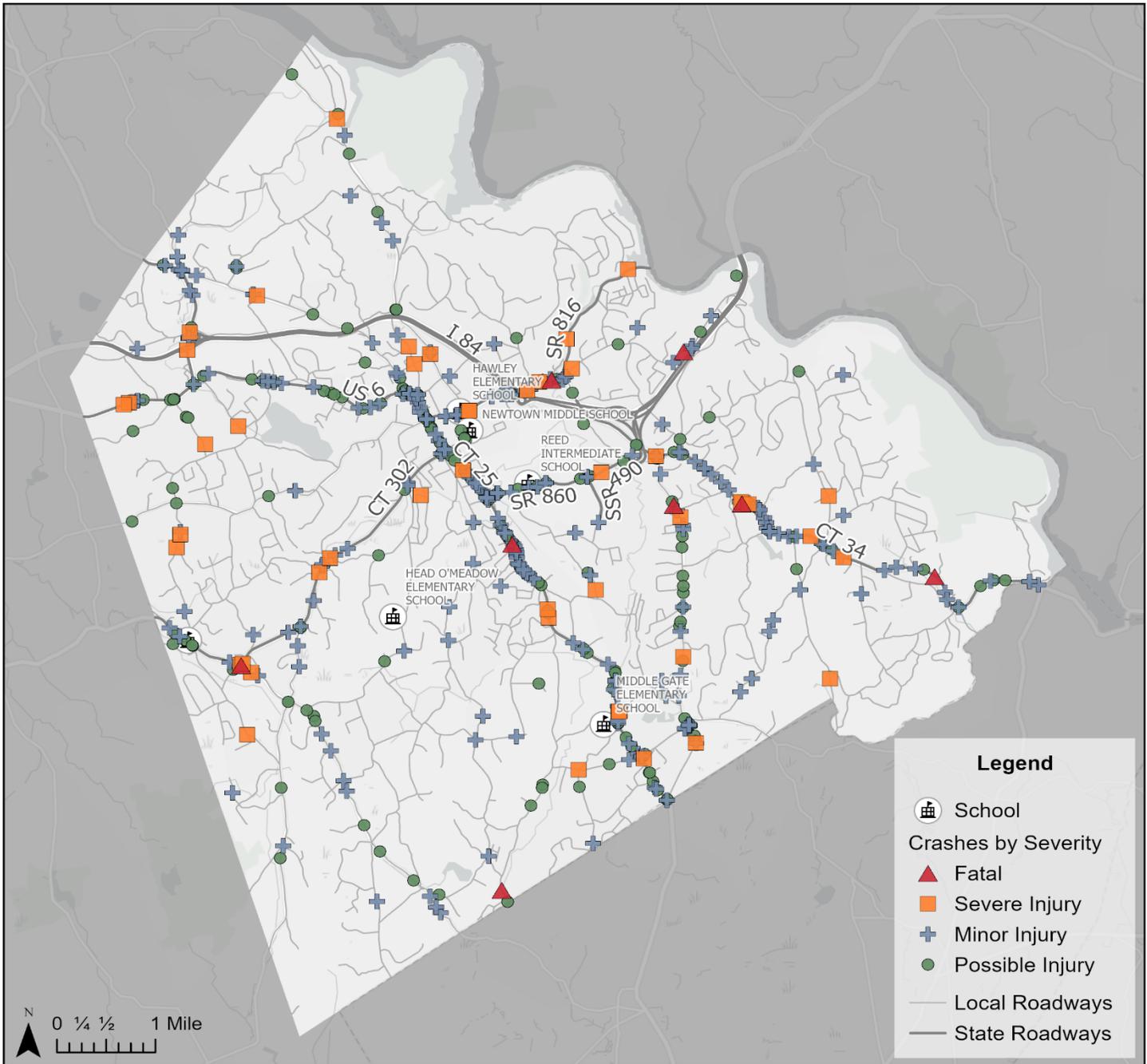


Figure 6: Newtown School Zone Crash History

## **High Injury Network (HIN)**

In the context of the SS4A program, a high injury network (HIN) is a network of streets and roads within a specific area that has a disproportionately high number of fatal and serious injury crashes. By identifying and analyzing these high-severity areas, HIN aims to prioritize interventions and allocate resources effectively to reduce the most severe crash outcomes.

For this action plan, the HIN was developed by analyzing both official crash data and community input to understand traffic safety priorities. At the time of analysis, detailed crash data was available until 2023. The data-driven analysis was completed using fatal and injury crash data between 2019 and 2023. The state-owned roadways and town-owned roadways were analyzed separately. These locations were then combined with the locations identified by residents and stakeholders through the public survey. The HIN provided the Town with a list of high-crash locations where proven safety countermeasures and strategies are expected to have a significant impact.

### **CRSMS**

The HIN was identified using the Connecticut Roadway Safety Management System (CRSMS). This web-based toolbox allows the user to identify high-crash locations based on methodologies documented in the Highway Safety Manual (HSM). The network screening module from this toolbox was used to determine the HIN. This is the first step in the six-step roadway safety management process included in the Highway Safety Manual. The purpose of this step is to rank sites and identify those that have the highest potential for crash reduction and safety improvements.

### **Public Survey Data**

Residents' and stakeholders' input from the public survey was also an integral part of the HIN development process. The survey data was matched against the CRSMS results. The locations that appear on both lists were considered the highest priority locations. The locations where the public felt unsafe, but lacked sufficient crash data to support the claim, were also included. If necessary measures are not taken, these places can become high-

crash locations. It is essential to evaluate road conditions, operations, driver behavior, and other factors at these locations to identify why drivers feel unsafe.

**Committee Input**

The SS4A committee developed for this action plan comprises members from several existing committees, such as the police committee, community committee, board of education, town-owned buildings committee, and Fairfield Hills complex committee. Each of these committees provided its input on locations of concern.

**Performance Measures**

The CRSMS toolbox provides multiple FHWA-recognized performance measures to utilize in the safety analysis. For this action plan, the “Equivalent Property Damage Only” (EPDO) method was used. EPDO attaches a greater numerical value to crashes resulting in a fatality (K) or a serious injury (A), a lesser number to crashes resulting in a moderate (B) or possible injury (C), and the least value to property damage only crashes (O). The EPDO score is weighted to the per-mile-per-year unit for segments and per year for intersections and is then adapted for ranking sites. The monetary consequences of crashes are determined using the Consumer Price Index (CPI) and Employment Cost Index (ECI) released by the U.S. Bureau of Labor Statistics (BLS) and updated annually. These values are integrated into the CRSMS system and are used automatically if EPDO is selected as the performance measure. **Table 3** shows the crash cost weight assigned to each level of severity.

*Table 3: EPDO Score Calculation*

Severity	Weight Factor	Crash Cost
Fatal (K)	574	\$6,415,389
Suspected Serious Injury (A)	30	\$338,576
Suspected Minor Injury (B)	11	\$123,646
Possible Injury (C)	6	\$69,541
Property Damage Only (O)	1	\$11,186

## Screening Methods

### *Simple Ranking*

The simple ranking method is the most straightforward approach to rank sites based on crash frequency. This method was used to rank the high-crash intersections for this report. Once an EPDO score is calculated for all intersections, this method ranks the intersections based on the value of the performance measure.

### *Sliding Window*

For identifying high-crash corridors, a sliding window method was used for this report. In this method, a window of a specified length is moved along the roadway segment with a specified incremental length. This process continues until it reaches the end of a continuous set of roadway segments. For each segment, the ranking is based on the window that has the highest EPDO score. For this analysis, a 0.25-mile window length was selected with a 0.1-mile increment.

## HIN Selection

Once the analysis was completed and the survey data were processed, the results were categorized into tiers. The criteria for each tier were:

- Crash Data - State Roads
  - ✓ Tier 1 - One Fatality (K) or Two Serious Injuries (A)
  - ✓ Tier 2 - One Serious Injury (A) or Two Minor Injuries (B)
  - ✓ Tier 3 - One Minor Injury (A) or One Possible Injury (C)
- Crash Data - Town Roads
  - ✓ Tier 1 - One Fatality (K) or One Serious Injury (A)
  - ✓ Tier 2 - One Minor Injury (B) or One Possible Injury (C)
- Survey Responses
  - ✓ Tier 1 – 10 or more responses/location
  - ✓ Tier 2 – 5 to 9 responses/location
  - ✓ Tier 3 – Less than one responses/location
- Committee Input

All tier 1 and tier 2 locations from both crash data and survey data were included in the HIN. Any locations of concern identified from committee input were also added to the HIN.

## Results

At the end of the selection process, the HIN comprised 25 state intersections, 10 town intersections, 13 state road segments, and five town road segments. **Table 4** depicts the HIN intersections within Newtown. **Table 5** provides the list of road segments included in the HIN. **Figures 7** and **8** show the high injury network in the context of Newtown.

Table 4: High Injury Network Intersections

Road Name	Ownership	Area	Type	Selection Criteria		
				Crash Data	Survey	Committee
CT-34 and Jordan Hill Rd	State	Urban	Unsignalized	Yes	Yes	Yes
CT-25 and US-6	State	Urban	Unsignalized	Yes	Yes	Yes
CT-25 and Button Shop Rd	State	Urban	Signalized	Yes	Yes	No
CT-25 and Country Club Rd	State	Urban	Unsignalized	Yes	Yes	No
CT-34 and Toddy Hill Rd	State	Urban	Signalized	Yes	Yes	No
CT-25 and Huntingtown Rd	State	Urban	Unsignalized	Yes	No	No
US-6 and Currituck Rd	State	Urban	Unsignalized	Yes	Yes	Yes
CT-25 and Currituck Rd	State	Rural	Unsignalized	Yes	Yes	No
CT-25 and Botsford Hill Rd	State	Urban	Signalized	Yes	Yes	Yes
CT-25 and SR-860	State	Urban	Signalized	Yes	Yes	No
US-6 and The Boulevard	State	Urban	Signalized	Yes	No	Yes
CT-302 and Elm Dr No 1	State	Urban	Unsignalized	Yes	Yes	Yes
CT-34 and Sherman St	State	Urban	Unsignalized	Yes	No	No
CT-25 and CT-302	State	Urban	Signalized	Yes	No	No
CT-34 and Bennetts Bridge Rd	State	Urban	Unsignalized	Yes	No	No
CT-302 and Key Rock Rd	State	Urban	Unsignalized	No	Yes	Yes
SR-860 and Queen St	State	Urban	Unsignalized	No	Yes	No
SR-860 and Mile Hill Rd South	State	Urban	Unsignalized	No	Yes	Yes
CT-302 and Hattertown Rd	State	Urban	Unsignalized	No	Yes	Yes
SR-816 and Walnut Tree Hill Rd	State	Urban	Unsignalized	No	Yes	No
SR-816 and Washington St	State	Urban	Signalized	No	Yes	Yes
US-6 and School House Hill Rd	State	Urban	Unsignalized	No	Yes	Yes

US-6 and Sawmill Rd No 1	State	Urban	Unsignalized	Yes	No	No
CT-302 and Head of Meadow Rd No 1	State	Urban	Unsignalized	Yes	No	No
CT-302 and Long View Heights Rd	State	Urban	Unsignalized	Yes	No	No
Meadow Brook Rd and Pine Tree Hill Rd	Town	Urban	Unsignalized	Yes	No	No
Flat Swamp Rd and Jangling Plains Rd	Town	Urban	Unsignalized	Yes	No	No
Cherry St and Cherry Heights Ter	Town	Urban	Unsignalized	Yes	No	No
Glover Ave and Queen St	Town	Urban	Unsignalized	Yes	Yes	No
Old Hawleyville Rd and Meridian Ridge Dr	Town	Urban	Unsignalized	Yes	No	No
Botsford Hill Rd and Swamp Rd	Town	Urban	Unsignalized	Yes	Yes	No
Hattertown Rd and Key Rock Rd	Town	Urban	Unsignalized	Yes	Yes	No
Hattertown Rd and Hi-Barlow Rd No 2	Town	Urban	Unsignalized	Yes	Yes	No
Jeremiah Rd and Misty Vale Rd	Town	Urban	Unsignalized	Yes	Yes	No
Toddy Hill Rd and High Bridge Rd	Town	Urban	Unsignalized	Yes	Yes	No

Table 5: High Injury Network Road Segments

Name	From	To	Length (miles)	Ownership	Area	Selection Criteria		
						Crash Data	Survey	Committee
CT-34 (Berkshire Rd)	Sherman St	Old Mill Rd.	0.61	State	Urban	Yes	No	No
CT-302 (Sugar St)	Hattertown Rd	Rock Ridge Rd	0.23	State	Urban	Yes	No	No
US-6 (Mt. Pleasant Rd)	Redwood Dr.	Pocono Road	0.87	State	Urban	Yes	No	No
CT-25 (S Main St.)	Appleblossom Ln	Greenbriar Ln	0.3	State	Urban	Yes	No	No
CT-25 (S Main St.)	Wills Rd	Pecks Ln	0.45	State	Urban	Yes	No	No
SR-816 (Glen Rd)	Riverside Rd	27 Glen Rd	0.48	State	Urban	Yes	Yes	No
CT-25 (S Main St.)	Country Club Rd	Laurel Rd	0.35	State	Urban	Yes	Yes	No
CT-25 (S Main St.)	Botsford Hill Rd	Kay Ln	0.35	State	Urban	Yes	No	No
CT-25 (Main St.)	Glover Ave	West St	0.35	State	Urban	Yes	No	No
US-6 (Main St)	Church Hill Rd	Currituck Rd	0.34	State	Urban	Yes	No	No
US-6 (Church Hill Rd)	CT-25 (Main St.)	The Blvd	0.45	State	Rural	Yes	No	No
SR-816 (Church Hill Rd)	Glen Rd	Walnut Tree Hill Rd	0.38	State	Urban	Yes	No	No
SR-860 (Mile Hill Rd)	CT-25 (S Main St.)	Trades Ln	0.58	State	Urban	Yes	No	No
Toddy Hill Rd	Sugarleaf Rd.	CT-34 (Berkshire Rd.)	0.63	Town	Urban	Yes	No	No

Huntingtown Rd	Brushy Hill Road	Sycamore Drive	0.86	Town	Urban	Yes	No	No
Riverside Rd	Washington Ave	Center Street	2.58	Town	Urban	Yes	No	No
Glover Ave	Queen St	CT-25 (S Main St)	0.23	Town	Urban	Yes	Yes	Yes
Botsford Hill Rd	CT-25 (S Main St)	Railroad Bridge	0.57	Town	Urban	Yes	Yes	Yes
Toddy Hill Rd	Railroad Bridge	Little Brook Lane	0.59	Town	Urban	Yes	No	No

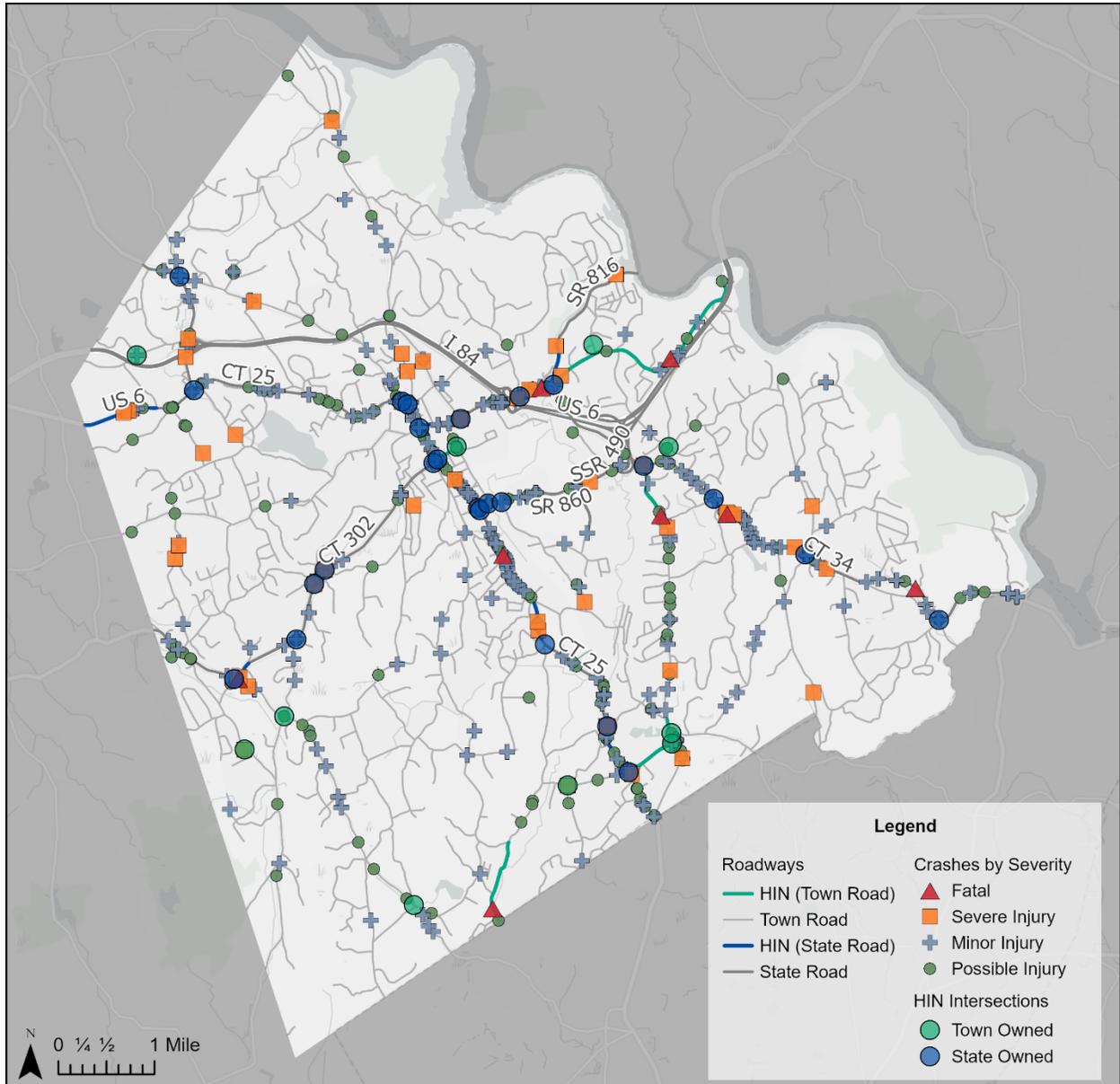


Figure 7: Newtown High Injury Network (With Intersections)

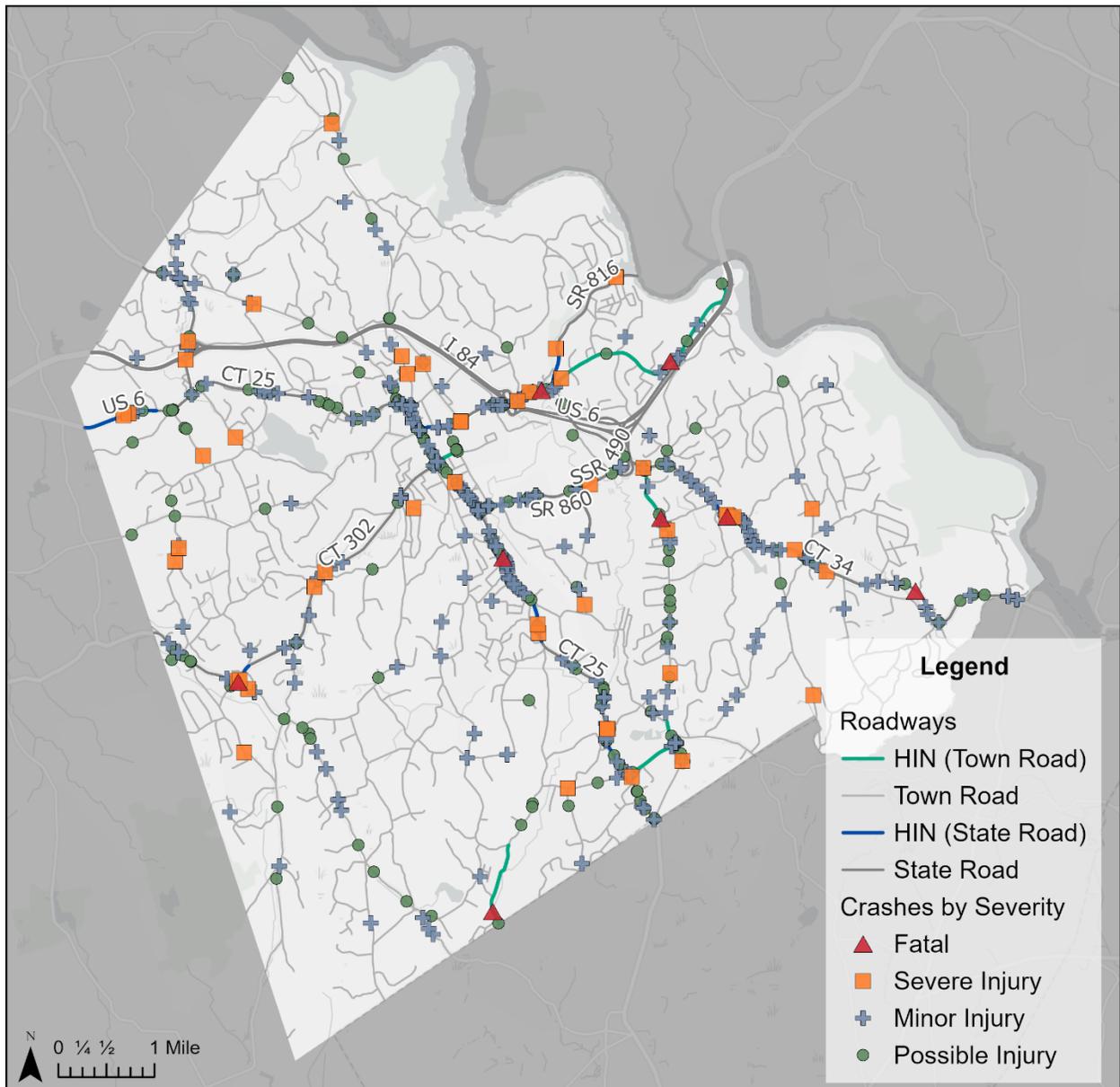


Figure 8: Newtown High Injury Network (No Intersections)

# HIGH INJURY NETWORK SUMMARY

## Intersections



- 71% State Intersections
- 29% City Intersections

- 20% Signalized Intersections
- 80% Unsignalized Intersections

- 43% of Intersections on the HIN were deemed unsafe both by residents and historical crash data

## Roads Segments



- 68% State Road Segments
- 32% City Road Segments

- 95% in Urban Areas
- 5% in Rural Areas

- 27% of segments on the HIN were deemed unsafe both by residents and historical crash data

Figure 9: HIN Summary

## Equity

*Access to safe and affordable transportation options impacts quality of life. Considering the types and extent of underrepresentation in an area and the challenges faced by those groups is essential in ensuring mobility and accessibility for all residents.*

Transportation options in Newtown are strategically developed to support the quality of life of all of its residents. Significant investments are made in infrastructure systems to support both residents and businesses. This entails enhancing transportation networks for efficient and reliable connectivity across the Town. This report emphasizes increasing public transportation options to support residents adapting to high energy costs, providing alternatives to private vehicle use, reducing traffic congestion and emissions, and improving overall accessibility.

Moreover, safety remains paramount as roadway crashes have tragically affected families and communities. Ensuring safe, reliable access to transportation, particularly for individuals with mobility challenges or health vulnerabilities, is crucial for creating and maintaining a thriving, inclusive community. This effort encompasses creating a transportation network that prioritizes safety and accessibility for all, especially for vulnerable populations. **Figure 10** illustrates the median income of Newtown residents with recent crash history. **Figure 11** depicts households without access to personal vehicles, compared to crash history.

By prioritizing safety interventions to address the specific needs of vulnerable populations, Newtown is committed to building and sustaining a safer transportation network for all users. This dedication to improving roadway safety will increase the well-being and quality of life for all residents, creating a more connected and secure community.

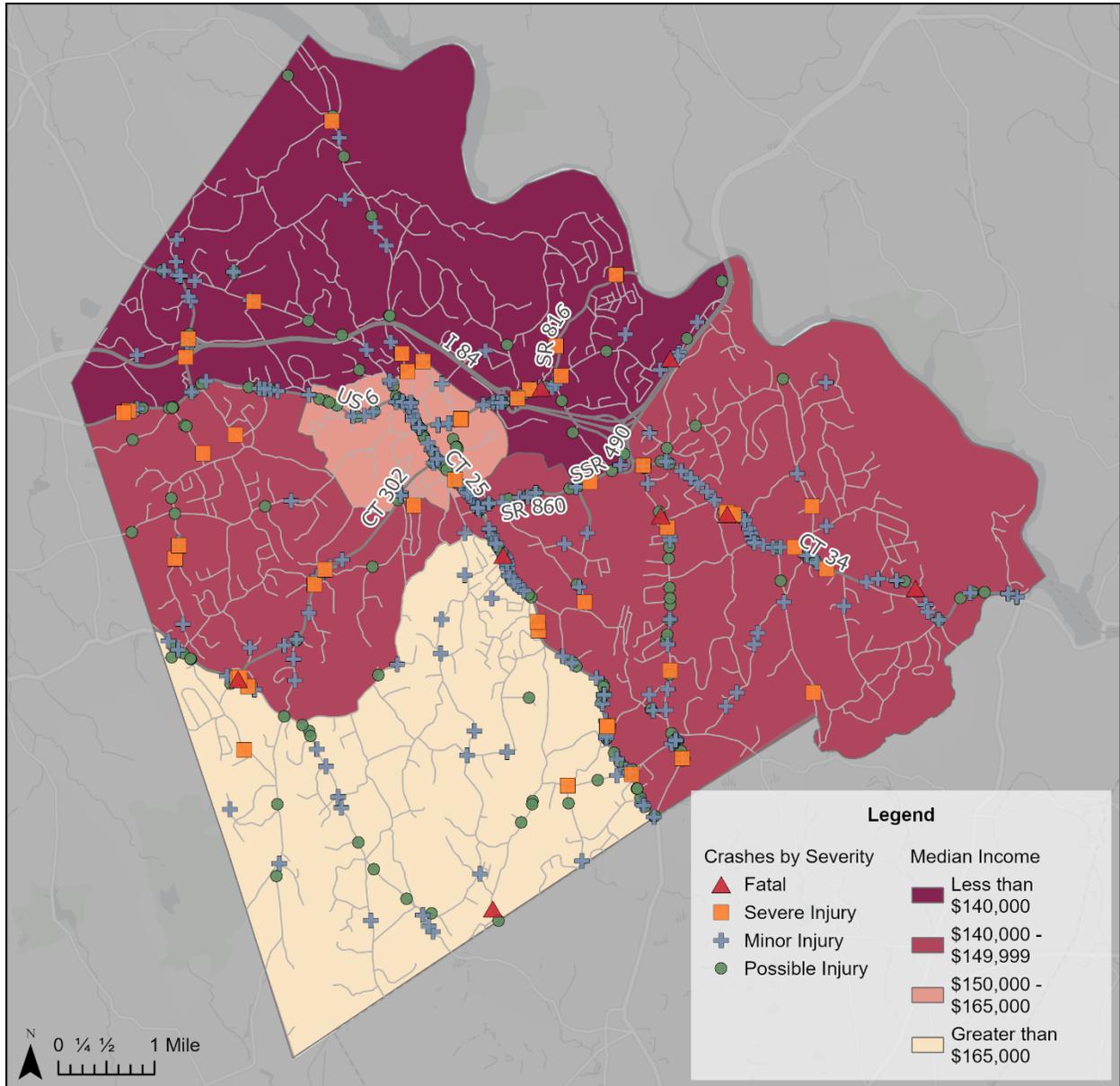


Figure 10: Median Income and Crash History

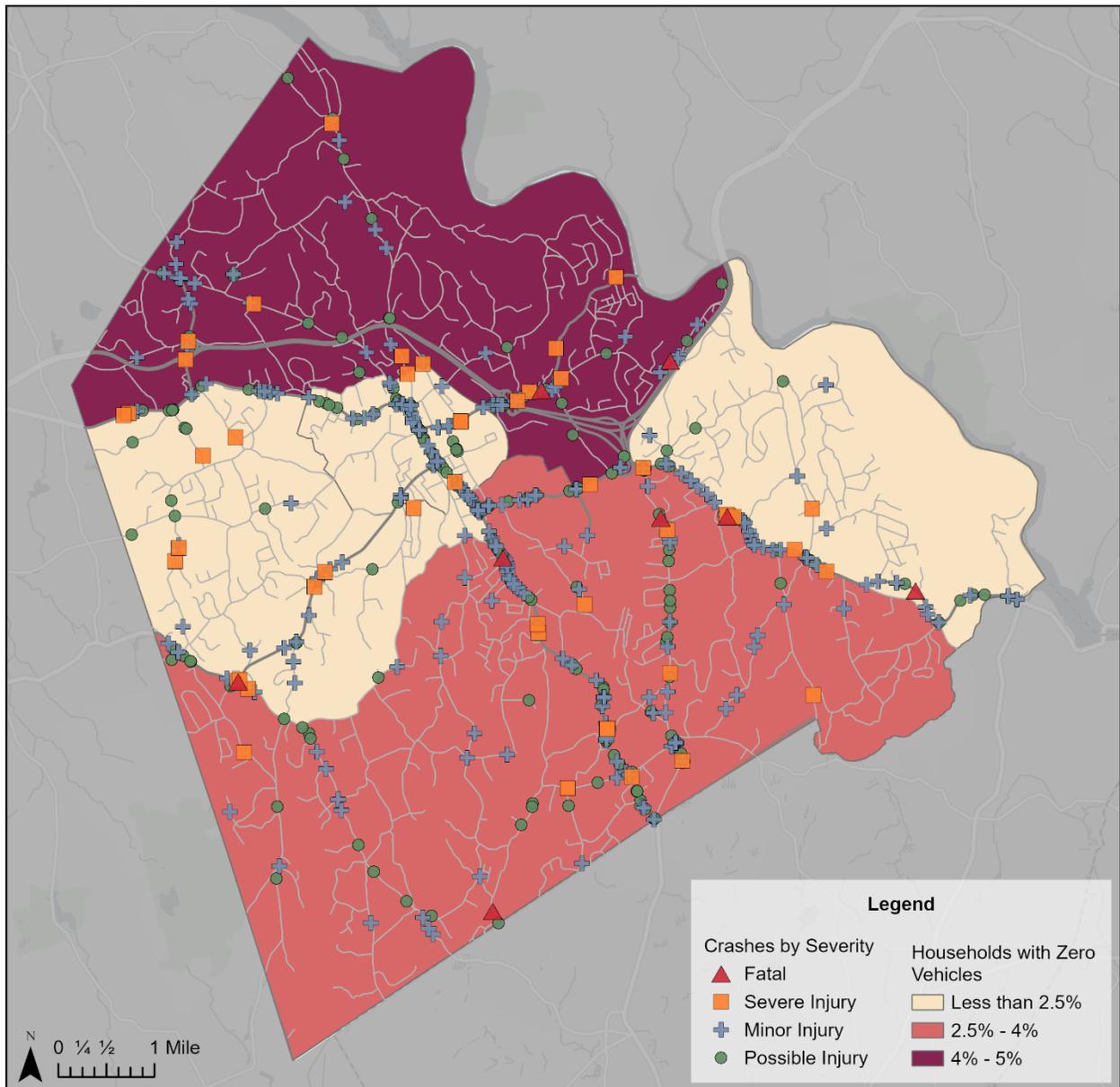


Figure 11: Households with Zero Vehicles and Crash History

## Safety Countermeasures

### Potential Countermeasures

Based on rigorous safety analysis, the contributing factors behind the crashes on Newtown's streets can be attributed to both physical infrastructure and the behavior of road-users. The Safe System Approach emphasizes designing transportation systems in a way that if one countermeasure fails, another will help prevent a crash, or in the event of a crash, lessen the likelihood of serious injury or death.

**Table 6** and **7** provides potential engineering countermeasures for reducing crashes at intersections and roadway segments. **Table 8** provides potential non-engineering countermeasures. The efficacy of these selected countermeasures depends on several factors, including crash type, level of severity, roadway type, and annual average daily traffic. Before implementing any of these countermeasures, a comprehensive investigation of the selected locations is required to ensure feasibility and local context. To measure the effectiveness of these strategies, the measurement is calculated in terms of the Crash Modification Factor (CMF). A CMF is a multiplicative factor that can be directly applied to the number of crashes at a specific site to compute the number of anticipated crashes remaining after a countermeasure is implemented.

$$\textit{Expected Crashes with Treatment} = \textit{Expected Crashes without Treatment} * \textit{CMF}$$

Countermeasure		Safe System Element	Cost	Effectiveness
<b>Rumble Strip</b>	Install centerline, edge line and/or shoulder ramp rumble strips	Safer Road, Safer Speed	Low	0.4
	Install transverse rumble strips in advance of intersections		Low	0.9
<b>Optical Speed Bar</b>	Install optical speed bars	Safer Road, Safer Speed	Medium	0.3-0.8
<b>Clear Zone</b>	Increase distance to roadside features	Safer Road	Medium	0.0078
	Flatten Side Slope		Medium	0.88-0.92
<b>Access Management</b>	Reduce driveway density	Safer Road	Low-Medium	0.69-0.75
<b>Lighting</b>	Provide highway lighting	Safer Road, Safer People	Medium	0.31-0.83
	Provide intersection illumination		Medium	0.58-0.67
<b>Friction</b>	Install high friction surface treatment (HFST)	Safer Road	Low	0.52
	Increased pavement friction		Low	0.88
<b>Barriers</b>	Install cable barrier and guardrail	Safer Road	Medium-High	0.43
	Install median barrier		Medium High	0.03
<b>Turn Lanes</b>	Improve left-turn lane offset to create positive offset	Safer Road	Medium-High	0.74-0.86
	Installation of right-turn lanes		Medium High	0.52-0.72
	Improve the angle of channelized horizontal curves		Medium-High	0.36-0.56
<b>Horizontal Curvature</b>	Install chevron signs on horizontal curves	Safer Road, Safer Speed	Low	0.75-0.84
	Install/Upgrade existing curve signs to fluorescent sheeting		Low	0.82
	Advance static curve warning signs		Low	0.7
	Install in-lane curve warning pavement markings		Low	0.65
<b>Signs and Markings</b>	Install dynamic speed feedback signs	Safer Road, Safer People	Low	0.78-0.95
	Install wider lanes		Low-Medium	0.64
	Provide "Stop Ahead" pavement markings		Low	0.11-0.34
	Increase retro reflectivity of STOP signs		Low-Medium	0.8-0.9
	Install Safety EdgeSM technology when resurfacing roadways		Low-Medium	0.79-0.89

Table 6: Potential Engineering Countermeasures

Countermeasure		Safe System Element	Cost	Effectiveness
<b>Signs and Markings (contd.)</b>	Add lane lines on multilane roadway segments	Safer Road, Safer People	Low	0.82
	Painted channelization of both major and minor roads		Low	0.43
	Systemic application of low-cost countermeasures (signing, delineation, and pavement markings) at stop-controlled intersections		Low-Medium	0.73-0.95
<b>Traffic Signals</b>	Improve Left Turn Phasing	Safer Road	Medium-High	0.24-0.69
	Use flashing yellow arrow left turn		Medium-High	0.35-0.85
	Modify yellow change interval		Low-Medium	0.88-0.92
	Improve signal visibility		Low-Medium	0.71-0.79
	Install dynamic signal warning flashers		Low-Medium	0.75-0.81
	Add retroreflective sheeting to signal back plates		Low-Medium	0.85
<b>Traffic Calming</b>	Area-wide or corridor-specific traffic calming	Safer Road, Safer People, Safer Speed	Low-to High	0.82-0.94
	Install transverse rumble strips as a traffic calming device		Low	0.64-0.73
	Road Diet/Reconfiguration		Low to High	0.53-0.81
<b>Pedestrians and Bicycles</b>	Add exclusive pedestrian phasing	Safer Road, Safer People, Safer Speed	Medium	0.65
	Leading pedestrian intervals		Medium	0.87
	Increase pedestrian crossing time at signals		Medium	0.49
	Install pedestrian countdown timer		Medium-High	0.45-0.95
	Install a pedestrian hybrid beacon (PHB or HAWK)		Medium	0.54-0.85
	Install a rectangular rapid flashing beacon (RRFB)		Medium	0.53
	Install a High Visibility Crosswalk		Medium	0.6
	Install raised median or pedestrian refuge island		Medium High	0.44-0.54
	Install/repair sidewalks		Medium High	0.59
	Install Midblock crosswalks		Low	0.82
	Install cycle tracks, bike lanes, and/or on-street cycling		Medium-High	0.51-0.69

Table 7: Potential Engineering Countermeasures (Continued)

1. FHWA Proven Safety Countermeasures<sup>1</sup> FHWA Proven Safety Countermeasures<sup>2</sup>

<sup>1</sup> <https://highways.dot.gov/safety/proven-safety-countermeasures>

<sup>2</sup> <https://cmfclearinghouse.fhwa.dot.gov>

	Countermeasure	Timeline	Partners
<b>Policy</b>	Set appropriate speed limits based on land use	Long	 
	Re-evaluate speed limits on existing roadways and implement projects	Medium to Long	
	Encourage and implement Complete Streets for future projects	Medium	
	Improve safety data collection and integration method	Medium	
	Encourage and incentivize alternative transportation options in the region	Short	
<b>Enforcement</b>	Use radar speed feedback signs	Short	 
	Conduct high visibility speed and sobriety enforcement	Short	
	Consider Automated Traffic Enforcement Safety Devices (ATESDs)	Medium	
	Encourage collaboration between local and State police	Short	
<b>EMS</b>	Coordinate with EMS providers to identify and mitigate issues related to timely arrival at crash scenes and provide appropriate medical services	Short to Medium	 
<b>Education</b>	Implement Driver Education programs to reduce aggressive and dangerous behaviors by drivers	Short	   
	Educate pedestrians and bicyclists about safe practices while on the road.	Short	
	Coordinate with high schools to deploy national speed awareness education campaigns	Short	
	Partner with agencies to develop and market material (e.g., videos, flyers, online materials, advertisements) through various channels such as social media, Town websites, newsletters, emails, and chamber of commerce meetings	Short to Medium	

Table 8: Non-Engineering Countermeasures

1. Countermeasures that Work 3 2. CTDOT Strategic Highway Safety Plan (SHSP)

<sup>3</sup> <https://www.nhtsa.gov/book/countermeasures/countermeasures-that-work>

## **Project Selection**

Based on comprehensive data analysis and input from the Town of Newtown, several potential projects were identified. These projects cover both system-wide and site-specific improvements, with concept plans focused on multiple safety issues identified through public input and data analysis.

The purpose of this Action Plan was to develop a framework to improve roadway safety on Newtown's streets. To ensure the efficacy of the suggested countermeasures included in this report, collaboration with CTDOT, WestCOG, and the Town of Newtown must be facilitated. Newtown's residents, project committees, and municipal leadership have committed to bringing these strategies to fruition through the implementation of this Action Plan.

## System-Wide Improvements

### *Optical Speed Bars*

Many municipalities in Connecticut face continued challenges with speed-related crashes, especially in areas with high pedestrian traffic or sharp curves. Traditional physical traffic-calming measures can be costly and disruptive. There is a need for low-cost, easily deployable solutions to reduce speeds and improve overall safety. Optical speed bars are transverse pavement markings placed perpendicular to the travel lane. The spacing between bars decreases progressively, creating the illusion that the vehicle is accelerating, prompting drivers to slow down.

The benefits of optical speed bars include:

- Speed reduction: Proven to reduce operating speeds
- Crash mitigation: Lowers speeds to reduce crash likelihood and severity.
- Versatility: Applicable in curves, transition zones, school zones, and pedestrian safety zones
- Cost-effectiveness: Requires only pavement markings, minimizing infrastructure changes.

Due to the fact that the optical speed bars appear to pass faster as the spacing narrows, drivers get the illusion that they are speeding, even if their actual speed is constant. This optical illusion encourages drivers to slow down naturally, improving safety without the presence of physical barriers. Optical speed bars align with SS4A objectives by providing a proactive, evidence-based solution for effective speed management.

## ***AI School Bus Camera Enforcement Program***

In recent years, the use of AI-powered camera systems on school buses has rapidly expanded across North America, as school districts, municipalities, and law enforcement agencies seek to address the persistent problem of motorists illegally passing stopped school buses. Each year, tens of millions of these “stop-arm violations” occur, putting children at serious risk as they enter or exit school buses. To mitigate this problem, several technology vendors have developed intelligent cameras and analytic systems designed to detect violations automatically, capture high-quality evidence, and support automated citation workflows. Among several vendors, BusPatrol has emerged as a prominent player in the state of Connecticut, whereas other vendors, such as Verra Mobility, Gatekeeper Systems, and Safe Fleet, have gained popularity in other regions.

BusPatrol offers a cloud-connected safety program that equips school buses with high-definition cameras, AI detection systems, and real-time connectivity. When a bus’s stop arm is deployed, BusPatrol’s technology automatically detects and records vehicles that illegally pass, capturing license plate information, location, and video evidence. A distinctive feature of BusPatrol’s system is that it is funded by violators, meaning that school districts can implement the program with no upfront costs, as expenses are recovered through citation revenues. BusPatrol’s model involves full-fleet deployment, meaning every bus in the school district will be equipped with this technology.

## ***Automated Traffic Enforcement Safety Devices (ATESDs)***

Automated Traffic Enforcement Safety Devices (ATESDs) are camera and sensor-based systems that automatically detect traffic violations, including speeding, red-light running, school bus stop-arm violations, and illegal use of restricted travel lanes. By providing consistent, predictable enforcement, ATESDs can discourage dangerous driving behaviors that increase the frequency and severity of crashes. These devices are particularly effective in high-risk areas, such as school zones, pedestrian zones, and downtown areas with high levels of pedestrian and bicycle traffic. Enforcing high speeds at such locations significantly improves broader safety, especially for vulnerable road users. When implemented with clear signage, public outreach campaigns, and equity-focused policies, ATESDs are a proven tool for reducing crashes resulting in fatalities or any category of injury. In the context of

Connecticut, several municipalities have implemented or have planned to implement speed-enforcement camera programs, such as Middletown, West Hartford, Greenwich, Washington, Stratford, Wethersfield, and New Haven. Implementing ATESD devices requires significant logistical considerations and formal processes for program adoption. Connecticut law only recently authorized the use of speed cameras through Public Act 23-116 in 2023. To implement an ATESD program, municipalities must follow a state-regulated approval process, including the adoption of a town or city ordinance, approval from CTDOT, and a comprehensive application demonstrating that the identified camera locations are justified by relevant data. Once approved, municipalities must implement advanced signage and conduct a warning period before issuing citations. After implementation, Connecticut municipalities are required to monitor, report, and reevaluate program performance to ensure that ATESDs are actively improving safety rather than merely serving as a revenue tool. ATESD programs are typically funded through a mix of municipal upfront investment and citation revenue, with strict laws on how funds gathered by the devices can be used. Select municipalities have used third-party vendors that provide cameras and processing services under revenue-sharing or flat-fee contracts, reducing upfront costs. Revenue must be used for transportation safety purposes, including traffic calming, pedestrian improvements, and speed management. Typically, drivers who violate traffic laws receive a violation notice and fine by mail, including photographic evidence, the exact location, the nature of the violation, and the amount of the fine. These fines are generally civil penalties, rather than criminal charges, meaning that violations will not result in points on the driver's license under state law. The recipient will be given the option to pay the fine or contest the citation. This process ensures transparency and fairness while simultaneously improving roadway safety. In the context of the Safe System Approach, this strategy results in safer people, safer speeds, and safer roads. In summary, ATESD programs have expanded rapidly in Connecticut and have been shown to mitigate broader safety concerns, but they require continued commitment, substantial time, investment, and varying municipal resources.

## ***Dynamic Speed Feedback Signs (DSFS)***

Dynamic speed feedback signs (DSFS) improve roadway safety by providing drivers with real-time feedback on their speed, encouraging voluntary compliance with posted speed limits while reducing crash risk and severity. These signs are particularly effective in high-risk areas such as school zones, sharp curves, or areas with increased bicycle and pedestrian movements. The Transportation Research Board (TRB) has concluded that DSFS devices consistently reduce vehicle speeds by about 2-4 miles per hour across different locations and contexts. These contributions are critical because even a small decrease in speed can significantly reduce crash risk and severity. Research has shown that DSFS devices can lower average vehicle speeds by 5-15% and reduce the number of vehicles exceeding the speed limit. In effect, this strategy protects vulnerable road users in situations where a slight decrease in speed can determine the difference between life and death. This strategy is non-intrusive, relatively cost-effective, and can complement police speed enforcement and public awareness campaigns while providing critical data on local and regional speed patterns. By providing immediate feedback on driving behavior, these signs encourage drivers to adjust their speed proactively, enhancing roadway safety for all.

## ***Safe Routes to School Program (SRTS)***

The Connecticut Department of Transportation's Safe Routes to School Program (SRTS) can significantly improve safety for students of all ages by creating safer and more accessible paths for walking and biking to and from school. Through community collaboration, education programs, and bicycle and pedestrian infrastructure improvements, such as new sidewalks, bike lanes, improved school zone signage, and high-visibility crosswalks, this program reduces traffic hazards and unsafe conditions in and around school zones. The SRTS program helps prevent crashes involving student pedestrians and bicyclists and protects children on their daily commute to and from school. This state-funded initiative also includes education and encouragement activities like pedestrian safety training and walking and biking to school events that teach students and families how to utilize transportation modes to school other than school buses and personal vehicles. By combining physical infrastructure improvements, community engagement, and education,

CTDOT's SRTS program helps mitigate congestion at arrival and dismissal times, enhance traffic safety, and ensure that walking and biking to school are viable options for students and their families.

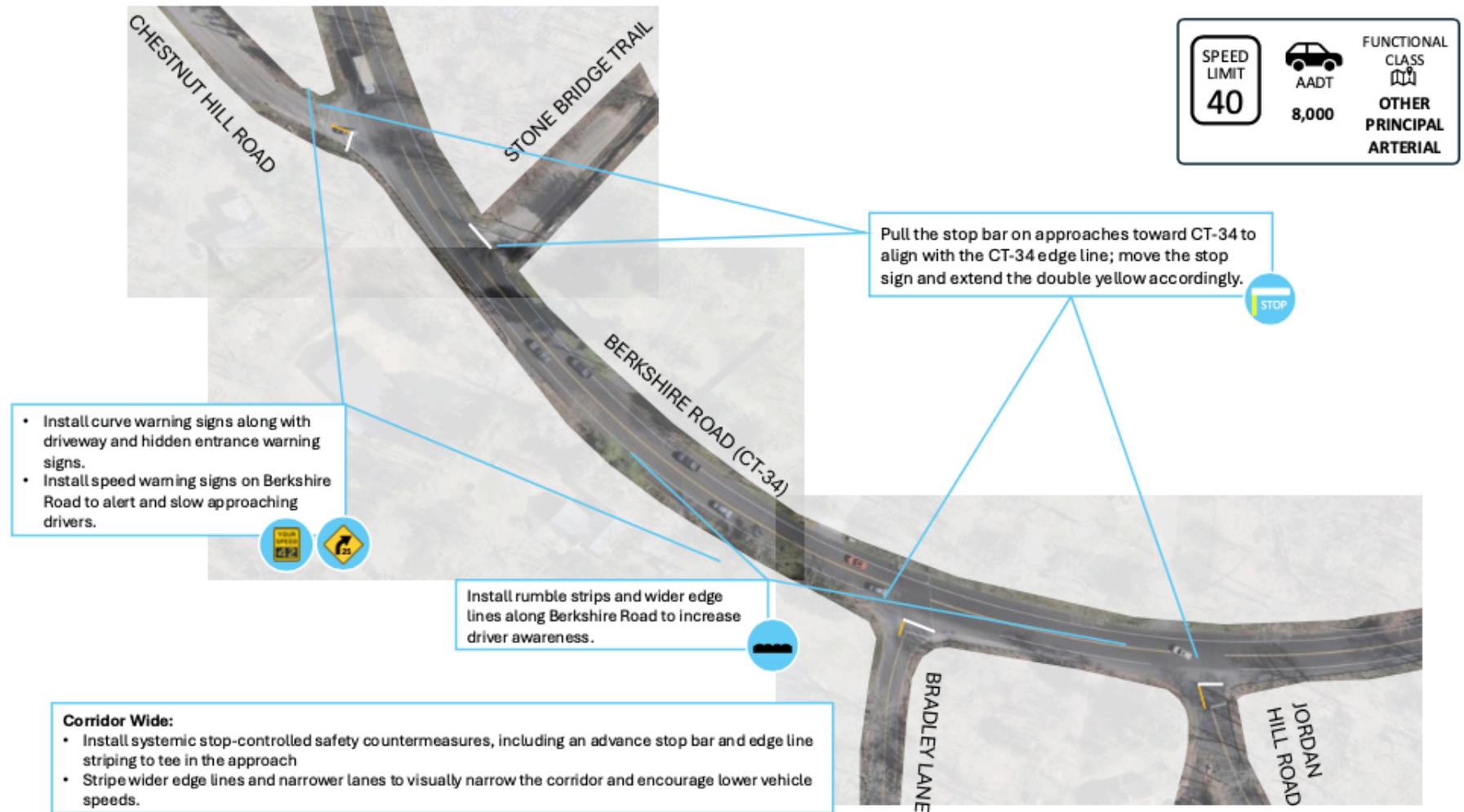
## Concept Plans

This Safety Action plan offers Newtown's dynamic community a proactive, data-driven approach to improving roadway safety and reducing serious injuries and fatalities. As a part of this effort, concept plans serve as a critical bridge between high-level safety goals and on-the-ground strategies needed to achieve meaningful change. These plans translate crash data, community input, walk audit observations, and systemic safety principles into clearly defined project ideas that can be advanced into full design and implementation. Each concept plan included in this Safety Action plan addresses location-specific safety issues. The purpose is not only to identify potential projects, but to demonstrate how these improvements collectively support a comprehensive, equitable, and multimodal approach to roadway safety. These concept plans represent the foundation for a safer transportation system in Newtown.

In addition to providing concept plans, the project team has also included estimated costs for each individual project. These estimates are based on decades of engineering experience from the project team, as reflected in comparable recent projects. To maximize the benefit of implementing these concept plans, these projects should be combined into one project for economy of scale and contract procurement simplicity. The engineering design cost is estimated at approximately 40 thousand dollars, whereas the total construction costs are estimated at around 100 to 120 thousand dollars.

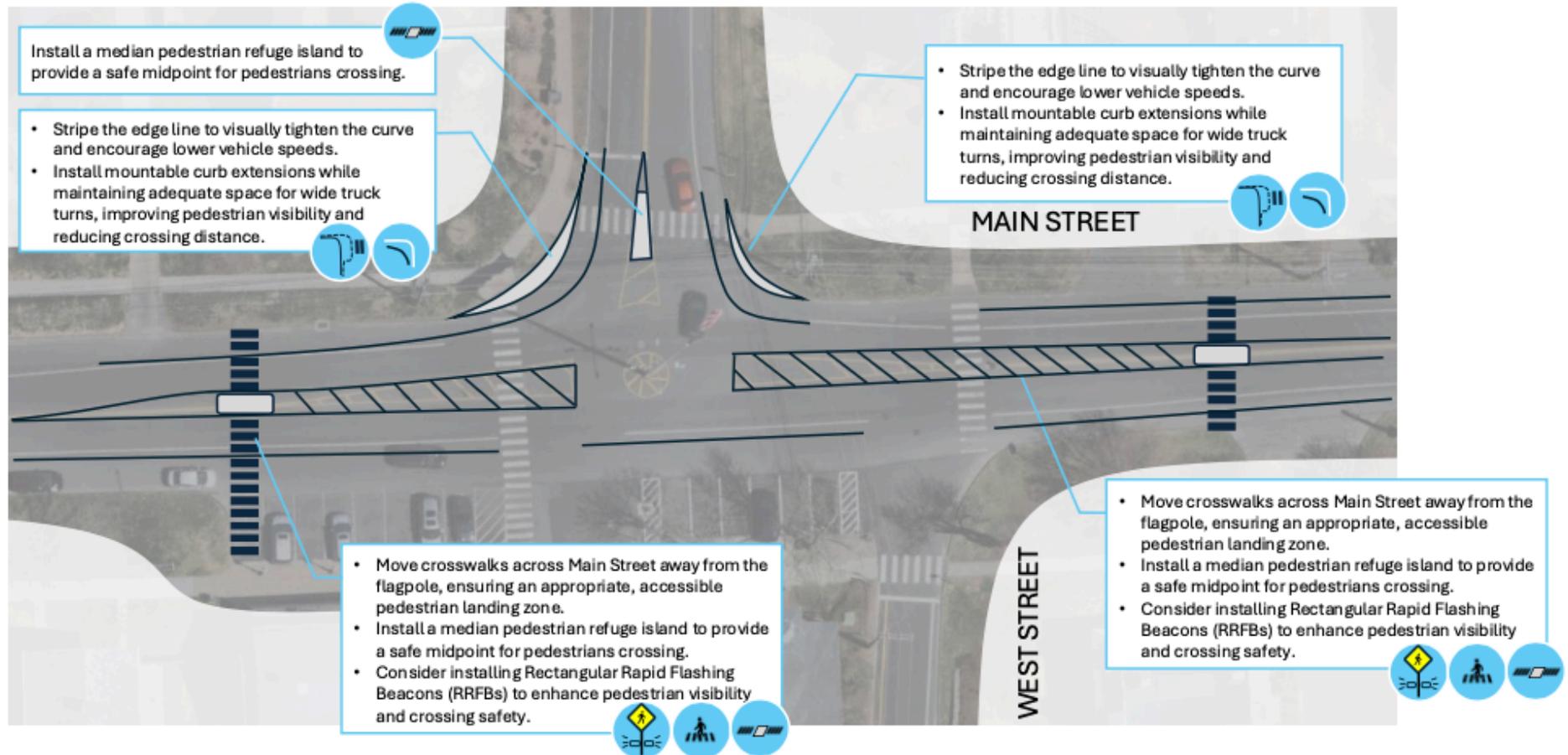
## Location 1: Berkshire Road (CT-34) Near Jordan Hill Road

Estimated Design Cost: \$5k, Estimated Construction Costs: \$10k.



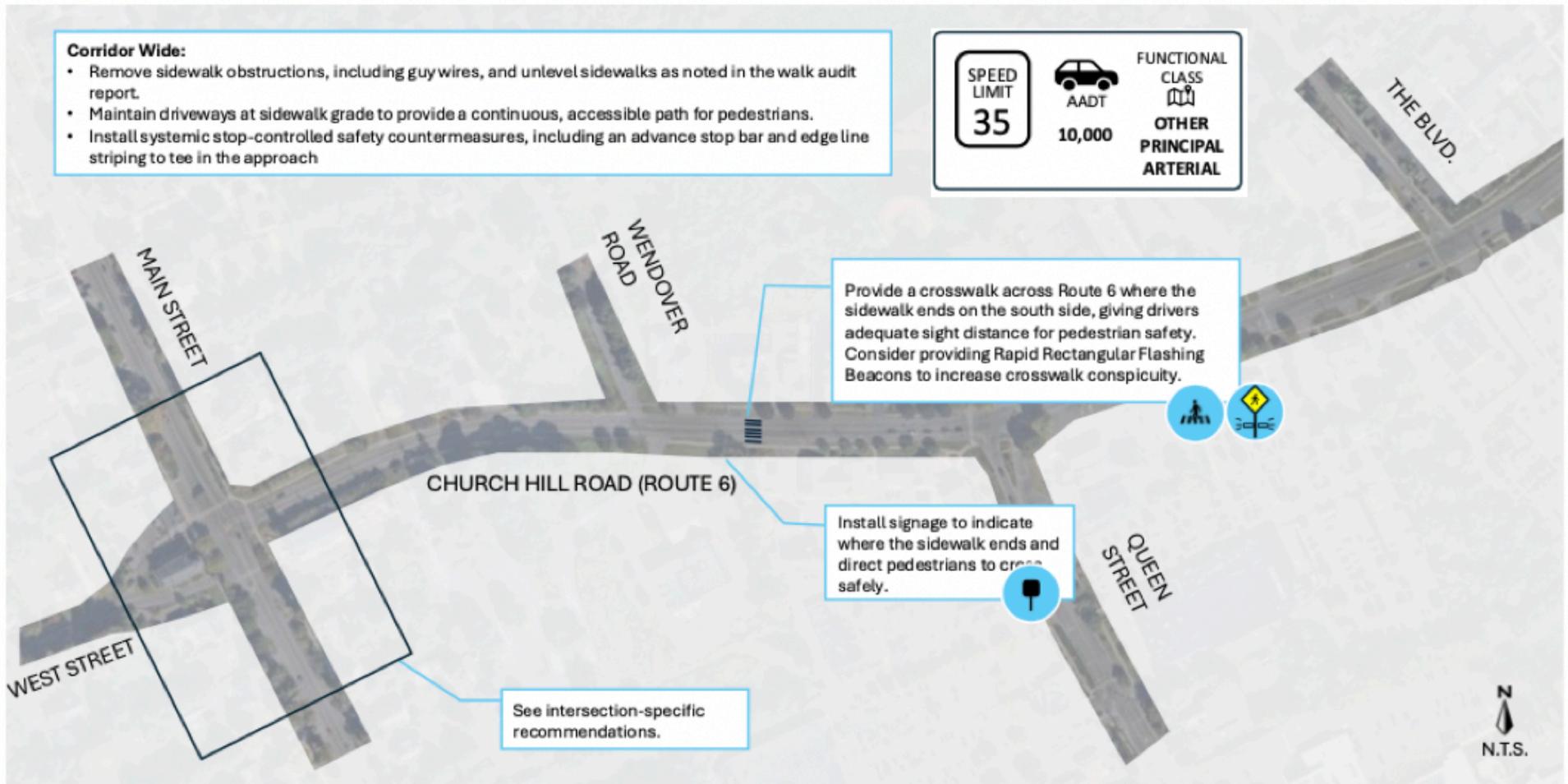
## Location 2: Main Street and Church Hill Road (Route 6)

Estimated Design Costs: \$12k, Estimated Construction Costs: \$30k.



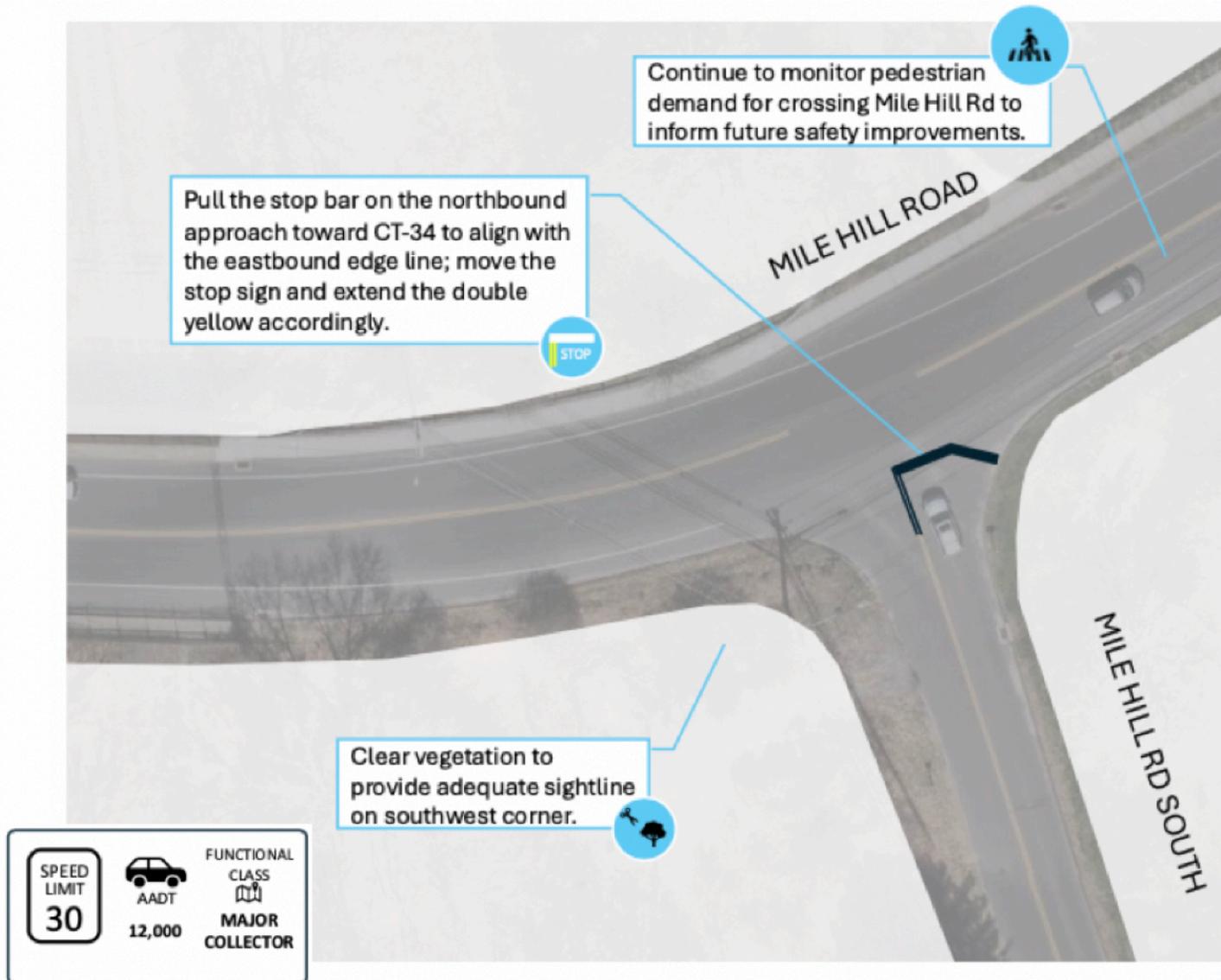
### Location 3: Church Hill Road between Main Street and the Blvd

Estimated Design Costs: \$2k, Estimated Construction Costs \$2k.



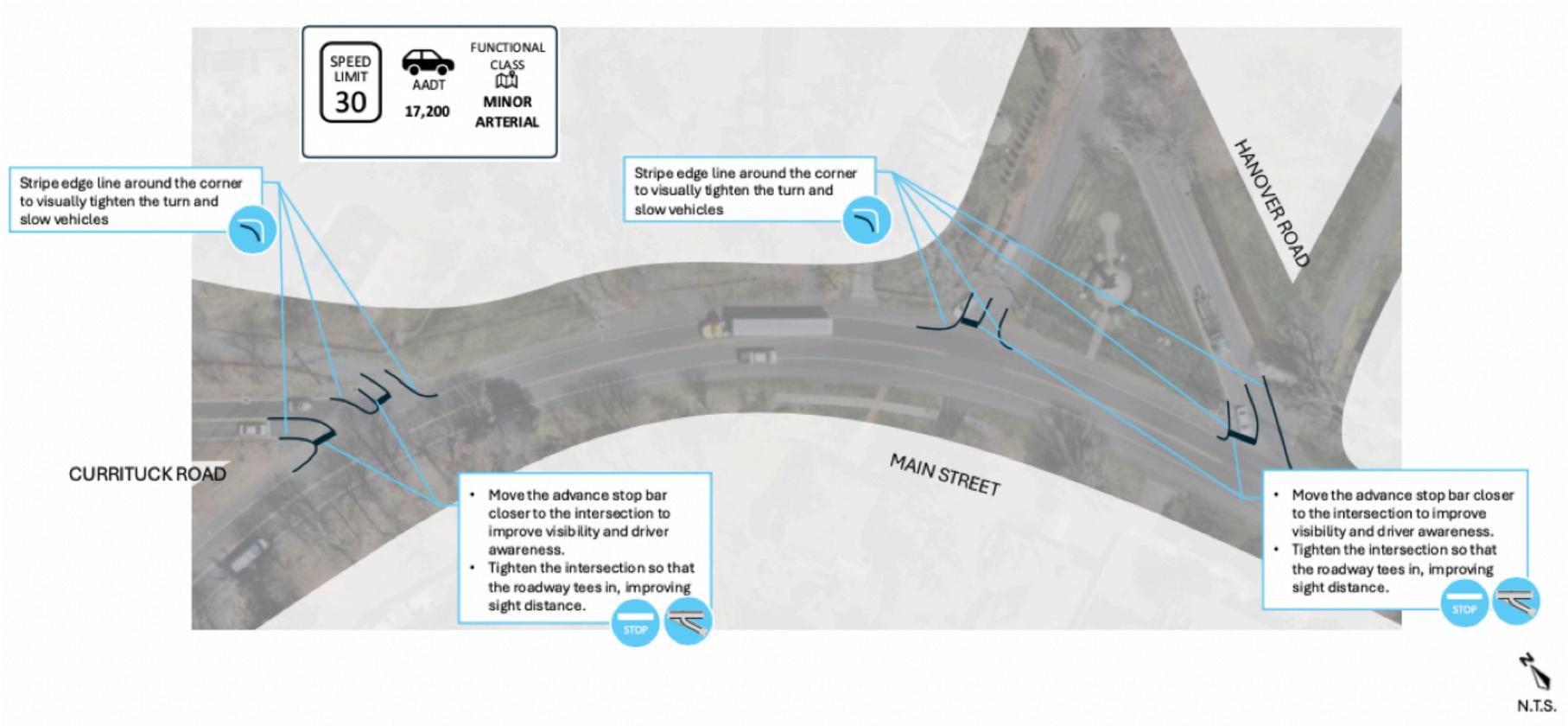
### Location 4: Mile Hill Road and Mile Hill Road South

Estimated Design Costs: \$1k, Estimated Construction Costs: \$1k.



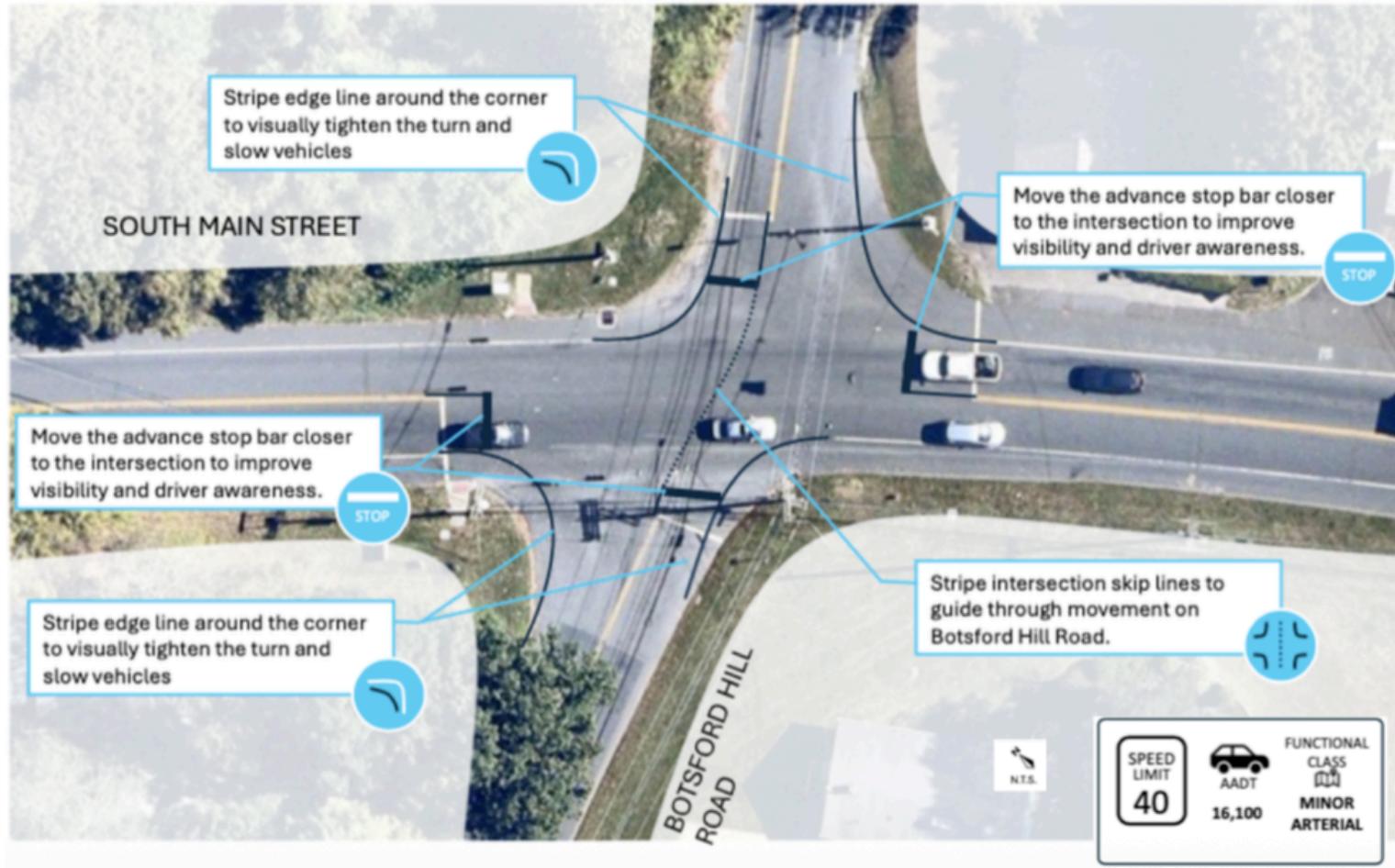
## Location 5: Main Street between Currituck Road and Hanover Road

Estimated Design Costs: \$5k, Estimated Construction Costs: \$5k.



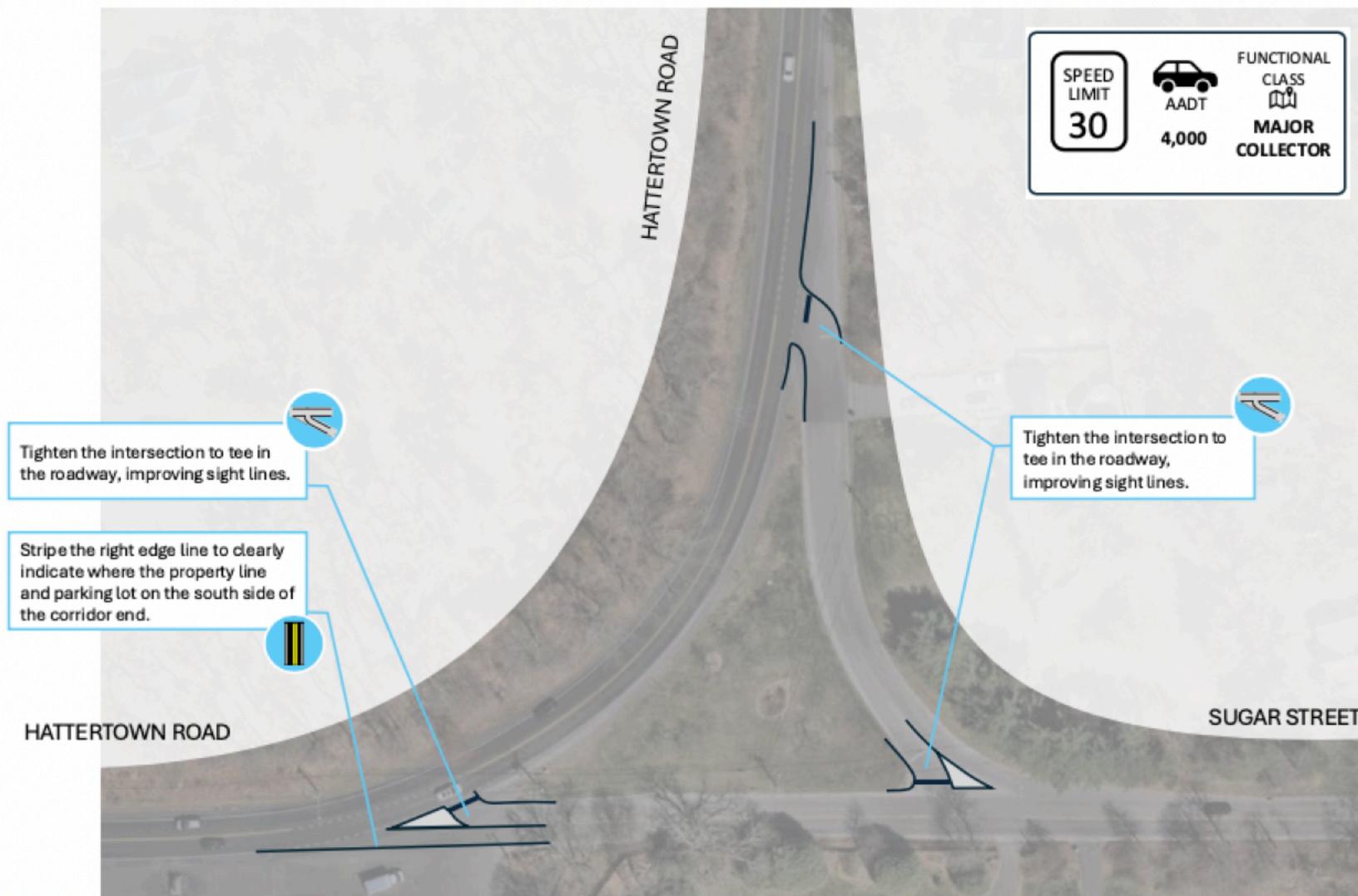
## Location 6: South Main Street and Botsford Hill Road

Estimated Design Costs: \$2k, Construction Costs: \$4k.



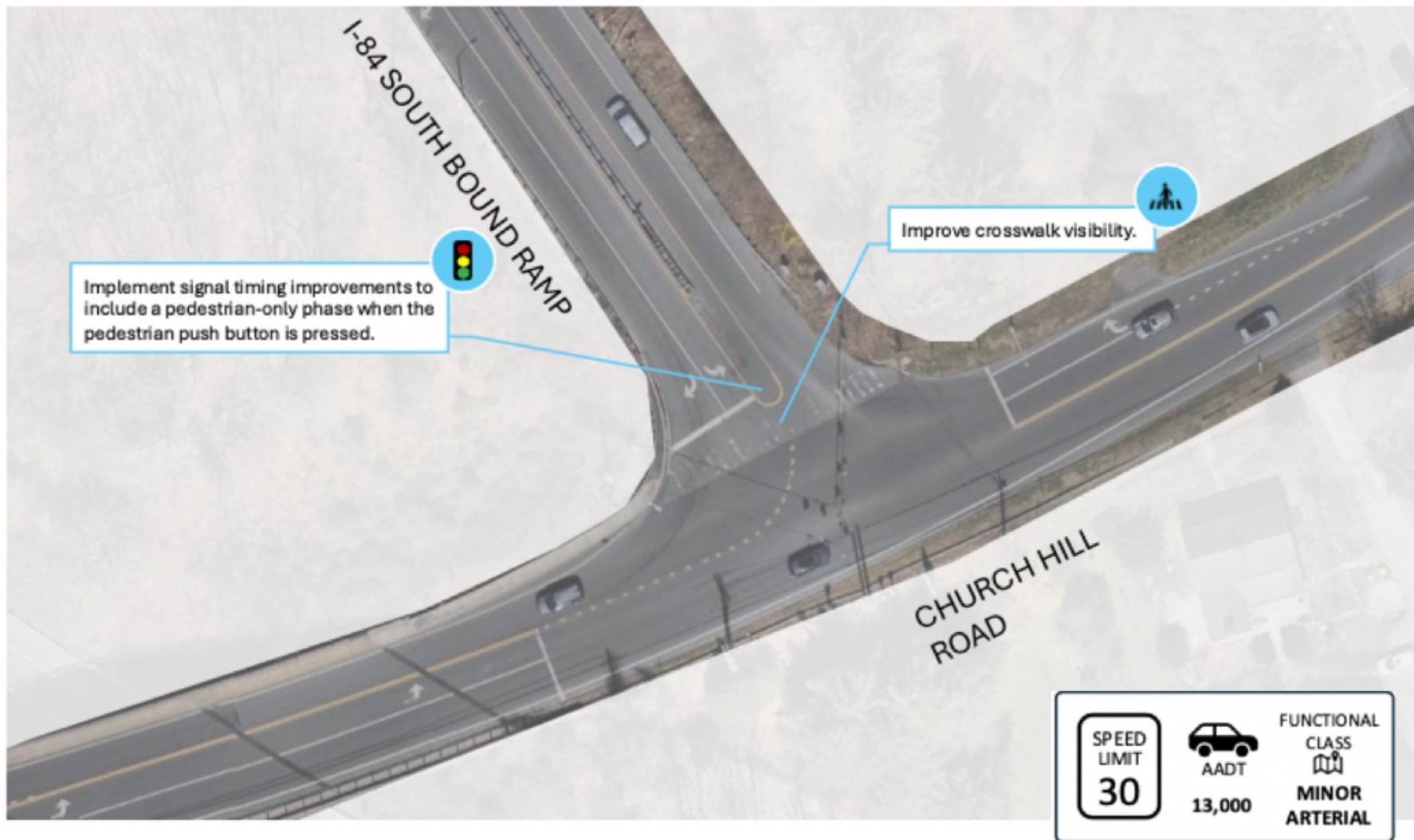
### Location 7: Sugar Street and Hattertown Road (CT-302)

Estimated Design Costs: \$2k, Estimated Construction Costs: \$4k.



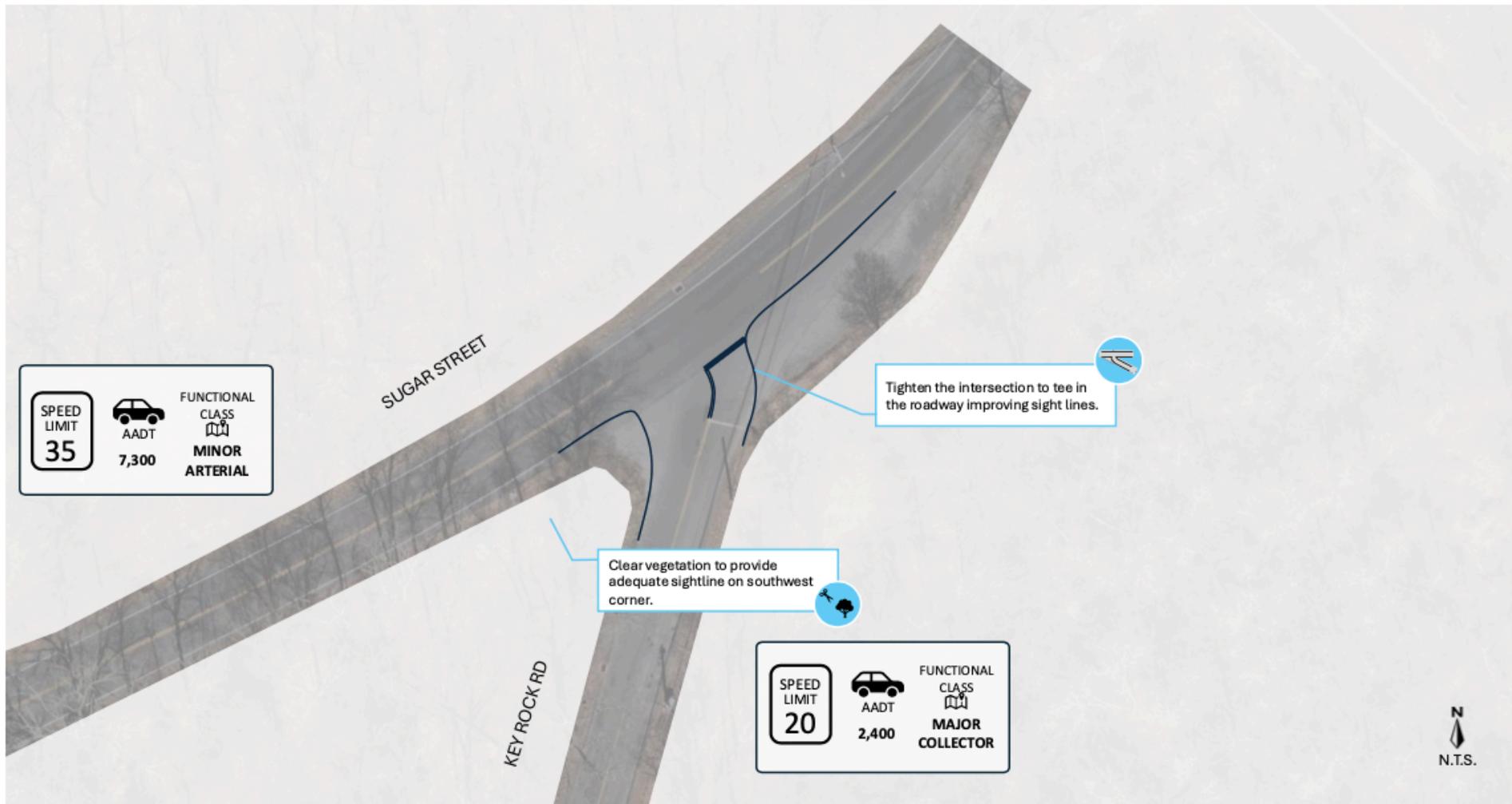
### Location 8: Church Hill Road and I-84 WB Ramp

Estimated Design Costs: None. Estimated Construction Costs: \$2k.



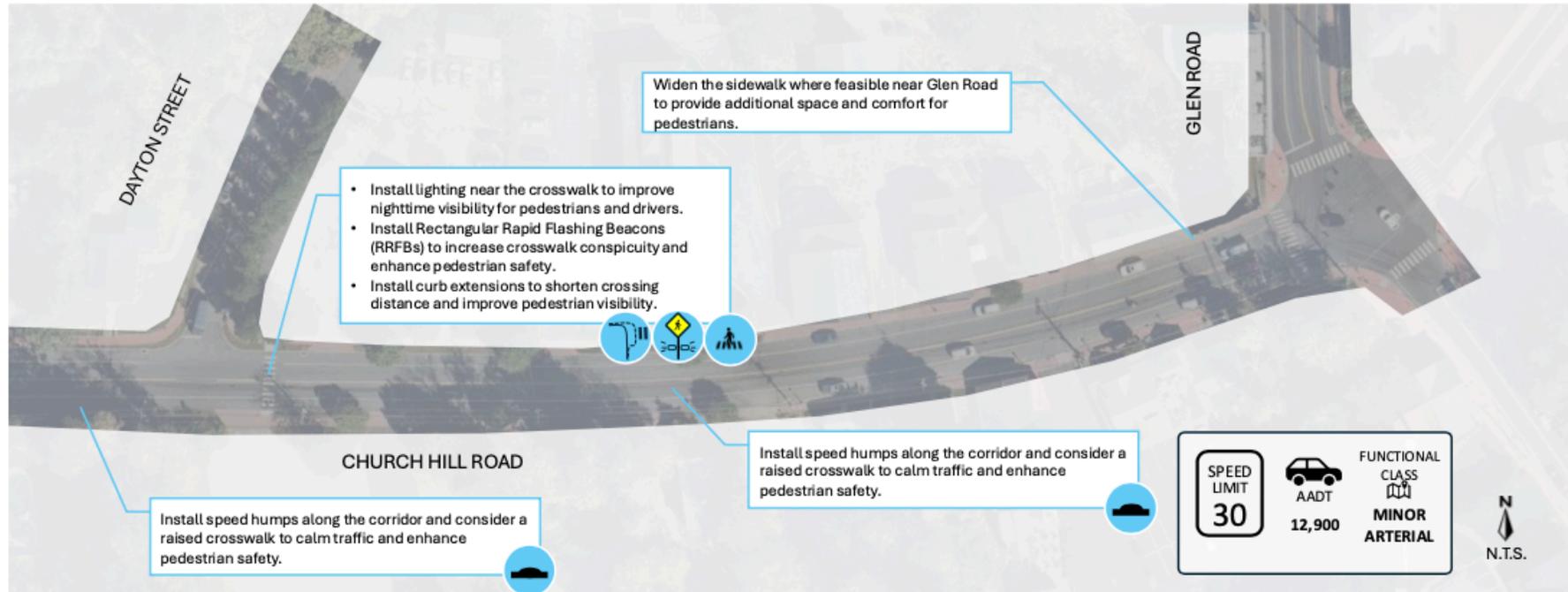
### Location 9: Sugar Street (CT-302) and Key Rock Road

Estimated Design Costs: \$1k, Estimated Construction Costs: \$2k.



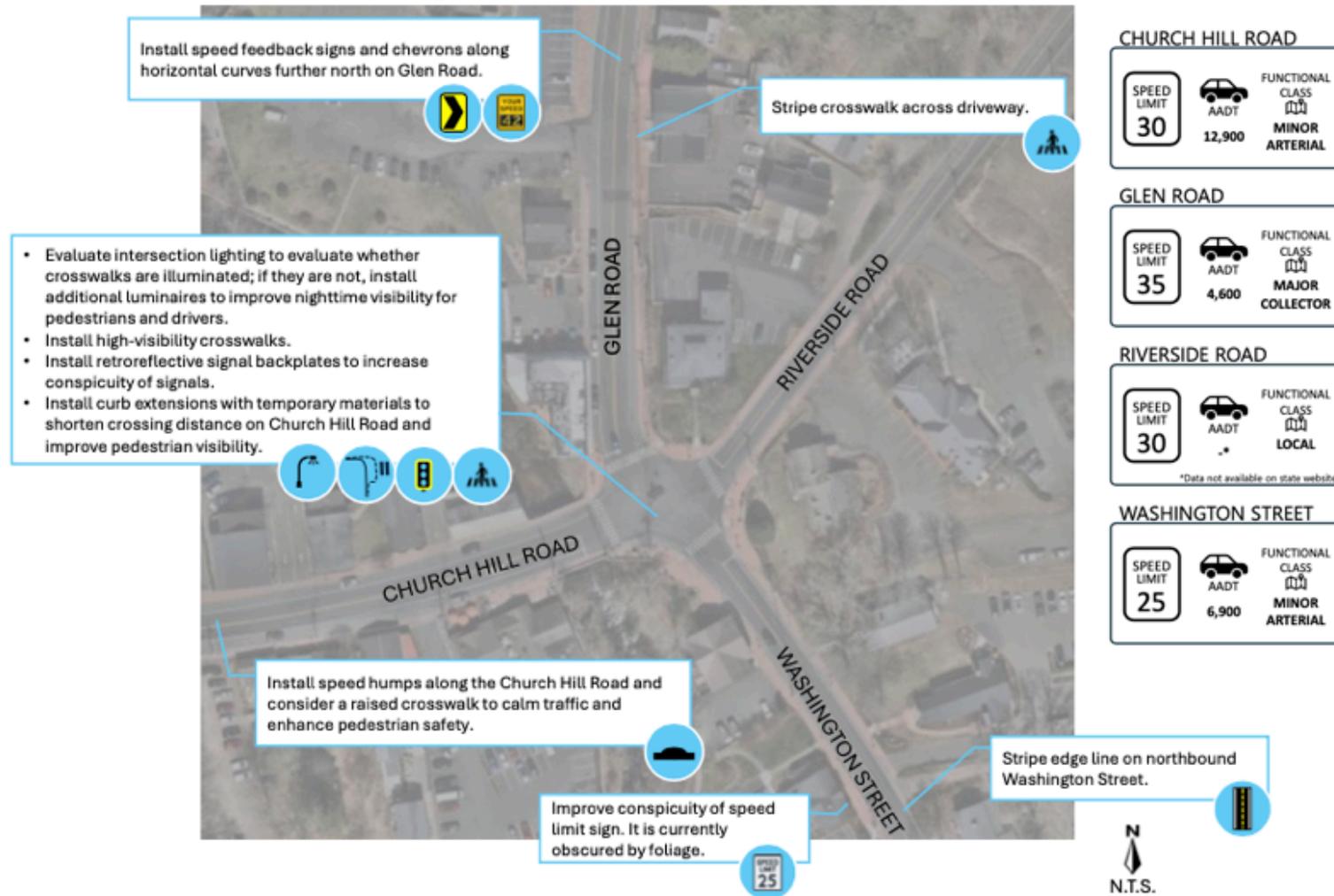
## Location 10: Church Hill Road between Dayton Street and Glen Road

Estimated Design Costs: \$5k, Estimated Construction Costs: \$30k.



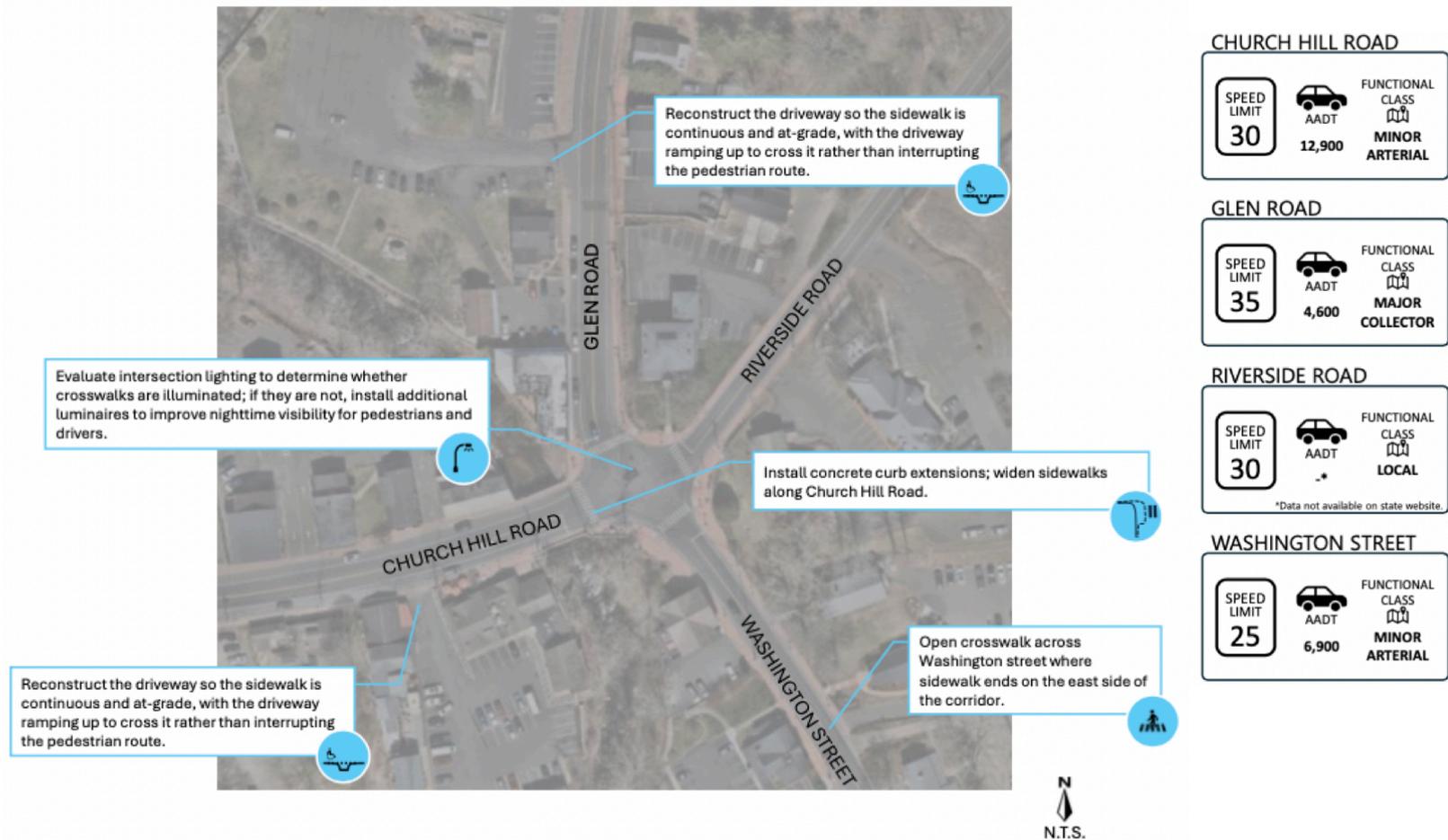
## Location 11: Sandy Hook Area: *Short-Term Recommendations*

Estimated Design Costs: \$30k, Estimated Construction Costs: \$200k.



## Location 12: Sandy Hook Area: Long-Term Recommendations

Estimated Design Costs: \$30k, Estimated Construction Costs: \$200k.



## Measuring Progress

*Establishing a monitoring framework for the safety action plan is essential in maintaining transparency with the public, tracking the effectiveness of past efforts, and making data-driven decisions for future improvements. This chapter will review the evaluation process and performance measures to track the effectiveness of adopted safety countermeasures.*

This Safety Action Plan serves as a strategic tool for achieving Newtown's Vision Zero goal and for improving the safety of all road users. Modifying road user behavior, systemically changing local and regional transportation policy, and securing funding for both infrastructure and non-infrastructure changes are all achievable goals. However, given the complex and varying timeframes of implementation, continuous efforts to accomplish these goals is required. By establishing a framework for monitoring and evaluating progress, Newtown's municipal leadership can ensure that all strategies are implemented throughout the town's vision zero goal.

## Performance Measures

While recognizing the significance of safety-specific plans and programs, traditional planning, design, and operations projects are critical in achieving Newtown's Vision Zero goal. To assess the efficacy of the suggested policies and strategies, the following performance measures were selected for monitoring.

- Number of fatal crashes
- Number of serious injury crashes
- Number of pedestrian and bicyclist crashes
- Number of aggressive driving-related crashes
- Number of DUI/DWI-related crashes
- Number of distracted driving-related crashes
- Number of education/enforcement campaigns initiated
- Number of policies updated/adopted to improve safety

## **Funding**

This comprehensive safety action plan identifies both systemic and site-specific countermeasures to ensure that Newtown receives appropriate funding for implementation projects. To maximize existing funding opportunities, it is strongly recommended that Newtown partners with other state or regional agencies to identify potential funding sources. To implement the strategies outlined in this plan, there are multiple possible sources of funding.

- Safe Streets and Roads for All (SS4A)
- Infrastructure for Rebuilding America Discretionary Grant Program (INFRA)
- Local Transportation Capital Improvement Program (LoTCIP)
- Transportation Rural Improvement Program (TRIP)
- Community Connectivity Program (CCGP)
- Better Utilizing Investments to Leverage Development (BUILD) Grant Program
- Thriving Communities Program
- Connecticut Recreational Trail Grant Program
- Safe Routes to School Program

## **Future Studies**

Improving roadway safety in Newtown, Connecticut, does not end with this Safety Action Plan. Future studies will build on this plan's foundation to help Newtown achieve its Vision Zero Resolution and improve roadway safety for all road users. A full list of further studies for the future is provided below:

- Automatic Traffic Enforcement Safety Device (ATESD) Plan
- Speed Limit Study
- Traffic Studies and Corridor Analysis of HIN locations
- Pedestrian and Bicyclist Safety Study
- Update of Plan of Conservation and Development (POCD)
- ADA Accessibility Plan

## **Updating Plan**

This action plan should be updated to ensure its alignment with changing safety concerns. It serves as a living document, providing a range of strategies and location-specific projects tailored to the unique needs of Newtown, Connecticut. However, to foster a Safe System and reduce fatalities and serious injuries, this action plan must move beyond being merely a document. This report is a starting point for improving roadway safety systemically through traffic safety analysis, recommendations, strategies, and proposed concept plans ready for direct implementation.

## **Conclusion**

This Safety Action Plan provides a unified vision and actionable framework for reducing serious injuries and fatalities on Newtown's transportation network. Through comprehensive data analysis, community engagement, proven safety countermeasures, and concept plans, this report outlines clear priorities that will guide future investments and policy decisions to keep Newtown's streets safe for all road users. Its success will be contingent on continued coordination among Newtown's municipal government, local agencies, stakeholders, and community members, as well as a commitment to implementing the recommended projects and strategies. By advancing this plan, Newtown's community affirms its dedication to a safer, more accessible, and more equitable transportation system for all who use it.