

Hamden Road Safety Audit

Route 707 (Whitney Avenue): Hamden / New Haven
Town Line to Millbrook Road



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1 Road Safety Audit Program

1.1 Program Background

The Connecticut Department of Transportation (CTDOT) has created a Road Safety Audit (RSA) Program that focuses on improving the state's transportation network for all users. An RSA is a formal safety assessment of the existing roadway at selected locations. It is a qualitative review by an independent team experienced in traffic, pedestrian, and bicycle operations and design that considers the safety of all road users and proactively assesses mitigation measures to improve the safe operation of the facility by reducing the potential crash risk frequency and/or severity.

RSAs are a collaborative effort led by a team of diverse professionals including CTDOT staff, consultants, municipal officials and staff, municipal police, the Local Traffic Authority (LTA), as well as local stakeholders and community leaders. The RSA team is established for each municipality based on the requirements of the individual location. They assess and review factors that can promote or obstruct safe walking and bicycling routes. These factors include traffic volumes and speeds, topography, roadway geometrics, crash data, roadway inventory (i.e. signage, curbs, bicycle/pedestrian facilities, amenities, safety components), and sidewalks.

Each RSA is conducted using RSA protocols published by the Federal Highway Administration (FHWA). For details on this program, please refer to the CTDOT RSA Program [webpage](#).

Prior to the site visit, area topography, land use characteristics, intersection sight distance concerns, sidewalk locations, parking, and bicycle facilities are examined using available mapping and imagery. The site visit includes a pre-audit meeting, the field audit, and a post-audit meeting immediately following the field audit to discuss the observations and formulate recommendations. This procedure and the summary results are discussed in the following sections.

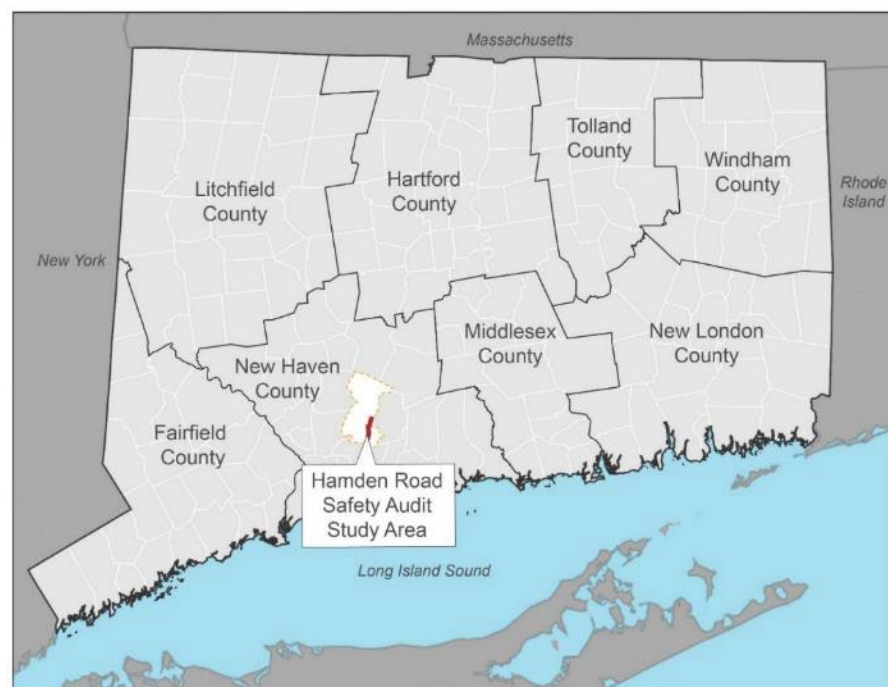
The summary results section of this report, Chapter 5: Recommendations, includes several recommendations and concepts that can be considered for implementation by the municipality, regional planning organization, and/or CTDOT. While many of these recommendations are less complex and easier to implement, many of the more complex recommendations will require further analysis to ensure that they are feasible to implement.

In addition, many of the more complex recommendations will likely be costly and require longer timeframes for further planning, design, and / or right-of-way (ROW) acquisition. This document does not replace future planning, design, and ROW work that may be necessary for project delivery. The more complex recommendations should be the subject of continued conversations amongst the LTA, regional planning organization, and CTDOT on planning, programming, and funding opportunities. Currently, there is no dedicated funding available for construction through the RSA Program. The RSA Program [webpage](#) not only explains the RSA process but also provides information regarding potential State and Federal funding resources and guidance to help municipalities and their COGs implement RSA recommendations in the Final RSA Report.

1.2 Hamden RSA Study Area and Location

CTDOT sponsored an RSA for the Town of Hamden on State Route 707 (Whitney Avenue). The study area encompasses roughly a 3.25-mile corridor from the City of New Haven and the Town of Hamden municipal line to Millbrook Road. The centerline of Route 707, between Short Hill Road and Mill Brook Road, marks the municipal line between Hamden and North Haven. Exhibit 1 shows the study area in context to the State of Connecticut, and Exhibit 2 shows the study area in further detail.

Exhibit 1: Hamden RSA Regional Location



The purpose of the RSA is to observe and document existing concerns, followed by recommendations for improvements to safety and operations within the study area, paying particular attention to the quality of travel for bicyclists and pedestrians. Route 707 (Whitney Avenue) in Hamden is one of the north-south connections through the neighborhoods of Whitneyville and Augerville in Hamden. It connects New Haven and Hamden to Route 15 (Wilbur Cross Parkway). The Route 707 study area provides access to businesses, restaurants, residential areas, schools, libraries, and churches. Pedestrians and bicyclists use the corridor to access homes, schools, and businesses in the area. Exhibit 3 displays points of interest located along the corridor.

CT**transit** operates bus routes 228 and 229 along this corridor. Exhibit 4 displays the transit network in the area.

Average Annual Daily Traffic (AADT) collected in the study area ranges between 10,200 and 13,300 vehicles per day, with the highest volumes at the north end of the corridor near Route 15 (Wilbur Cross Parkway). Exhibit 5 displays daily traffic in the study area.

The study area contains a mix of signalized and unsignalized intersections as well as curb cuts and entrances into and out of property parcels. This RSA focuses on the major roadway segments and intersections where the safety concerns and pedestrian movements are most concentrated.

Exhibit 2: Route 707 (Whitney Avenue) RSA Study Area



Exhibit 3: Study Area Points of Interest

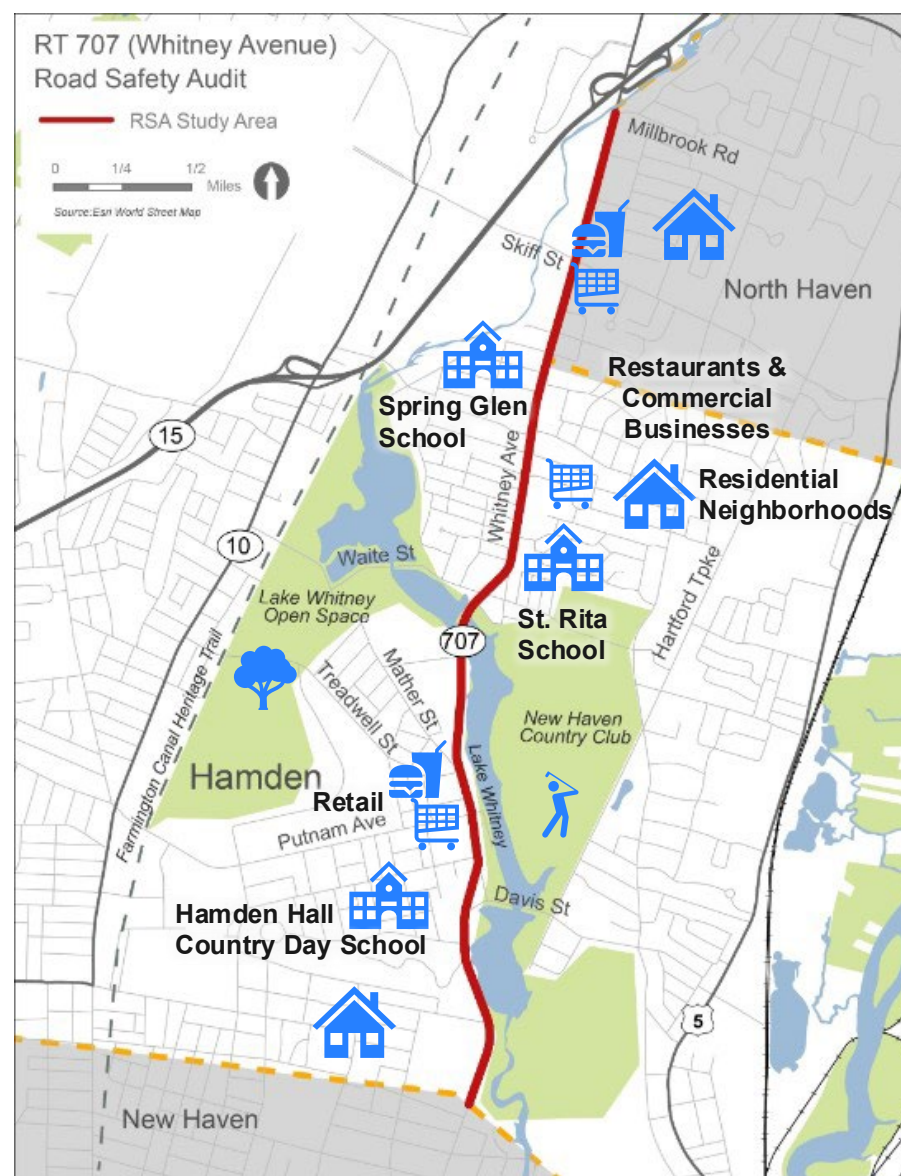


Exhibit 4: Transit Network in the Corridor

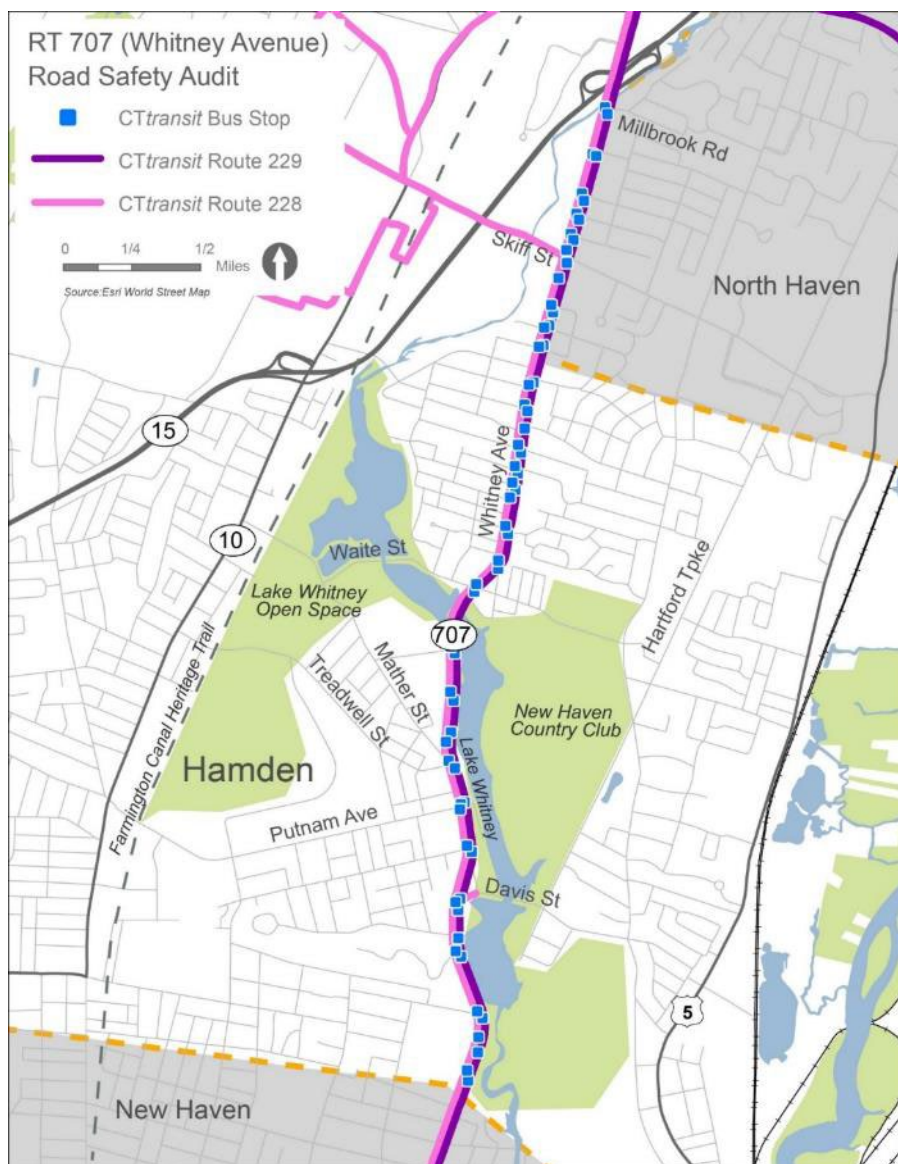
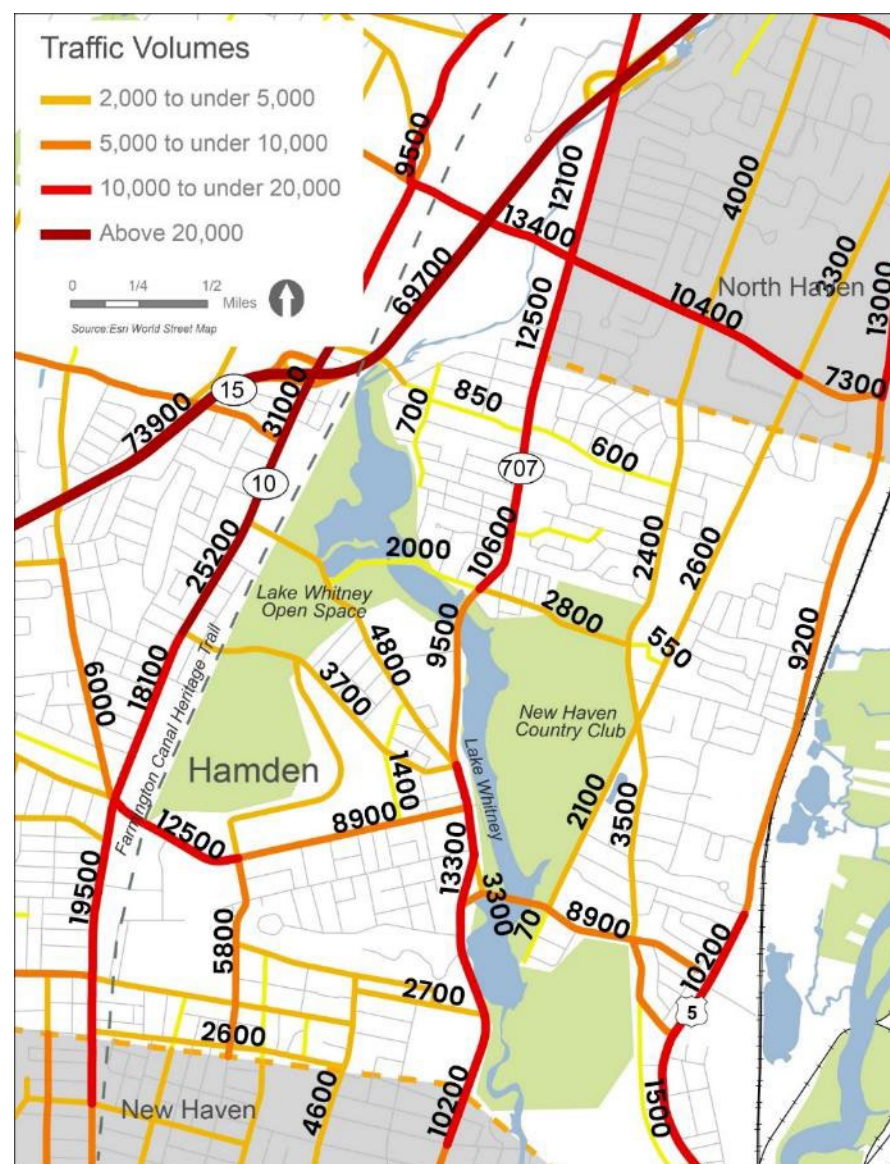


Exhibit 5: Average Annual Daily Traffic Volumes



2 Prior Efforts in Study Area

2.1 Complete Streets Policy

Hamden adopted its Complete Streets Policy in 2023 as recommended by its 2019 Plan of Conservation and Development (POCD). The goals of this policy include increasing safety and access for all ages, abilities, and modes, create better connections between residential and commercial areas, ensure the Town's urban centers support sustainable development and growth, improving access to/between public transit systems (e.g., rail and bus), and to develop safe routes to schools for students. Exhibit 6 displays the vision and goals of the policy.

2.2 Route 707 Area Projects

There is a CTDOT project to install Rectangular Rapid Flashing Beacons (RRFB) at the Davis Street and Lake Road intersection. This is listed as State project #0173-0547. Also, along Davis Street, the Hamden Hall Country Day School expanded the campus to include a property at 20 Davis Street. The Hamden LTA approved additional reduced speed and school zone signage for Davis Street.

The Hamden Engineering Department received Local Transportation Capital Improvement Program (LOTICIP) funding to replace the Waite Street and Mather Street bridges over Lake Whitney. Requests for Proposals went out for bidding on the design work for the bridges. The South Central Connecticut Regional Water Authority is working to replace the dam retaining Lake Whitney as this lake is a public water supply.

Exhibit 6: Hamden's Complete Streets Policy

April 10, 2023

Town of Hamden, CT COMPLETE STREETS POLICY

Presented to the Traffic Commission (Local Traffic Authority) by the Traffic and Engineering Departments.

Vision, Goals, and Principles

This Policy is intended to be a living document that will grow and adapt to needs of the Town of Hamden (the Town). It describes the Town's position on managing the transportation infrastructure within the Town and its connection to the surrounding region. The State of Connecticut has passed statute that promotes the consideration for all transportation modes. CT Gen Stat § 13a-153f (2012) - 2012 Connecticut General Statutes Title 13a - Highways and Bridges Chapter 238 - Highway Construction and Maintenance Section 13a-153f - Accommodations and provision of facilities for all users.

In Section 5.5 of the Town's Plan of Conservation and Development (2019) it is recommended that the Town adopt a Complete Streets Policy. This proposed policy more closely aligns the Town's local transportation network with the State's statute and the Plan of Conservation and Development to provide a framework specific to the Town of Hamden.

The Town should recognize that roadway projects, whether new, maintenance, or reconstruction, are potential opportunities to apply Complete Streets design principles and support the Town's goals for Multi-Modal Transit-Oriented Development. The Town should, to the maximum extent practical, design, construct, maintain, and operate streets to provide for a comprehensive and integrated street network of facilities to achieve the following objectives:

- Increase safety and access for all ages, abilities, and modes
- Create better connections between residential and commercial areas
- Ensure the Town's Urban Centers will support sustainable development and growth
- Improve access to and between public transit systems (e.g., rail and bus)
- Develop safe routes to schools for students
- Explore design interventions that create a sense of place, reflect the character of Hamden's different neighborhoods, and evoke a sense of safety and vibrancy
- Soften existing barriers (e.g., Wilbur Cross Parkway/Rt 15)
- Embrace Hamden's cultural arts, history, and natural resources
- Integrate traffic calming measures to slow traffic and encourage multi-modal transportation (e.g. walking, biking, public transit)
- Incorporate green infrastructure, and support of the Town's MS4 program for stormwater management.

3 Pre-audit Meeting

3.1 Pre-Audit Information

The RSA team conducted a pre-audit virtual meeting on Tuesday, October 8th, 2024. The RSA team presented a brief presentation that included an overview of the Hamden RSA goals and purpose, the study area, and key existing conditions findings. Key themes discussed during the pre-audit meeting are presented below.

Road Classification: Route 707 (Whitney Avenue) is classified as a principal arterial roadway, which is typically used for vehicle trips of moderate distance and speeds. The study area intersects with many minor arterial roads, two major collectors, and many local roads. Just north of the study area, it provides access to Route 15. The study area serves a wide variety of network users including pedestrians/bicyclists, regional bus transit riders, vehicle commuters, parents, teachers, business employees and patrons, and delivery drivers. Exhibit 7 displays the study area road functional classification. Exhibit 8 displays roadway geometry.

Speeds: The speed limit on Route 707 is 30 miles per hour (MPH) with several 25 MPH school zones. The average 85th percentile speeds were 40 percent higher than posted limits. Exhibit 9 displays speed limits and 85th percentile speeds in the study area.

Exhibit 7: Functional Classification

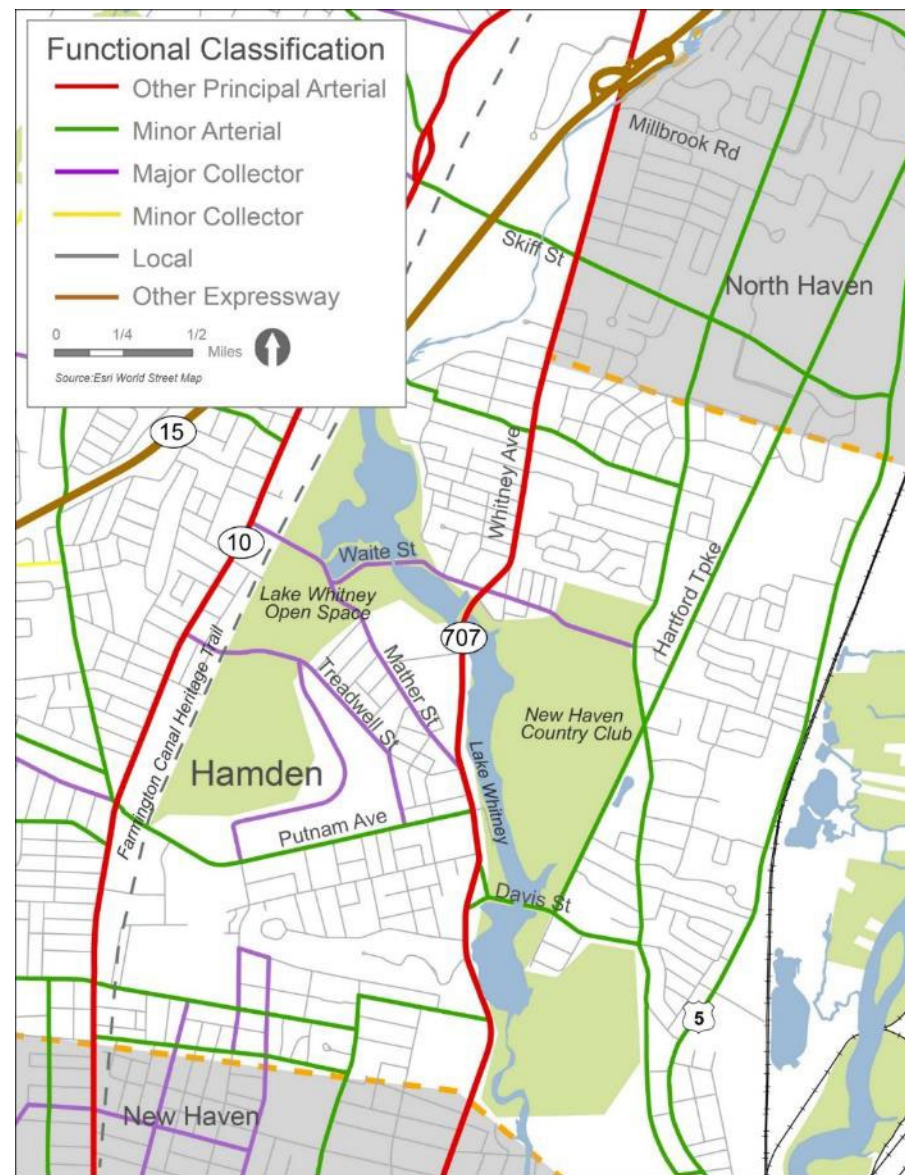


Exhibit 8: Route 707 (Whitney Avenue) Roadway Geometry

From	New Haven TL		Deepwood Dr		0.05 Mi N of Augur St		Waite St		Elihu St		Filbert St		Skiff St	
To	Deepwood Dr		0.05 Mi N of Augur St		Waite St		Elihu St		Filbert St		Skiff St		Millbrook Rd	
Distance	0.47 Mi		0.38 Mi		0.80 Mi		0.41 Mi		0.19 Mi		0.51 Mi		0.46 Mi	
Functional Classification	Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial	
Speed Limit	30 MPH		25 MPH		30 MPH		25 MPH		30 MPH		25 MPH		30 MPH	
Direction	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Lanes	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lane Width	Typ. 11'	Typ. 11'	11'	11'	11'	11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'
Sidewalk Type	Concrete	Concrete	Concrete	Varies	Varies	Varies	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Sidewalk Width	4-5'	5-6'	5-9'	5-10'	4-6'	4-7'	4-5'	5-8'	4-5'	4-5'	4-7'	4-7'	4-7'	4-7'
Sidewalk Condition	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Good	Poor-Fair	Poor-Good	Fair-Good	Poor-Good	Poor-Fair	Fair-Good
ADA Ramp Present	Yes	Yes	Varies	Yes	Yes	Yes	Varies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ADA Ramp Compliant	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Curb	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Parking	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No
Shoulder	None	None	None	None	None	None	None	None	None	None	None	None	None	None
On CTDOT Bike Network	No		No		No		No		No		No		No	
Notes			Short sidewalk gap SB		Unclear ped crossing at Mather St SB		NB sidewalk gap at Ford St				NB left turn lane at Skiff St		SB left turn lane at Skiff St, periodic sidewalk gaps NB	

*Condition:

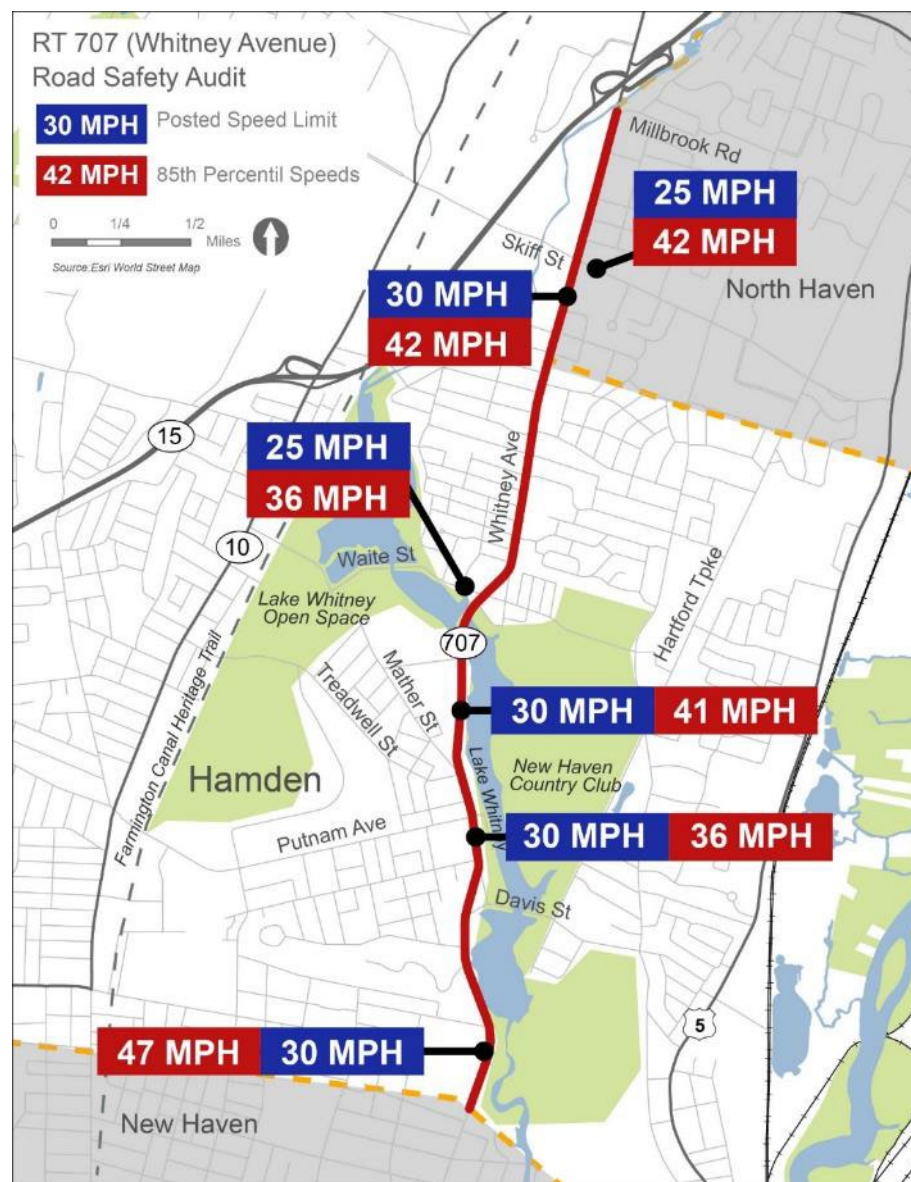
Good – serviceable, meets current design standards.

Fair – generally serviceable, but may need minor repairs, or may not completely align with current design standards.

Poor – not serviceable, generally inadequate for continued long-term use.

Highlighted cells indicate values which may warrant further investigation.

Exhibit 9: Study Area Speed Limits and 85th Percentile Speeds



Crashes: The study team collected data from the Connecticut Crash Data Repository (CTCDR) for a five-year period between January 2019 and December 2023, the latest available full-year dataset. There were 518 crashes in the study area. Crashes were concentrated at the intersections of Route 707 and Putnam Avenue, Skiff Street, Eli Road / Auger Street / Davis Street, Armory Street, and Waite Street. Exhibit 10 displays the study area crash summary by year and Exhibit 11 displays a study area crash heatmap.

Crashes by Type: Most crashes were angle and front-to-rear types. Angle crashes are typical in areas with ingress/egress movements at property entrances. Front-to-rear crashes occur most commonly at intersections where cars are queued to make turning movements. Exhibit 12 displays a chart of crashes by manner of impact and Exhibit 13 displays a map of crashes by location and type in the corridor.

Crash Severity: Most reported crashes, 72 percent, were classified as “no apparent injury.” Of the 518 reported crashes, less than one (1) percent were fatal injury crashes, and two (2) percent suspected serious injury crashes. The remaining 11 percent of crashes were suspected minor injury and 15 percent were possible injury crashes. Exhibit 14 displays a chart of crashes by severity. Exhibit 15 displays a map of crashes by location and severity in the corridor.

Crashes by Involved Person: There were four (4) reported crashes involving pedestrians or bicyclists in the five-year period of 2019–2023. These are shown in Exhibit 16. At the time of this RSA, two (2) additional crashes involving bicyclists occurred in 2024. One (1) pedestrian crash resulted in minor injury, and one (1) resulted in serious injury. Of the bicyclist accidents, three (3) resulted in minor injury, and one (1) resulted

in serious injury displays the locations and types of pedestrian and bicyclist crashes.

Exhibit 10: Study Area Crash Summary (2019-2023)

Year	Fatal Injury	Suspected Serious Injury	Suspected Minor Injury	Possible Injury	No Apparent Injury	Total
2019			10	18	95	123
2020		1	8	13	69	91
2021	1	1	10	19	75	106
2022		2	14	11	73	100
2023		5	13	16	64	98
Total	1	9	55	77	376	518

Exhibit 11: Study Area Crash Heatmap (2019-2023)



Exhibit 12: Crashes by Manner of Impact (2019 – 2023)

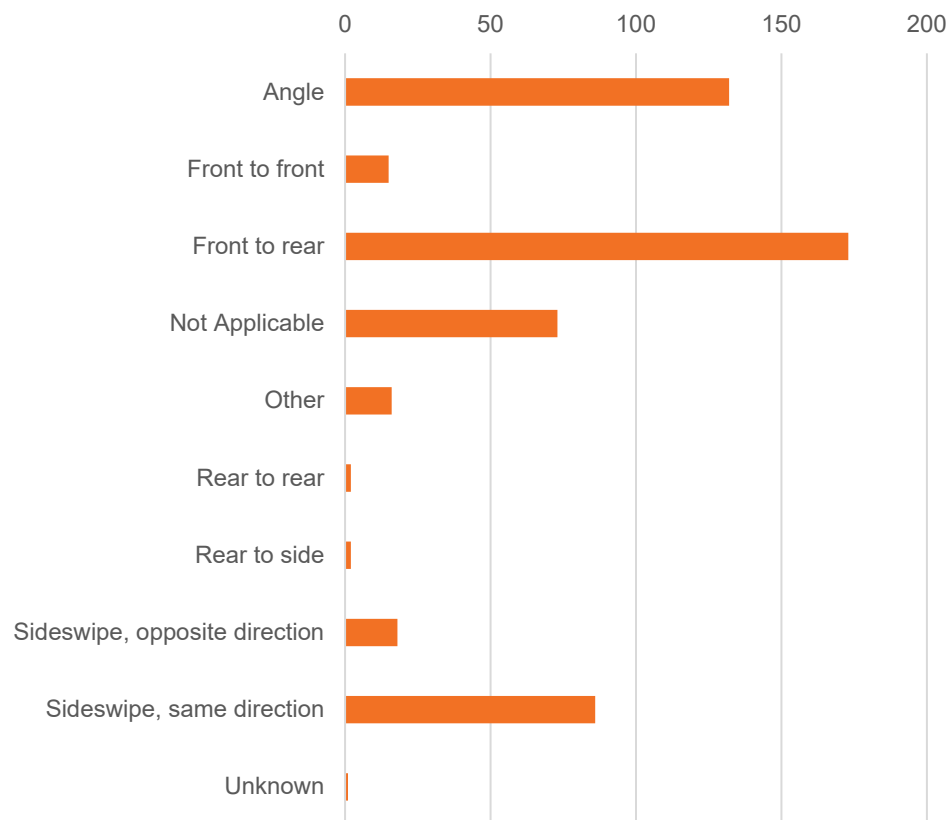


Exhibit 13: Crashes by Type and Location (2019-2023)

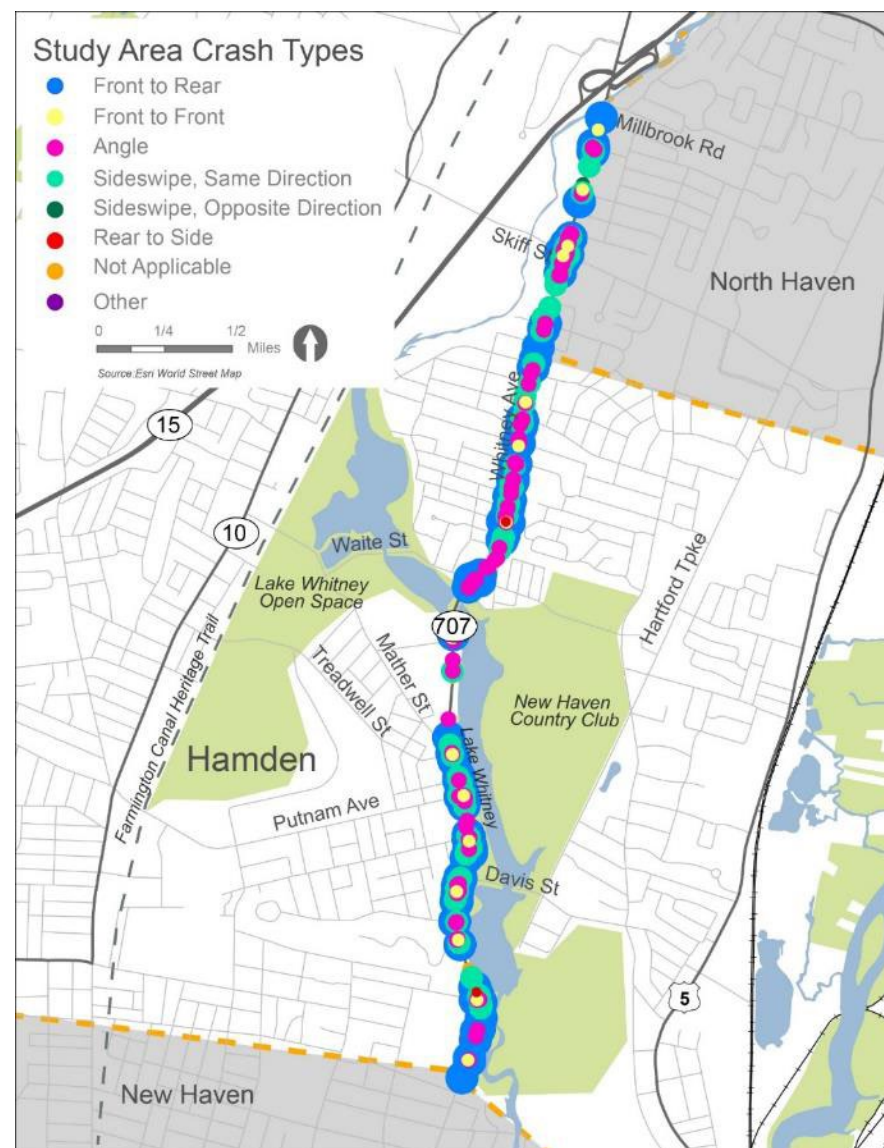


Exhibit 14: Crashes by Severity (2019-2023)

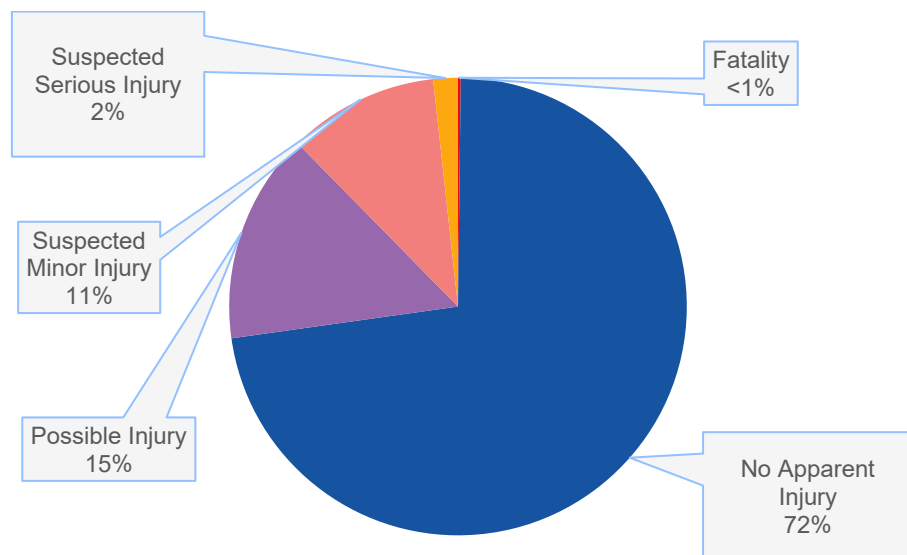


Exhibit 15: Crash Severity by Location (2019-2023)

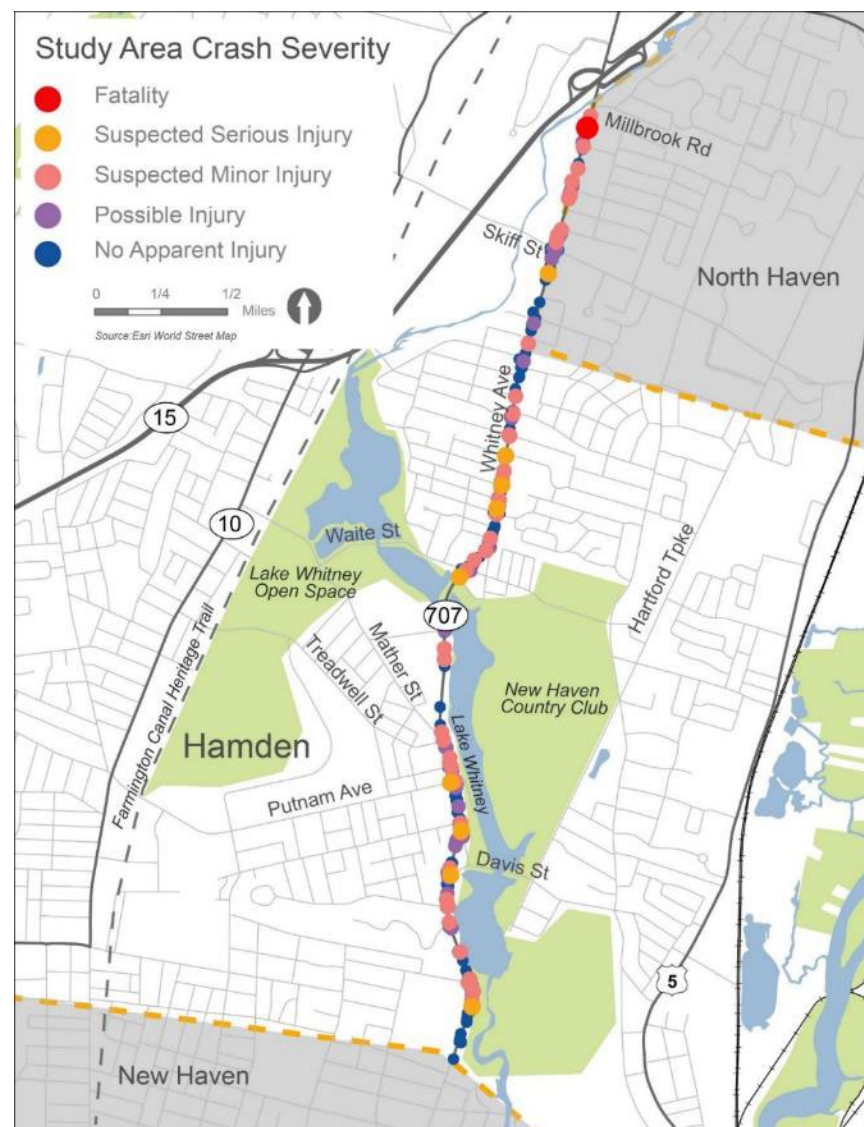
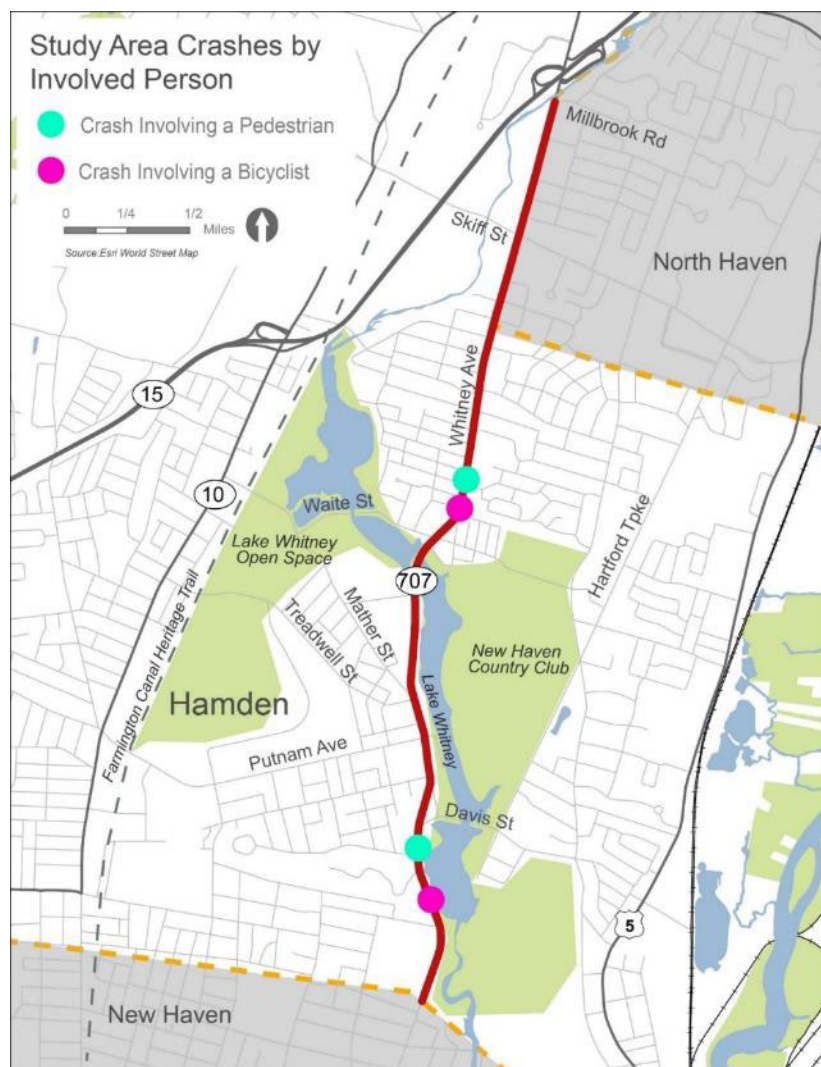


Exhibit 16: Crashes Involving Pedestrians and Bicyclists (2019-2023)



3.2 Pre-Audit Discussion

Immediately following the pre-audit presentation, a short discussion followed where attendees highlighted additional concerns and notes regarding the Hamden Route 707 (Whitney Avenue) RSA study area. Comments from participants included:

- The presentation was comprehensive.
- The sidewalks are in poor condition.
- Many do not feel safe walking in the corridor.
- While there are bicyclists that use the corridor, there is not adequate space (e.g., shoulder width) for them to ride on.
- There are limited connections to the Farmington Canal Heritage Trail.
- There is significant interest in pursuing a road diet in the corridor, potentially as part of the next Vendor-in-Place (VIP) paving project. If this moves forward, the Town will be responsible for conducting a public information meeting.
- There are no school zone signs near Hamden Hall Country Day School.
- There is limited pedestrian scale lighting.

Sample slides from the pre-audit presentation are shown in Exhibit 17.

Exhibit 17: Sample slides from Pre-Audit Presentation



Agenda

1. Welcome / Introductions
2. RSA Purpose and Goals
3. Study Area Existing Conditions
5. Potential Countermeasures
6. Discussion
7. Next Steps



Pedestrian Safety Countermeasures



Sidewalks

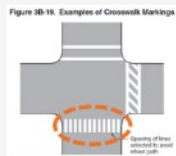


Figure 10-16. Examples of Crosswalk Markings

Crosswalks



RRFB



Pedestrian refuge islands



Raised crosswalks



Pedestrian-scale lighting

Some countermeasures may not be appropriate on certain facilities

4 RSA Assessment

A summary of the team's findings from documenting conditions seen in the field, along with comments by stakeholders from the Town, is presented below. Many of the issues discussed are corridor wide and are presented first. Concerns at specific areas are presented after the corridor wide conditions. Exhibit 18 shows RSA participants walking the Route 707 (Whitney Avenue) corridor.

4.1 General Corridor Wide Conditions

- High vehicular speeds were observed throughout the length of the corridor.
- There are numerous locations along the route that are not Americans with Disabilities Act (ADA)-compliant. Some of these concerns include sidewalks, crosswalks, and bus stop landing areas. Many locations lack such accessible features as countdown heads, Accessible Pedestrian Signal (APS) push buttons, audible, and tactile warning surfaces.
- Multiple locations have poor pedestrian-scale lighting.
- Vegetation encroachment, as shown in Exhibit 19, is a recurring issue in several areas, affecting visibility and sidewalk usability.
- Adequate cycling facilities are limited or non-existent along most of the corridor.
- Most of the signal heads throughout the corridor lack retroreflective backplates.

Exhibit 18: RSA Participants Walking Along Route 707 near Armory Street



Exhibit 19: Vegetation Encroaching on Sidewalk



4.2 Intersection of Route 707 (Whitney Avenue) and Armory Street

- The grade/elevation differences contribute to visibility issues at the signalized intersection. Despite the visibility issues, high vehicular speeds were observed by the RSA study team.
- The travel lane widths appear to be about 10.5 – 11 feet wide in this area. There is no shoulder. If a road diet were to be implemented in this area, bike lanes would likely be less than the five-foot recommended width. Exhibit 20 displays a bicyclist riding through the intersection.
- The vegetation along the west side sidewalk north of Armory Street is overgrown. There is 4 – 5-foot-wide sidewalk here.
- The sidewalk on the east side of the road borders the Lake Whitney dam and is disconnected from the roadway. It is in fair to poor condition and has limited to no pedestrian-scale lighting.
- There is no crosswalk across the northern leg of the intersection. The crosswalk across the southern leg of the intersection has crossing flags, as shown in Exhibit 20.
- There is no ramp or connection to the sidewalk at the northeastern corner of the intersection.
- There is a missing bus stop sign on the northwest corner of the intersection.

4.3 Intersection of Route 707 (Whitney Avenue) and Eli Road / Davis Street / Augur Street

- Hamden Hall County Day School, serving students in preschool through 12th grade, is in this area. Participants stated that students frequently cross Route 707 (Whitney Avenue) at Davis

Street. There are school zone and school crossing signs at Davis Street but no school zone speed reduction in place.

- There are no mid-block crosswalks.
- One participant observed southbound vehicles speeding.
- The crosswalk across Davis Street is faded.
- It is difficult for drivers to merge onto Route 707 (Whitney Avenue) from Eli Road because of sightlines and skew of the intersection.
- The crossing distance across Eli Road is long. The driveway to Whitney Wood apartments, at the intersection of Route 707 (Whitney Avenue) and Eli Road has an awkward placement at (or in) the intersection. Exhibit 21 displays this intersection and the extra pedestrian ramp that does not have a marked crosswalk.
- There are no shoulders in this area and there are frequent collisions with utility poles and other objects off the roadway.
- Residents in the area have expressed the desire for speed control.
- Limited visibility makes left turns into and out of Augur Street challenging. Northbound motorists drive up the hill too fast and do not realize that vehicles are stopped on Route 707 (Whitney Avenue) waiting to turn left onto Augur Street.
- Several bulbs were missing / have broken luminaires.
- At least one pedestrian lamp post did not have a lamp / light fixture.
- Participants voiced a desire for on-street parking between Augur Street and Ralston Avenue.

Exhibit 20: Bicyclist Traveling Northbound at Armory Street Intersection

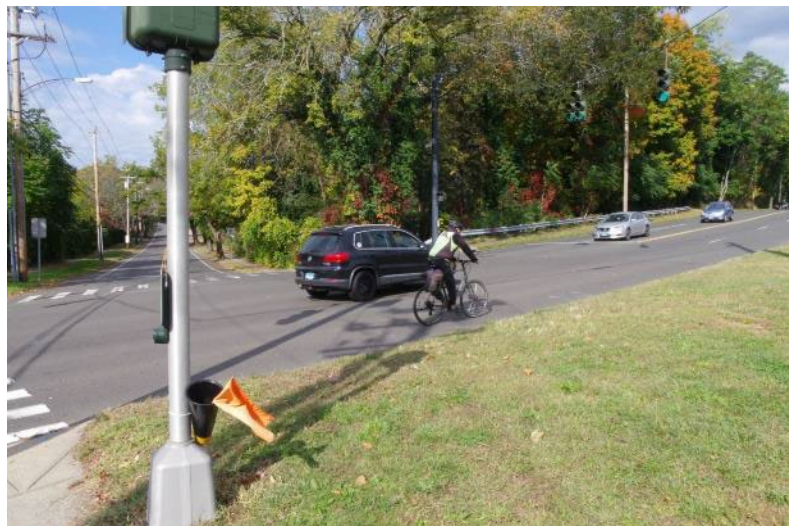


Exhibit 21: Entrance to Whitney Wood Apartments at Eli Road (Source: Google Maps, August 2024)



4.4 Intersection of Route 707 (Whitney Avenue) and Putnam Avenue

- This is the Whitneyville neighborhood, with several commercial and community destinations.
- No on-street parking observed in this area despite several businesses.
- This area has the highest number of crashes in the corridor.
- There are no left turn signals at this intersection. The high number of crashes could be a result of people trying to turn left onto Putnam Avenue.
- There is no street sign identifying Putnam Avenue.
- There is no pedestrian scale lighting on Route 707 (Whitney Avenue) at this busy intersection. At least one lamp post on the northwest corner, on Putnam Avenue, was missing the lamp.
- The crosswalks, particularly the one across the eastern leg of Putnam Avenue, are faded, as displayed in Exhibit 22.
- Like most intersections throughout the corridor, crossing amenities, sidewalks, bus facilities are not ADA-compliant. In particular, the sidewalks are uneven with utilities and street furniture placed in the travel path.
- The bus shelter and stop located north of the intersection is in poor condition. The area is overgrown with vegetation and the landing zone is not ADA-compliant.
- The RSA team noticed higher than expected truck traffic on Putnam Avenue.
- The bollards are damaged from vehicular turning movements. Putnam Avenue is a minor arterial roadway, and the intersection geometry is insufficient for a WB-62 design vehicle for an arterial roadway classification.

- Further north, participants stated that pedestrians frequently cross Route 707 (Whitney Avenue) near Treadwell Street /Mather Street to get from the municipal parking lot to the Whitney Cultural Commons. This tends to happen during events. There could be a need for a crossing at or near Ralston Avenue.
- Further north, participants stated that the crosswalks at Servoss Street and in front of Whitney Place are unsafe with drivers failing to yield to pedestrians.

Exhibit 22: Crosswalk Across Eastern Leg of Putnam Avenue



4.5 Intersection of Route 707 (Whitney Avenue) and Waite Street

- This signalized intersection is askew and has poor sightlines because of a curve to the north of the intersection and grade/elevation change on the western leg of Waite Street.
- Like most intersections throughout the corridor, crossing amenities, sidewalks, and bus facilities are not ADA-compliant.
- Overgrown vegetation is prevalent here and encroaching onto the sidewalk.
- There is no pedestrian scale lighting.
- There is no street sign identifying Waite Street.
- There is no crosswalk across the southern leg of Route 707 (Whitney Avenue). The crosswalk across the western leg of Waite Street is faded.
- North of Waite Street, there is a sharp curve that drivers often drive too fast on.
- Participants stated that many children and teens walk and bike in this area to access the reservoir.
- Participants stated that there are sightline issues at the intersection Walden Street at Route 707 (Whitney Avenue).

4.6 Route 707 (Whitney Avenue) Near Saint Rita School and Commercial Areas North of Park Avenue / Gillies Road

- Saint Rita School is on the southeast corner of Route 707 (Whitney Avenue) and Gillies Road. The church is across the street and all students navigate crossing Route 707 (Whitney Avenue) on Fridays to attend mass. Exhibit 23 displays a photo of this intersection.

- Vehicles use the western-most southbound lane as parking between Russell Street and Harmon Street. There is a public parking lot across from Hawthorne Avenue and patron parking behind most of the businesses. The limits of on-street parking is ill-defined throughout this area.
- One participant stated that the transformation of the southbound right travel lane to the parking lane causes confusion for drivers.
- There are many driveways on the east side of Route 707 (Whitney Avenue) north of the intersection.
- There is no pedestrian scale lighting.
- There are no bus stop signs on either side of Route 707 (Whitney Avenue) at Park Avenue and Gillies Road, despite CTtransit identifying stops here. Participants stated that many pedestrians cross Route 707 (Whitney Avenue between Park Avenue / Gillies Road and Central Avenue to move between businesses.
- Participants stated that the area could benefit from streetscape design enhancements.

Exhibit 23: Route 707 (Whitney Avenue) at Park Avenue



4.7 Intersection of Route 707 (Whitney Avenue) and Skiff Street

- This is a very wide signalized intersection. There are crosswalks across all legs, but crossing distances are long.
- This area has a different feel and character than the rest of the corridor. While the intersection is bigger geometrically, motorists, bicyclists, and pedestrians seem to be able to navigate it better than other areas of the corridor.
- Skiff Street, while only a minor arterial, carries a significant amount of east-west traffic through Hamden. Its AADT is over 13,000 vehicles/day just west of the intersection.
- A new lane configuration was installed on Skiff Street a year ago. Skiff Street now has a bike lane in either direction between Whitney Avenue and Dixwell Avenue. Access to the Farmington Canal Trail is provided on Skiff Street.
- The Town of Hamden would like to use the Transportation Alternatives Program grant to continue the Mill River Trail north to Davis Street.

4.8 Route 707 (Whitney Avenue) Near Millbrook Road

- Participants noted that speeding is a problem in this section of the corridor.
- There was a fatal head on collision, caused by impaired driving and high speeds (60 MPH), on New Year's Day 2024 at this location.
- Like many sections of the corridor, there are no shoulders and no pedestrian scale lighting
- South of the bridge over Route 15, the roadway narrows abruptly.

5 Recommendations

Based on the findings discussed during the RSA, the study team compiled a set of recommendations for the study area. These recommendations are organized into ten locations. The RSA team used a combined shuttle / walk approach to cover the 3.25-mile corridor from the City of New Haven and the Town of Hamden municipal line to Millbrook Road. The centerline of Route 707, between Short Hill Road and Mill Brook Road, marks the municipal line between Hamden and North Haven. The sections below were established to organize the recommendations in a coherent way. Many of the recommendations identified by the RSA team are applicable to any / all intersections or roadway segments in the study area. A table of recommendations organized by location is presented in Exhibit 24. Further details on recommendations are provided in the section below.

All recommendations are categorized by their complexity of implementation:

- **Least Complex Recommendations:** These are typically low-cost recommendations such as striping and signage, and generally do not require extensive engineering or construction costs. More extensive recommendations which have funding previously committed may be included.
- **Moderately Complex Recommendations:** These are improvements that may require more substantial engineering than those generally included as least complex recommendations. These may require establishment of funding in capital improvement plans, or a dedicated funding item. However, these recommendations fall between the least complex and most complex, requiring some level

of design and funding, but typically do not include ROW acquisitions, extensive environmental permitting, etc.

- **Most Complex Recommendations:** These are improvements that require substantial study and engineering. These recommendations generally require significant funding for implementation and may require several years of planning to budget.

Any work within the State ROW to be done by non-State forces will require an encroachment permit from the District 3 Permit Office and/or an official request from the municipal LTA.

Exhibit 24: Route 707 (Whitney Avenue) Recommendations Summary

Recommendation	Route 707 (Whitney Avenue) Location							
	Corridor Wide	Armory Street	Davis Street / Eli Road / Augur Street	Putnam Avenue	Waite Street	St. Rita School / Commercial Areas	Skiff Street	Millbrook Road
Least Complex								
Install pedestrian scale lighting to increase visibility of vulnerable users	•							
Replace missing or broken lighting in luminaires over roadway			•	•				
Trim overgrown vegetation along existing sidewalk network	•							
Stripe all crosswalk legs at signalized intersections where sidewalks exist or are planned as part of a new project, consistent with CTDOT 2023 Complete Streets Design Criteria and Justification Process	•							
Improve sightlines at the intersection of Route 707 (Whitney Avenue) and Walden Street through tree trimming					•			
Replace missing side street signs				•	•			
Replace missing bus stop signs		•				•		
Upgrade pedestrian facilities at feasible bus stop locations	•							
Remove extra pedestrian ramp that faces Route 707 (Whitney Avenue) at Eli Road			•					
Moderately Complex								
Install ADA/PROWAG compliant crosswalks, curb ramps, signal push buttons	•							
Install and enforce speed reduction signs in school zones			•			•		
Install "Your Speed" signs			•			•		•
Upgrade signal heads	•							
Repair / replace sidewalk in areas of disrepair	•							
Consider converting Walden Street to one-way in only from Route 707 (Whitney Avenue)					•			
Remove or formally establish parking between Russell Street and Harmon Street						•		
Construct sidewalk adjacent to east side of roadway		•						
Consider chevron signs at curves if road diet is implemented			•		•			
Continue planning for road diet implementation in corridor	•							
Shorten crossing distances at approaches to the intersection							•	
Consider on-street parking between Auger Street and Ralston Avenue			•					
Consider crosswalk improvements at Servoss Street and Whitney Place				•				
Consider a mid-block crossing at Ralston Avenue				•				
Most Complex								
Reconstruct intersections with Davis Street / Eli Road			•					
Revise intersection/curb geometry to be sufficient for a WB-62 design vehicle				•				
Pursue access management for adjacent property owners where appropriate						•		

5.1 General Corridor Wide Recommendations

The recommendations for the entire length of Route 707 (Whitney Avenue) corridor focus on creating a safer, more coherent, and more aesthetic experience for non-motorized users. The recommendations aim to increase the visibility for and of pedestrians, as well as create clear designated spaces for vehicles, bicyclists, and pedestrians.

Least Complex Recommendations

- 1) Install pedestrian scale lighting to increase visibility of vulnerable road users. Note: CTDOT EB-2024-1 requires roadway lighting at all new pedestrian crosswalks across state roads, in conformance with the Engineering & Construction Directive ECD-2023-8, "Complete Streets Controlling Design Criteria". The goal of crosswalk lighting should be to illuminate with positive contrast to make it easier for a driver to visually identify the pedestrian. This involves placing the luminaires in forward locations to avoid a silhouette effect of the pedestrian.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Trim overgrown vegetation along existing sidewalk network.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 3) For State owned and maintained crosswalk locations, stripe all crosswalk legs at signalized intersections where sidewalks exist or a planned as part of a new project, consistent with CTDOT 2023 Complete Streets Design Criteria and Justification Process
 - **Next Step:** LTA to contact DOT.TrafficEngineering@ct.gov

- **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 4) Upgrade pedestrian facilities at feasible bus stop locations in the corridor. Several bus stops can be enhanced with pedestrian / ADA-compliant upgrades.
 - **Next Step:** Coordinate with the [Office of Transit & Ridesharing](#) to identify the location and type of facilities (e.g., landing pad, bus shelter, etc.) that should be provided

Moderately Complex Recommendations

- 1) Install ADA / Public Right-of-Way Accessibility Guidelines (PROWAG)-compliant crosswalks, curb ramps, signal push buttons at intersections. If approved, the municipality must first install ADA-compliant landing areas and sidewalk ramps, address any pedestrian-related sightline inadequacies, and address any lighting requirements via an encroachment permit. Once the municipality notifies CTDOT that this work is completed, CTDOT would install the crosswalk pavement markings with appropriate pedestrian crossing warning signing.
 - **Next Step:** Municipality to contact South Central Regional Council of Governments ([SCRCOG](#)) for potential funding sources
 - **Next Step:** Municipality to evaluate crosswalk locations along corridor
 - **Next Step:** LTA to send request to DOT.TrafficEngineering@ct.gov for concurrence
 - **Next Step:** Municipality to check available ROW and roadside area for feasibility. Coordinate with CTDOT for feasibility

- **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Repair / replace sidewalk in areas of disrepair.
 - **Next Step:** Municipality to coordinate with adjacent property owners for access management
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 3) Continue planning for road diet implementation in corridor. The implementation of a road diet can reduce speeds and crashes, as well as provide a more defined space for cyclists.
 - **Next Step:** Municipality to continue to coordinate with CTDOT Traffic Engineering to discuss the feasibility of a road diet.
 - **Next Step:** LTA to contact DOT.TrafficEngineering@ct.gov

5.2 Intersection of Route 707 (Whitney Avenue) and Armory Street

Recommendations in this area focus on transit improvements and pedestrian security.

Least Complex Recommendation

- 1) Replace bus stop sign on the northwest corner of intersection.
 - **Next Step:** Municipality to contact DOT.BusStops@ct.gov to coordinate with CTDOT to identify bus stop needs

Moderately Complex Recommendation

- 1) Add new sidewalk on east side of Route 707 (Whitney Avenue) closer to the roadway, north of Amory Street.

- **Next Step:** Municipality to contact [SCRCOG](#) for potential funding sources
- **Next Step:** Municipality to check available ROW and roadside area for feasibility
- **Next Step:** Municipality to coordinate with adjacent property owners for access management
- **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

5.3 Intersection of Route 707 (Whitney Avenue) and Davis Street /Eli Road/Augur Street

Recommendations in this area focus on roadway lighting, school zone speed reduction, speed reduction at curves, and the realignment of the intersection at Eli Road, as displayed in Exhibit 25 and Exhibit 26. If Davis Street and Eli Road are realigned as show in Exhibit 25, significant impacts to Eli Whitney Park would occur, which could involve fulfilling Section 4f requirements. Exhibit 26 is an alternative concept and was developed to show reduced impacts to Eli Whitney Park.

Least Complex Recommendations

- 1) Replace missing or broken lighting in luminaires over roadway.
 - **Next Step:** LTA to send requests for new illumination to DOT.TrafficEngineering@ct.gov for an illumination study
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
 - **Next Step:** LTA to consider applying for a school speed limit change through OSTA if applicable

Exhibit 25: Route 707 (Whitney Avenue) Preliminary Concept

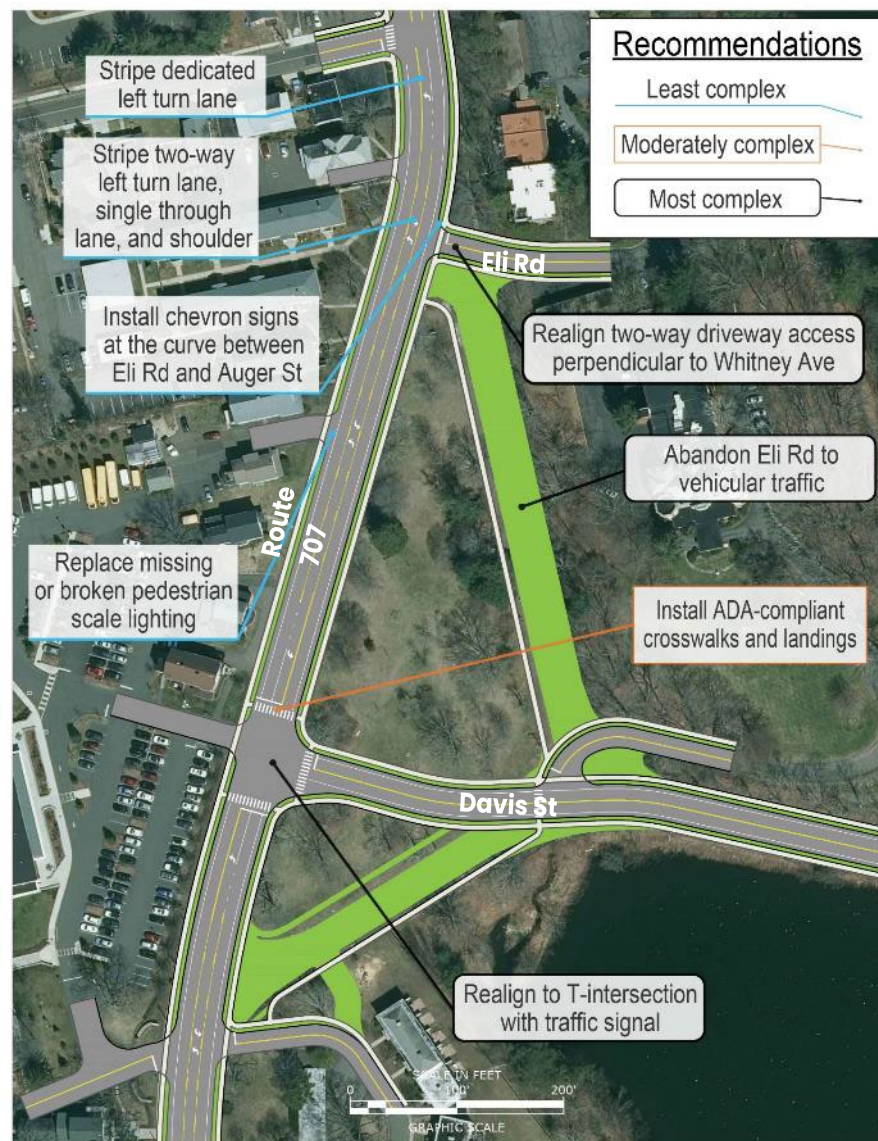
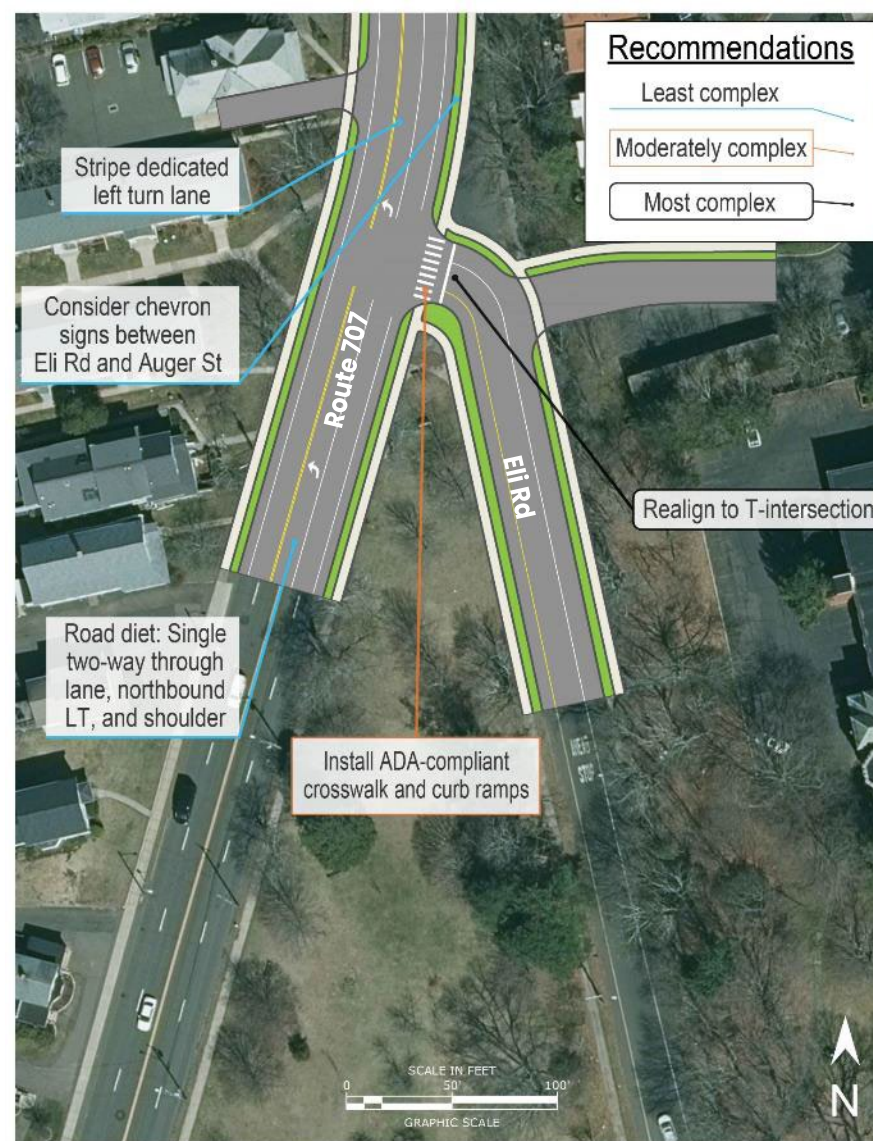


Exhibit 26: Route 707 (Whitney Avenue) Alternative Concept



- **Next Step:** Municipality to consider applying for Automated Traffic Enforcement Safety Devices through OSTA
- 2) Remove the extra pedestrian ramp that faces Route 707 (Whitney Avenue) at Eli Road.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

Moderately Complex Recommendations

- 1) Install and enforce speed reduction signs in the school zone.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Install “Your Speed” signs
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 3) Consider chevron signs at the curve between Eli Road and Auger Street.
 - **Next Step:** LTA to send request to DOT.TrafficEngineering@ct.gov for review of guiderail
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 4) Consider on-street parking between Auger Street and Ralston Avenue as part of the road-diet.
 - **Next Step:** LTA to coordinate with DOT.TrafficEngineering@ct.gov to determine feasibility

Most Complex Recommendation

- 1) Reconstruct Route 707 (Whitney Avenue) intersection in the Davis Street / Eli Road area, as displayed in Exhibit 23.

- **Next Step:** Municipality to contact [SCRCOG](#) for potential funding sources
- **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- **Next Step:** Municipality to consider applying for a quick build complete streets demonstration project
- **Next Step:** Municipality to evaluate available ROW and Roadside area for feasibility
- **Next Step:** LTA to contact DOT.TrafficEngineering@ct.gov

5.4 Intersection of Route 707 (Whitney Avenue) and Putnam Avenue

Additional recommendations in this section of the corridor focus on missing lighting and signage.

Least Complex Recommendations

- 1) Replace missing or broken lighting in luminaires over roadway.
 - **Next Step:** LTA to send requests for new illumination to DOT.TrafficEngineering@ct.gov for an illumination study
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Replace missing street signs.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

Moderately Complex Recommendations

- 1) Consider improvements at crosswalks at Servoss Street and in front of Whitney Place. First, consider less complex warning and improvements first such a back-to-back pedestrian warning signs, yield lines, Yield Here to Pedestrian signs, ADA-compliant ramps, and RRFBs. If the issues do not resolve, consider a raised crosswalk.
 - **Next Step:** LTA to coordinate with DOT.TrafficEngineering@ct.gov for review of appropriate measures
- 2) Consider a mid-block crossing at Ralston Avenue.
 - **Next Step:** LTA to coordinate with DOT.TrafficEngineering@ct.gov for review of appropriate measures

Most Complex Recommendation

- 1) Revise intersection/curb geometry to be sufficient for a WB-62 design vehicle
 - **Next Step:** Municipality to evaluate available ROW and Roadside area for feasibility
 - **Next Step:** Municipality to contact SCRCOG for potential funding sources
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

5.5 Intersection of Route 707 (Whitney Avenue) and Waite Street

Additional recommendations in this section of the corridor focus on missing signage and speed reduction at curves.

Least Complex Recommendations

- 1) Replace missing street signs.

- **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Improve sightlines at the intersection of Route 707 (Whitney Avenue) and Walden Street through tree trimming.
 - **Next Step:** Municipality to evaluate available ROW and Roadside area for feasibility
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

Moderately Complex Recommendations

- 1) Consider converting Walden Street to one-way in only from Route 707 (Whitney Avenue).
 - **Next Step:** Municipality to evaluate feasibility
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 2) Consider chevron signs at the curve near Ford Street.
 - **Next Step:** LTA to send request to DOT.TrafficEngineering@ct.gov for review of guiderail
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

5.6 Route 707 (Whitney Avenue) Near St. Rita School and Commercial Areas North of Park Avenue / Gillies Road

Additional recommendations in this section of the corridor focus on transit improvements, pedestrian safety, and access management.

Least Complex Recommendation

- 1) Replace missing bus stop signs on both sides of Route 707 (Whitney Avenue).
 - **Next Step: Next Step:** Municipality to contact DOT.BusStops@ct.gov to coordinate with CTDOT to identify bus stop needs

Moderately Complex Recommendations

- 1) Install and enforce speed reduction signs in the school zone.
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
 - **Next Step:** LTA to consider applying for a school speed limit change through OSTA if applicable
 - **Next Step:** Municipality to consider establishing Pedestrian Safety Zone through OSTA
 - **Next Step:** Municipality to consider applying for Automated Traffic Enforcement Safety Devices through OSTA
- 2) Install "Your Speed" signs
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office
- 3) Remove or formally establish parking between Russell Street and Harmon Street.
 - **Next Step:** Municipality to evaluate available ROW and feasibility
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

Most Complex Recommendation

- 1) Pursue access management for adjacent property owners to reduce the number of conflicting movements with roadway traffic.
 - **Next Step:** Municipality to initiate and coordinate access management with adjacent property owners
 - **Next Step:** LTA to coordinate with CTDOT Office of State Traffic Administration at DOT.OSTA@ct.gov on need for traffic signal revisions to town-owned signal

5.7 Intersection of Route 707 (Whitney Avenue) and Skiff Street

The pedestrian ramps at this intersection were recently upgraded for ADA compliance. Despite this, the intersection lacks pedestrian scale lighting, and the crossing distances are long, due in part to the skew of the crossings.

Moderately Complex Recommendations

- 1) Install pedestrian scale lighting to increase visibility of vulnerable users.
 - **Next Step:** LTA to send request to DOT.TrafficEngineering@ct.gov for concurrence
 - **Next Step:** Municipality to check available ROW and roadside area for feasibility. Coordinate with CTDOT for feasibility
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

- 2) Shorten crossing distances at all approaches to the intersection
 - **Next Step:** LTA to send request to DOT.TrafficEngineering@ct.gov for concurrence
 - **Next Step:** Municipality to check available ROW and roadside area for feasibility. Coordinate with CTDOT for feasibility
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

5.8 Route 707 (Whitney Avenue) Near Millbrook Road

Recommendations in this section of the corridor focus on speed reduction.

Moderately Complex Recommendation

- 1) Install “Your Speed” signs
 - **Next Step:** Municipality to consider applying for an [Encroachment Permit](#) through the District permit office

6 Summary

This report documents the observations, discussions, and recommendations developed during the completion of the Town of Hamden's RSA. It provides the municipality with an outlined strategy to improve the transportation network for all users in the study area, particularly focusing on pedestrians and cyclists. Moving forward, the municipal and CTDOT may use this report to prepare strategies for funding and implementing the improvements. This report provides Hamden with a toolkit to plan for including these multi-modal recommendations into future development within the study area.

This RSA Report is an objective review intended for the municipality to use to help assess the existing conditions within a predetermined area selected by the municipality. The conclusions of this report are advisory and intended for general planning purposes to help identify bicycle, pedestrian and non-motorized transportation needs that encourage walking and bicycling, as well as assists in developing recommendations to improve the existing conditions. The contents of this report are not intended to be legally binding but rather offer recommendations to improve safety in the vicinity of the audit location and create a more appealing transportation alternative.

Appendices

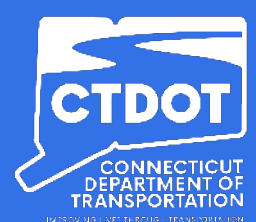
A: Pre-Audit Presentation

B: Walk Audit Materials

C: Field Notes

Hamden Road Safety Audit

Route 707 (Whitney Avenue): Hamden / New Haven Town Line to Millbrook Road



October 2024



Welcome / Introductions

Project Team

- Connecticut Department of Transportation (CTDOT) is sponsoring
- Town of Hamden is applicant
- FHI Studio is assembling and writing Road Safety Audit report



Agenda

1. Welcome / Introductions
2. RSA Purpose and Goals
3. Study Area Existing Conditions
5. Potential Countermeasures
6. Discussion
7. Next Steps



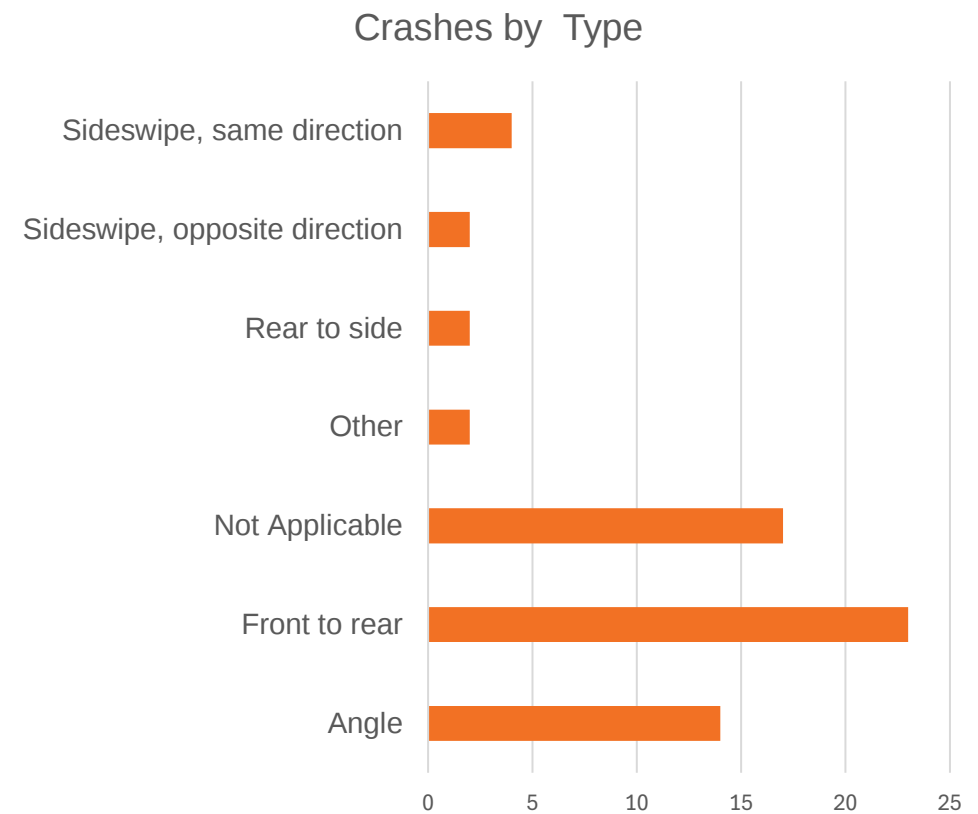
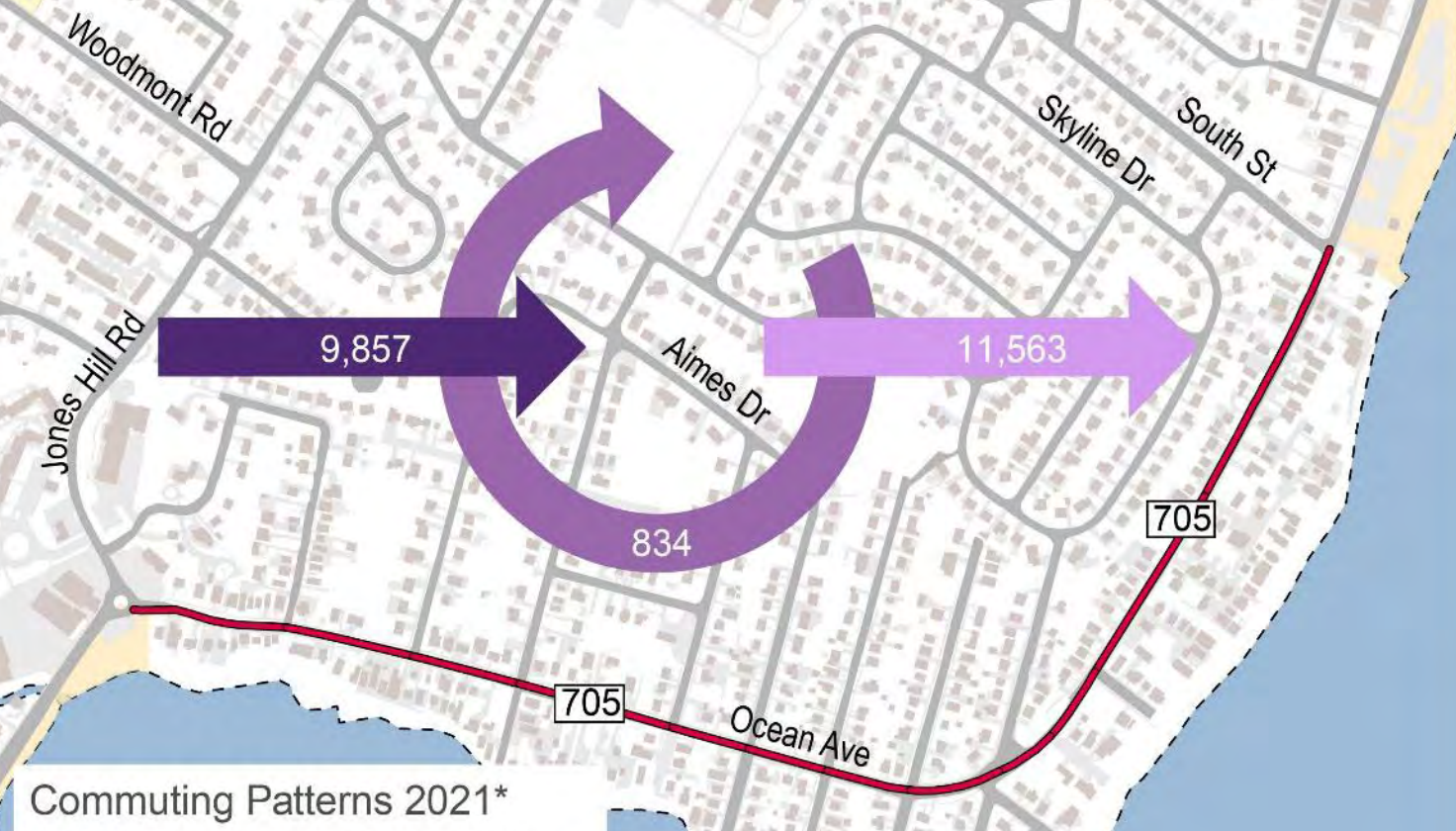


RSA Purpose and Goals



Purpose and Goals

- Safety assessment of existing walking and biking routes
- Improve transportation network for all users by making conditions safer and more comfortable for pedestrians and bicyclists
- Identify the issues that may discourage or prevent walking and bicycling
- Identify next steps, evaluate feasibility of proposed improvements, and potential funding sources.



Study Area Existing Conditions

Study Area

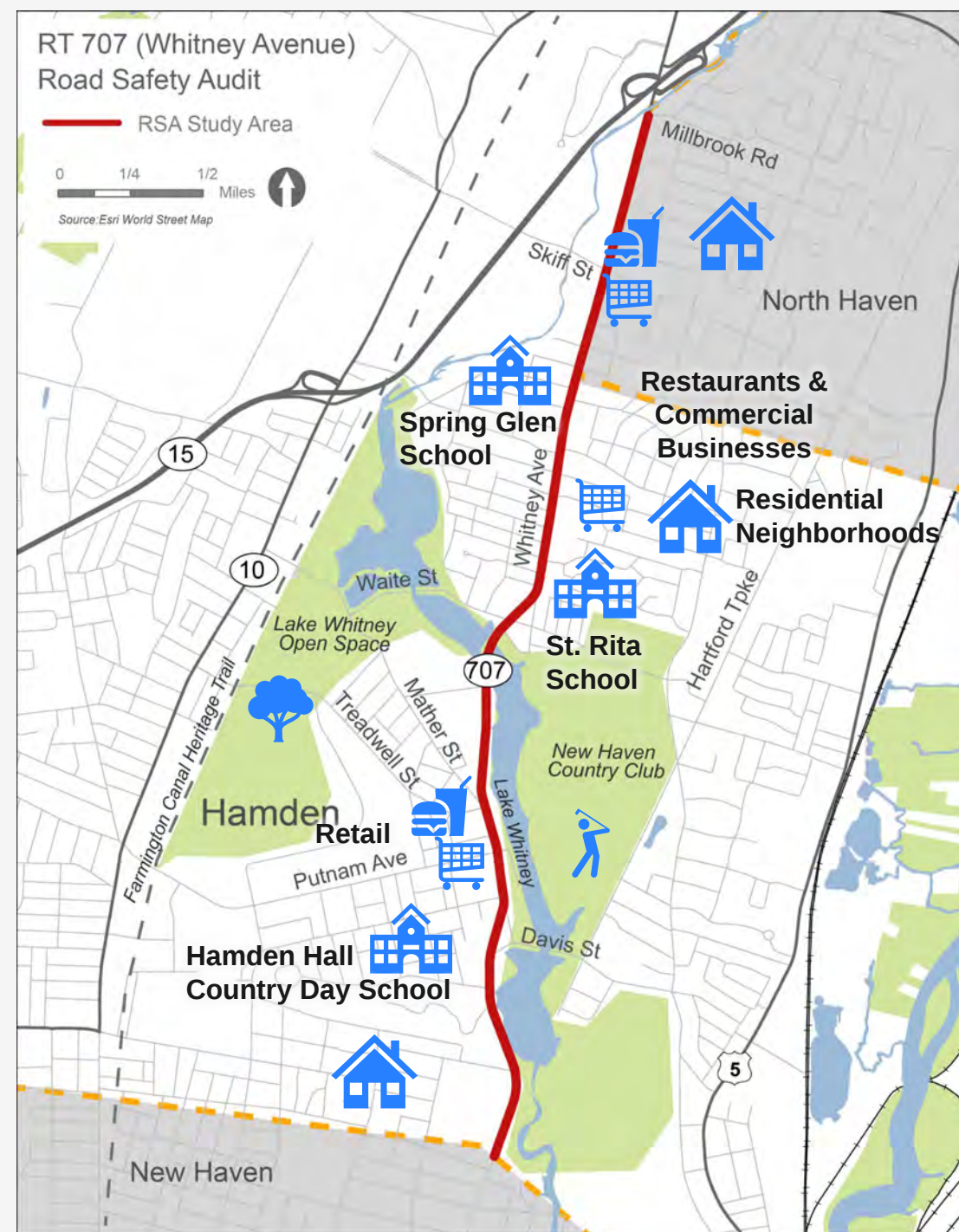
- Route 707 (Whitney Av)
- City of New Haven/Town of Hamden Town Line to Millbrook Rd
- 3.25 miles

Note: Hamden and North Haven town line is roadway centerline from Short Hill Rd to Millbrook Rd



Points of Interest

- Commercial
- Mixed use
- Retail
- Residential
- Schools:
 - Spring Glen Elementary
 - Hamden Hall Country Day
 - St. Rita



Employment and Commuter Patterns*

- Greater share of workers commute into study area for employment versus residents leaving study area for employment
- About 300 people both live and work within a ½-mile

**2021 data analysis using ½-mile study area buffer*



Transit Network

- CT**transit** Route 228: *Whitney Av – New Haven, Hamden, and Cheshire*
 - Part of ParkConneCT program, providing access to state parks – Sleeping Giant State Park
- CT**transit** Route 229: *Waterbury – Waterbury and New Haven via Whitney Av*



Past / Current Work

Hamden Complete Streets Policy (2023)

- 2019 POCD recommendation
- Increase safety and access for all ages, abilities, and modes
- Create better connections between residential and commercial areas
- Ensure Town's urban centers support sustainable development and growth
- Improve access to / between public transit systems (e.g., rail and bus)
- Develop safe routes to schools for students

April 10, 2023

Town of Hamden, CT COMPLETE STREETS POLICY

Presented to the Traffic Commission (Local Traffic Authority) by the Traffic and Engineering Departments.

Vision, Goals, and Principles

This Policy is intended to be a living document that will grow and adapt to needs of the Town of Hamden (the Town). It describes the Town's position on managing the transportation infrastructure within the Town and its connection to the surrounding region. The State of Connecticut has passed statute that promotes the consideration for all transportation modes. CT Gen Stat § 13a-153f (2012) - 2012 Connecticut General Statutes Title 13a - Highways and Bridges Chapter 238 - Highway Construction and Maintenance Section 13a-153f - Accommodations and provision of facilities for all users.

In Section 5.5 of the Town's Plan of Conservation and Development (2019) it is recommended that the Town adopt a Complete Streets Policy. This proposed policy more closely aligns the Town's local transportation network with the State's statute and the Plan of Conservation and Development to provide a framework specific to the Town of Hamden.

The Town should recognize that roadway projects, whether new, maintenance, or reconstruction, are potential opportunities to apply Complete Streets design principles and support the Town's goals for Multi-Modal Transit-Oriented Development. The Town should, to the maximum extent practical, design, construct, maintain, and operate streets to provide for a comprehensive and integrated street network of facilities to achieve the following objectives:

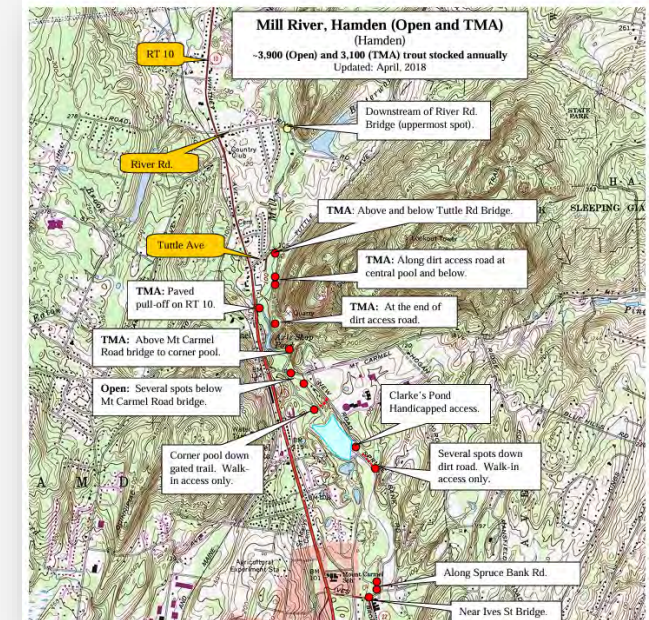
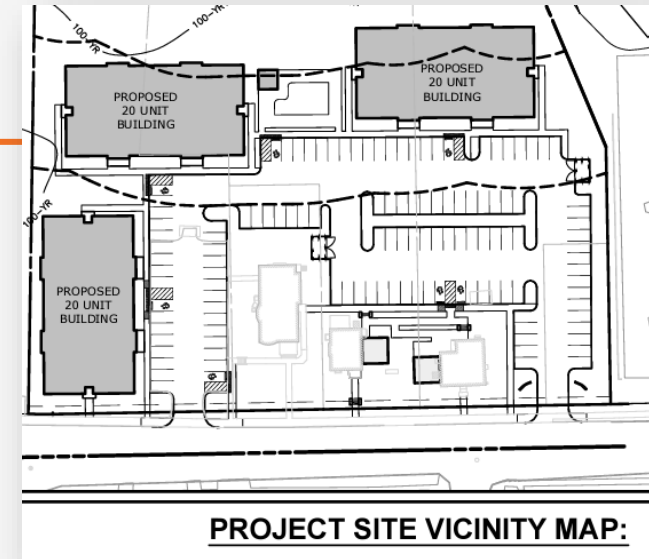
- Increase safety and access for all ages, abilities, and modes
- Create better connections between residential and commercial areas
- Ensure the Town's Urban Centers will support sustainable development and growth
- Improve access to and between public transit systems (e.g., rail and bus)
- Develop safe routes to schools for students
- Explore design interventions that create a sense of place, reflect the character of Hamden's different neighborhoods, and evoke a sense of safety and vibrancy
- Soften existing barriers (e.g., Wilbur Cross Parkway/Rt 15)
- Embrace Hamden's cultural arts, history, and natural resources
- Integrate traffic calming measures to slow traffic and encourage multi-modal transportation (e.g. walking, biking, public transit)
- Incorporate green infrastructure, and support of the Town's MS4 program for stormwater management.



The Town has a membership with CT Main Streets and passed a Complete Streets Policy in 2023. The Town values walkable and prosperous areas that reflect a sense of place and community.

Past / Current Work

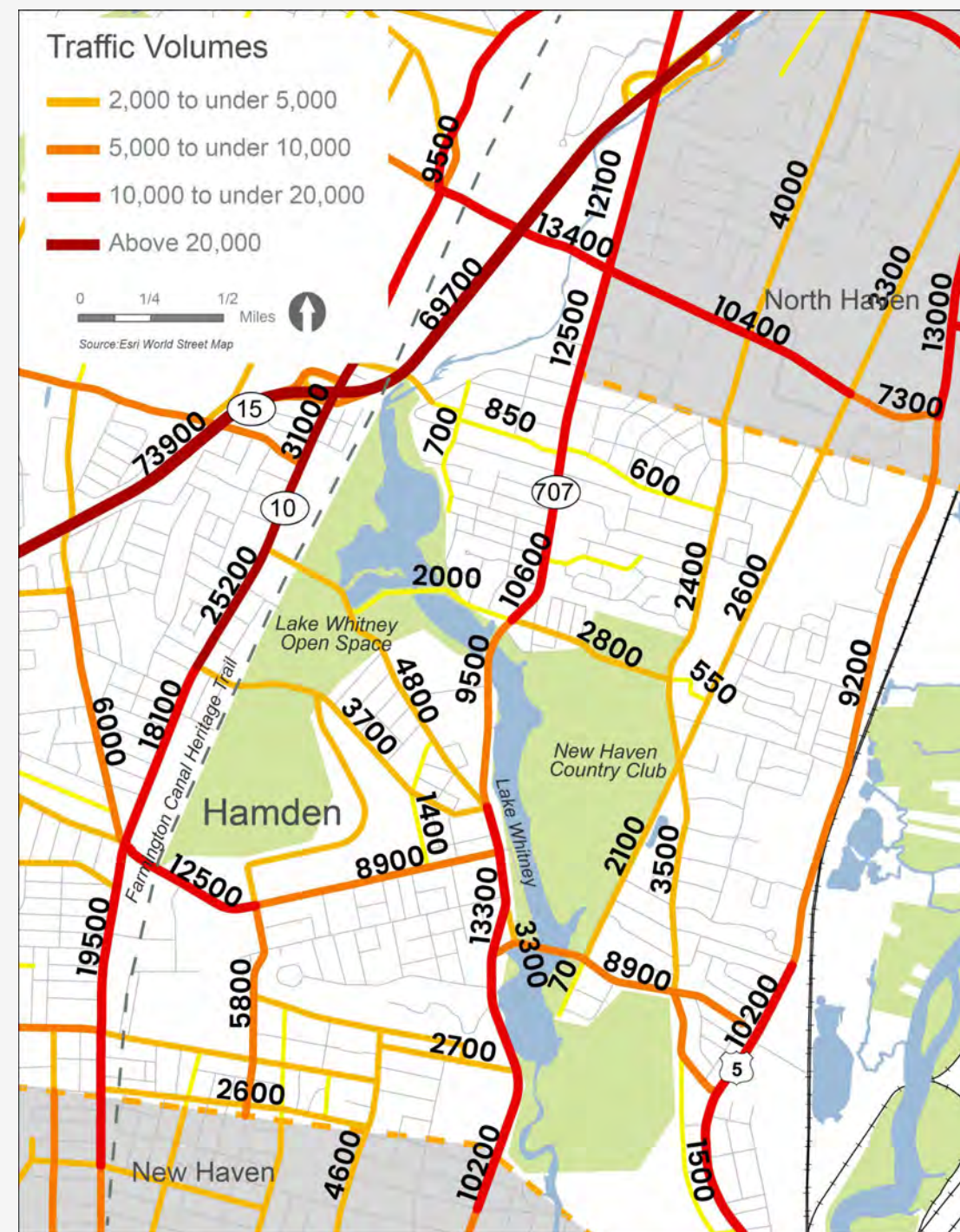
- CTDOT project to install RRFBs at Davis St and Lake Rd intersection - State project #0173-0547
- Hamden Engineering Department LOTCIP project bid to replace Waite St and Mather St bridges over Lake Whitney
- Hamden Hall Country Day School expanded campus to include property at 20 Davis St
 - Add reduced speed School Zone signage to Davis St
- Mixed-use development proposed at 2028-2056 Whitney Av
- Transportation Alternatives grant application to install a segment of Mill River Trail
 - Design and construction in progress in New Haven and Hamden
 - Connection along Whitney Av as mixed-use trail



Traffic Volumes - 2021

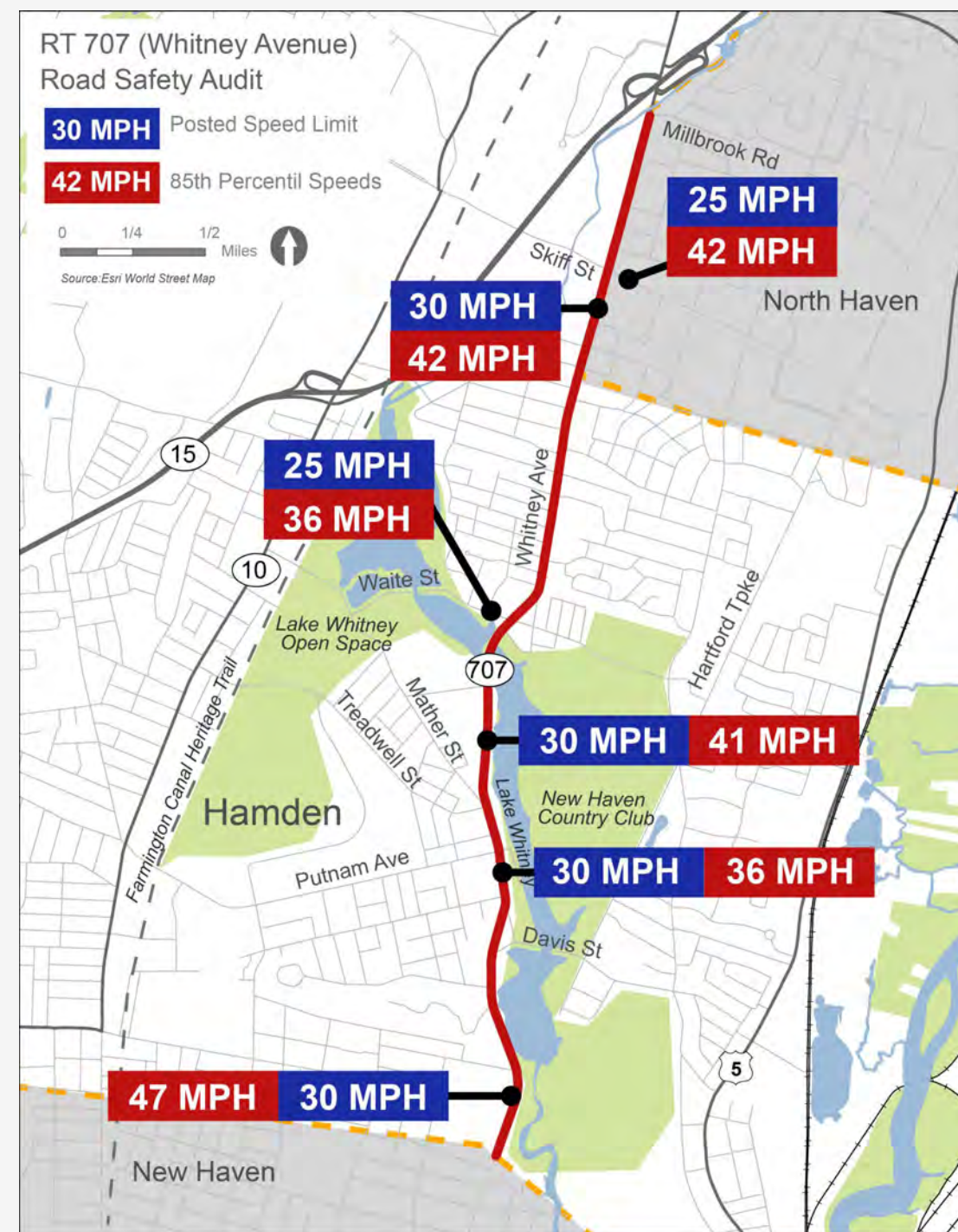
Average Annual Daily Traffic (AADT,
vehicles/day)

- RT 707 (Whitney Av): 10,200–13,300
- RT 10 (Dixwell Av): 9,500–31,000
- Skiff St: 10,400–13,400



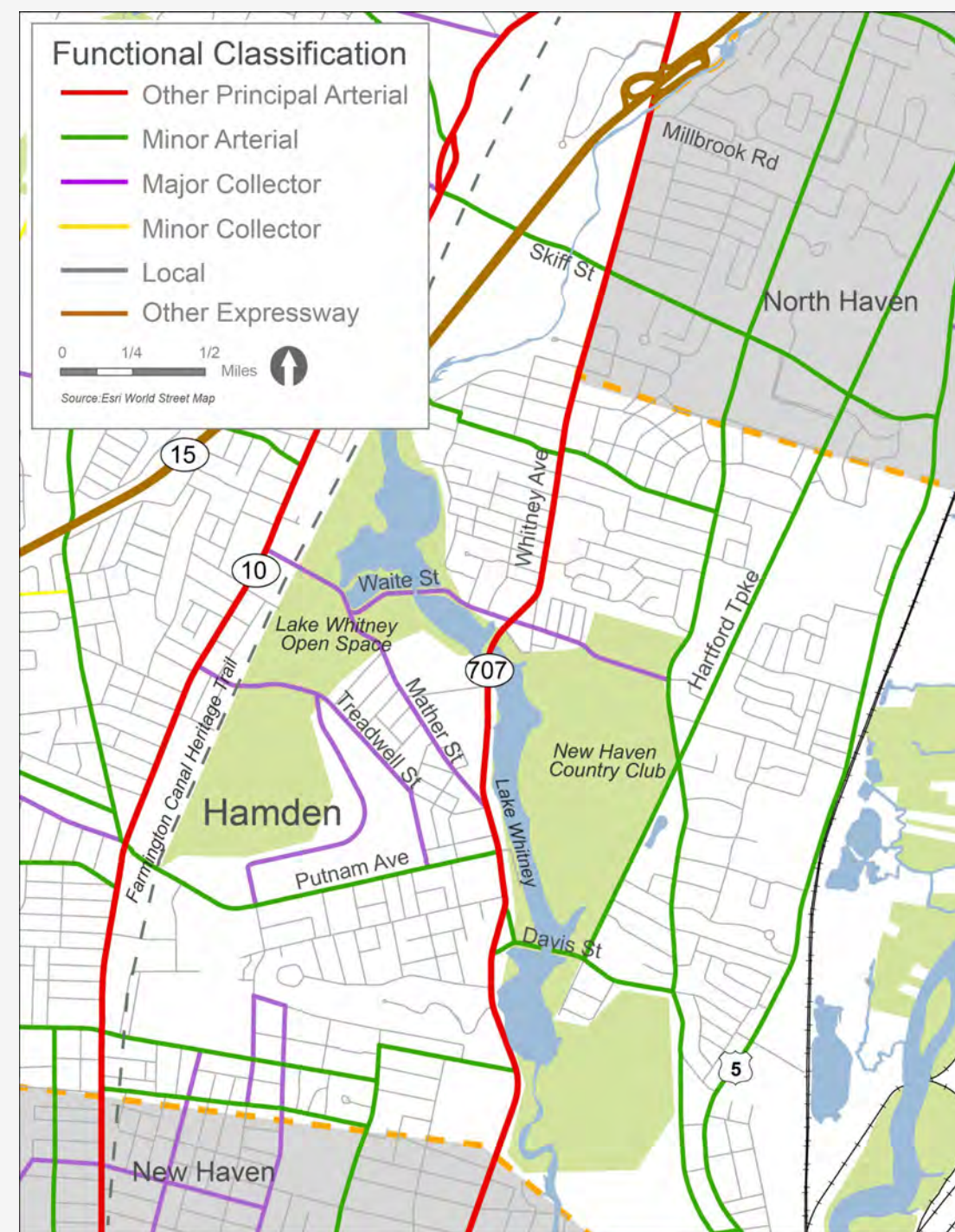
Traffic Speed Limits

- Route 707 (Whitney Av): 30 MPH
- Several 25 MPH school zones
- Average 85th percentile speeds 40% higher than posted limits



Functional Classification

- RT 707 (Whitney Av)
 - Principal arterial
- Intersecting minor arterials, major collectors, and local roads





Roadway Geometry

SR 707 (Whitney Av) Street Inventory*

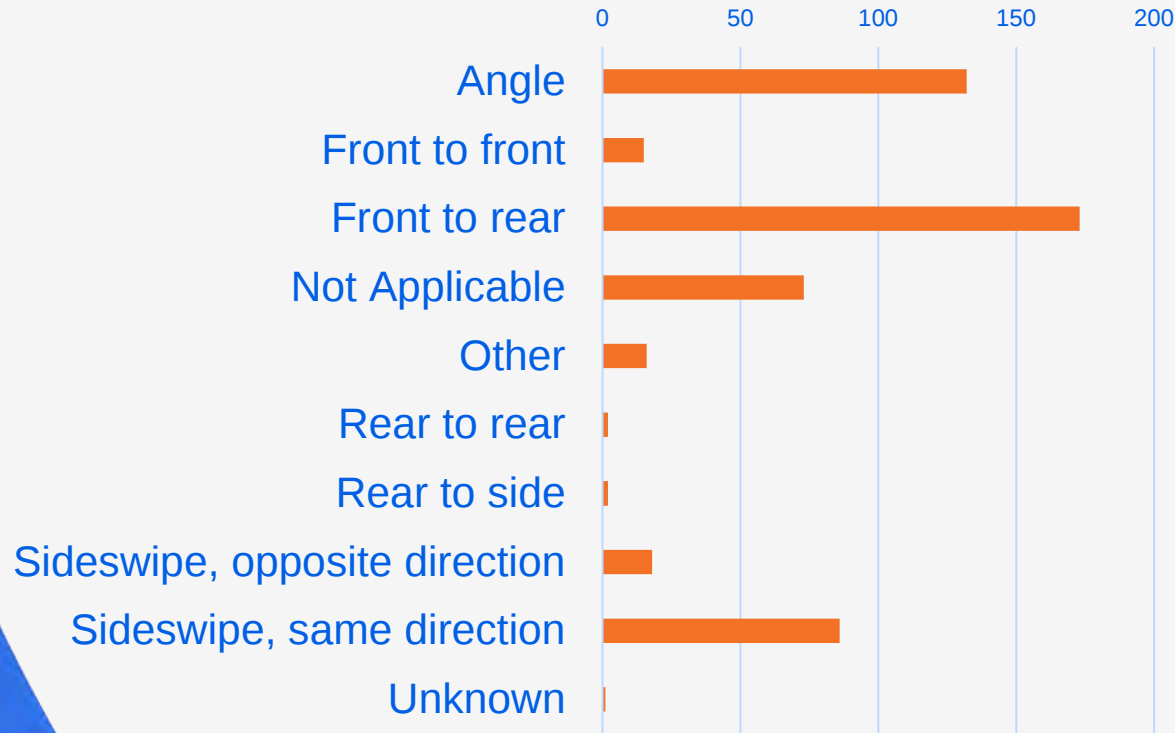
From	New Haven TL		Deepwood Dr		0.05 Mi N of Augur St		Waite St		Elihu St		Filbert St		Skiff St	
To	Deepwood Dr		0.05 Mi N of Augur St		Waite St		Elihu St		Filbert St		Skiff St		Millbrook Rd	
Distance	0.47 Mi		0.38 Mi		0.80 Mi		0.41 Mi		0.19 Mi		0.51 Mi		0.46 Mi	
Functional Classification	Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial		Principal Arterial	
Speed Limit	30 MPH		25 MPH		30 MPH		25 MPH		30 MPH		25 MPH		30 MPH	
Direction	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB	NB	SB
Lanes	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Lane Width	Typ. 11'	Typ. 11'	11'	11'	11'	11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'	10-11'
Sidewalk Type	Concrete	Concrete	Concrete	Varies	Varies	Varies	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete	Concrete
Sidewalk Width	4-5'	5-6'	5-9'	5-10'	4-6'	4-7'	4-5'	5-8'	4-5'	4-5'	4-7'	4-7'	4-7'	4-7'
Sidewalk Condition	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Fair	Poor-Good	Poor-Fair	Poor-Good	Fair-Good	Poor-Good	Poor-Fair	Fair-Good
ADA Ramp Present	Yes	Yes	Varies	Yes	Yes	Yes	Varies	Yes	Yes	Yes	Yes	Yes	Yes	Yes
ADA Ramp Compliant	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Curb	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies	Varies
Parking	No	No	No	No	No	No	No	Yes	No	No	No	No	No	No
Shoulder	None	None	None	None	None	None	None	None	None	None	None	None	None	None
On CTDOT Bike Network	No		No		No		No		No		No		No	
Notes			Short sidewalk gap SB		Unclear ped crossing at Mather St SB		NB sidewalk gap at Ford St				NB left turn lane at Skiff St		SB left turn lane at Skiff St, periodic sidewalk gaps NB	

*Condition: Good is serviceable, meets current design standards. Fair is generally serviceable, but may need minor repairs, or may not completely align with current design standards. Poor is not serviceable, generally inadequate for continued long-term use.

Highlighted cells indicate values which may warrant further investigation.

Crash Types (2019-2023)

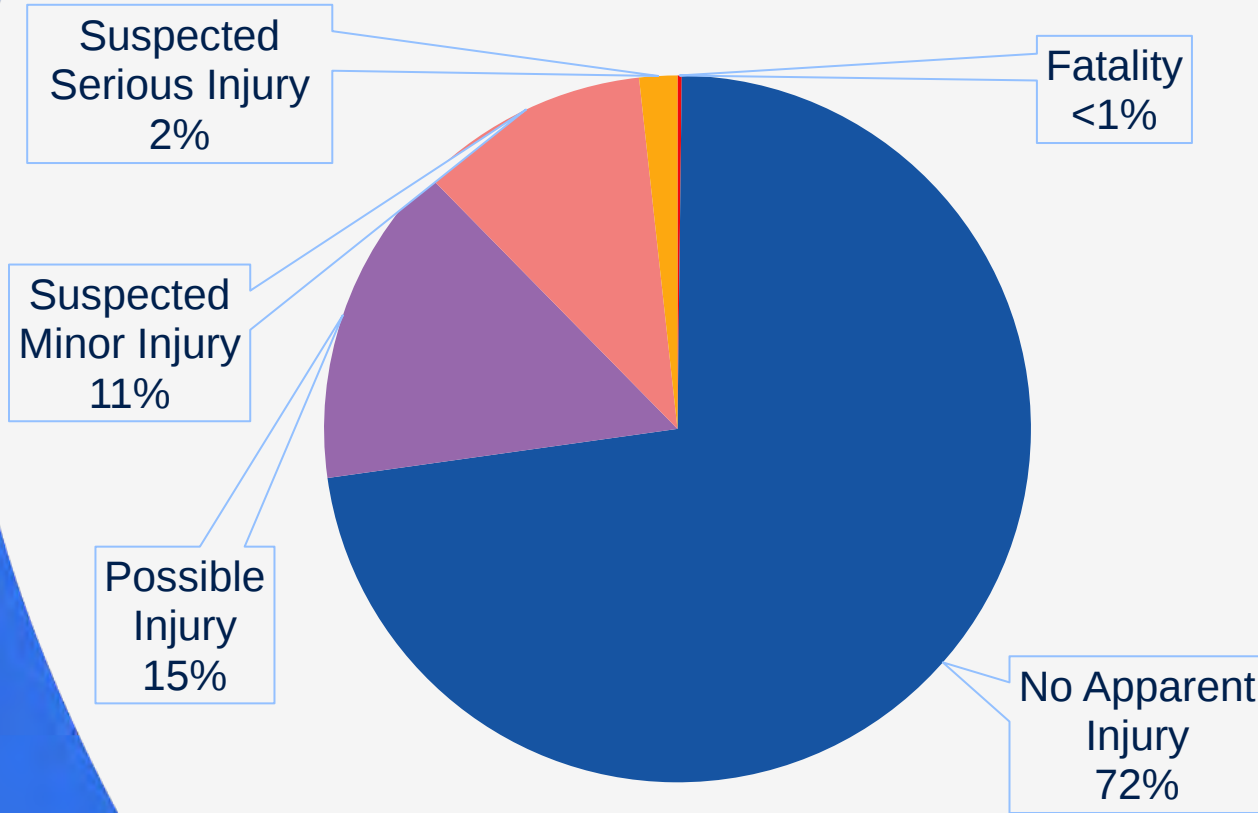
Manner of Impact



5-year crash total: 518



Crash Severity (2019-2023)



Statewide

Fatality	<1%
Suspected Serious Injury	1%
Suspected Minor Injury	11%
Possible Injury	12%
No Apparent Injury	76%



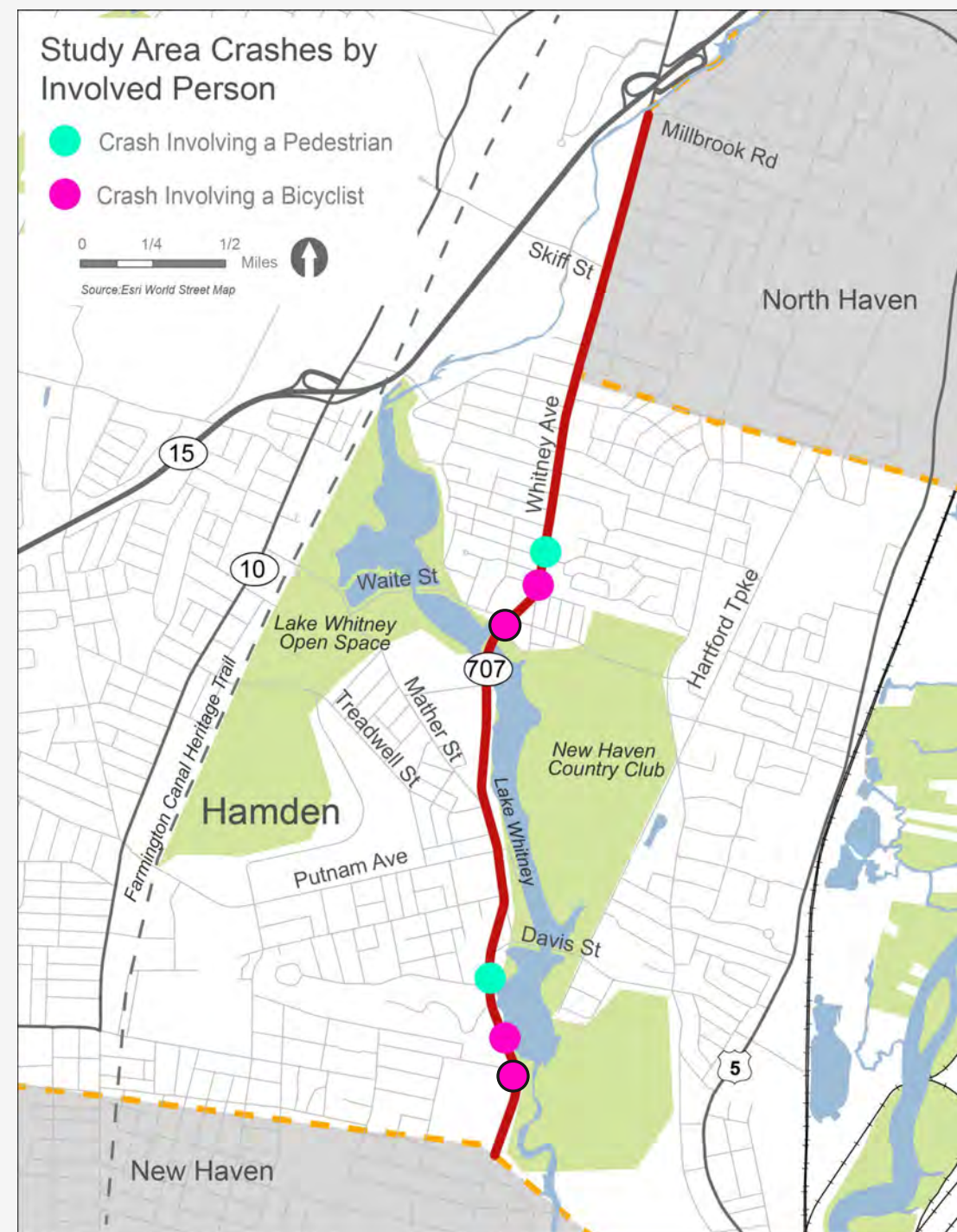
Crashes Involving Pedestrian or Bicyclist

6 Total Crashes (2019–2023)*:

Vulnerable User	Minor Injury	Serious Injury
 Pedestrian	1	1
 Bicycle	3	1

**Includes 2 crashes involving bicyclists in 2024 (●)*

Whitney Av corridor community organizations request improved roadway safety in this area. The Town and LTA strongly supports this request.



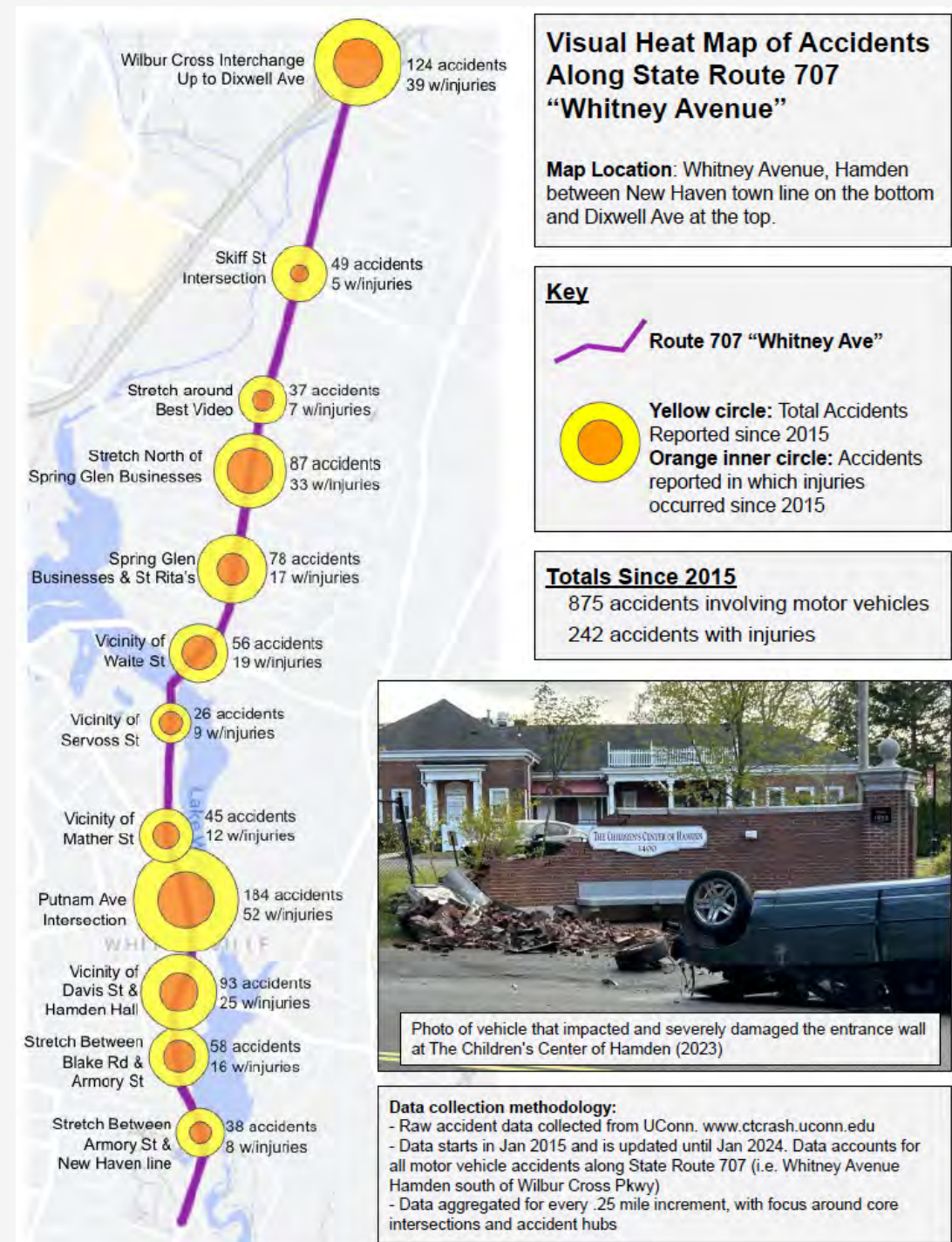
Crash Hotspots (2019 – 2023)

- Putnam Av
- Skiff St
- Eli Rd/Augur St/Davis St
- Armory St
- Waite St



Crash Hotspots (2015 – Jan 2024)

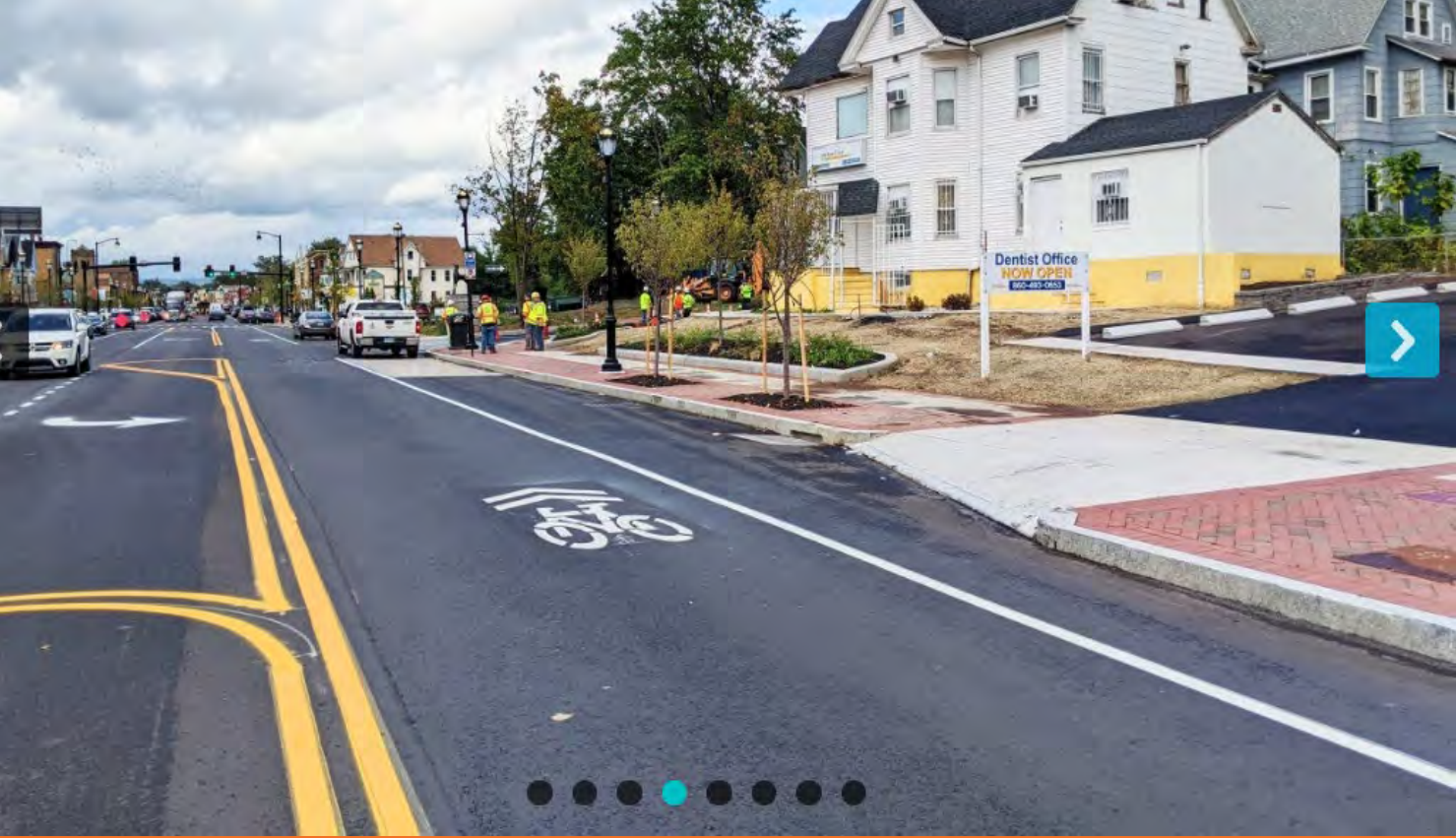
- Putnam Av intersection
- Wilbur Cross interchange
- North of Spring Glen businesses
- Vicinity of Davis St and Hamden Hall



Existing Conditions Findings

- Points of interest and trip generators
 - Three schools in the area
 - Many residential neighborhoods
 - Commercial
- Regional and local traffic
 - Access to Route 15 (Wilbur Cross Parkway)
 - US Route 5 and I-91 are parallel to Route 707
- Sidewalks with limited buffers from roadway, no bicycle infrastructure





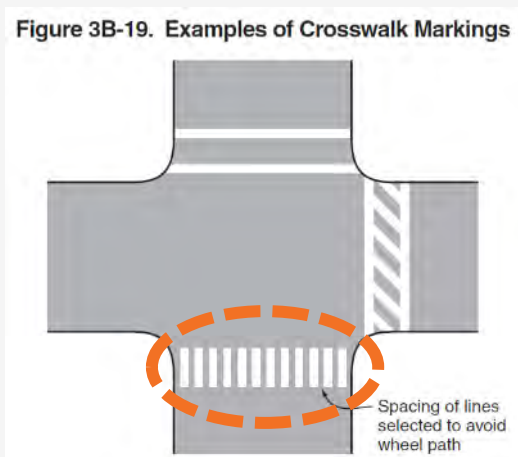
Potential Countermeasures



Pedestrian Safety Countermeasures



Sidewalks



Crosswalks



RRFB



Pedestrian refuge islands



Raised crosswalks



Pedestrian-scale lighting

Some countermeasures may not be appropriate on certain facilities



Sharrows



Bike lanes



Buffered bike lanes



Sidepaths

Some countermeasures may not be appropriate on certain facilities



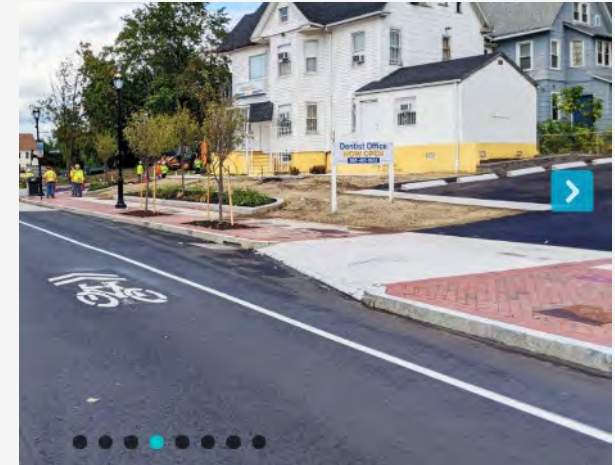
Speed Countermeasures



Lane narrowing



Signal timing



Streetscape



Median island



Street trees



Dynamic speed signs

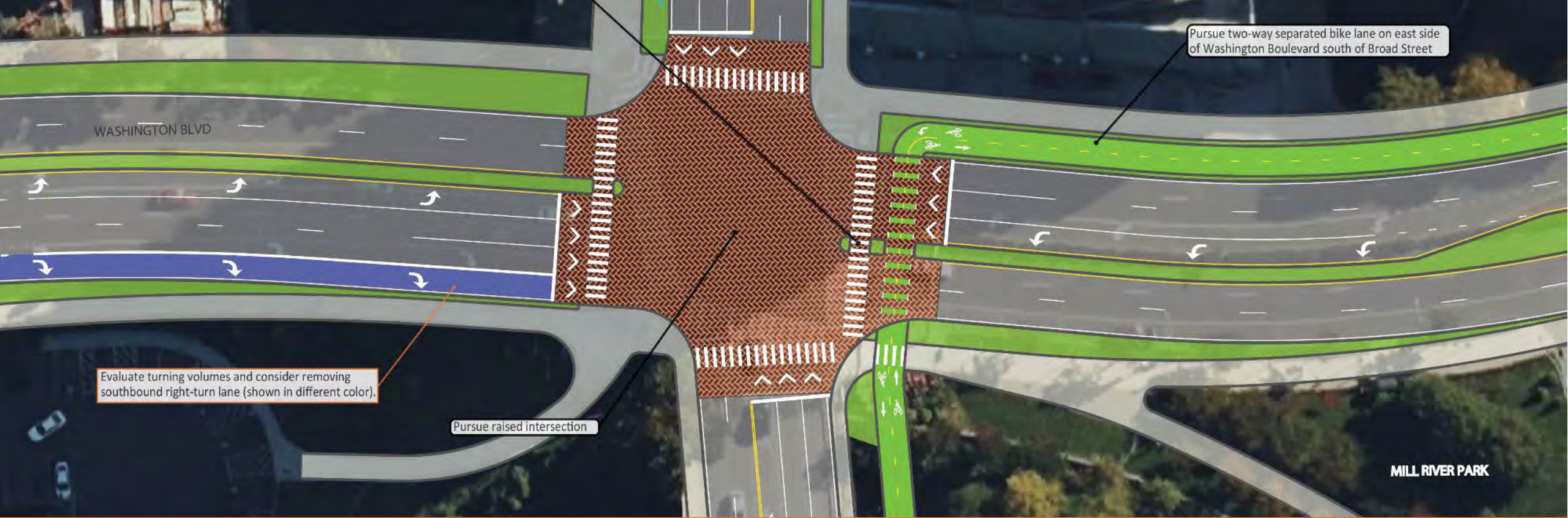
Some countermeasures may not be appropriate on certain facilities



Short medians / lateral shift



Roundabout



Discussion



Next Steps

Tomorrow's Site Visit

- Meet at **Eli Whitney Museum parking lot, 915 Whitney Av, 9:45 a.m.**
- Review safety protocols, reflective vests, etc.
- Walk study area corridor
 - Assess existing conditions
 - Identify potential countermeasures
- Recap findings at post-audit discussion immediately following



Thank you!



Route 707 (Whitney Avenue) - Road Safety Audit (RSA)

Site Walk / Visit

Hamden, CT

Wednesday, October 9th, 2024

AGENDA

- 1. Welcome and Introductions**
- 2. Route Review**
- 3. Safety Reminders**
- 4. Site Walk**
 - Distribute and discuss field packets
 - Suggestions for adding feedback
 - Identify issues and improvement opportunities (all participants)
- 5. Post-Audit Recap**
 - Discuss observations and potential improvements
 - Next steps

Participant Expectations

All participants should plan to be actively involved during the entire RSA process. Participants are encouraged to share their ideas, concerns, and comments with the study team at the pre-audit meeting and during the site visit. In addition, after the RSA site visit, participants will be asked to review and comment on the draft report to assure it is reflective of the RSA completed by the multidisciplinary team. Stakeholders' opinions are key elements to the success of the RSA.

Overall Study Area

Route 707 (Whitney Avenue): Hamden/ New Haven Town Line to Millbrook Road



RSA Field Sheet

Location 1: Intersection Route 707 and Armory Street

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____

RSA Field Sheet

Location 2: Intersection Route 707 and Eli Road/Augur Street/Davis Street

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Sheet

Location 3: Intersection Route 707 and Putnam Avenue

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Sheet

Location 4: Intersection Route 707 and Waite Street

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.

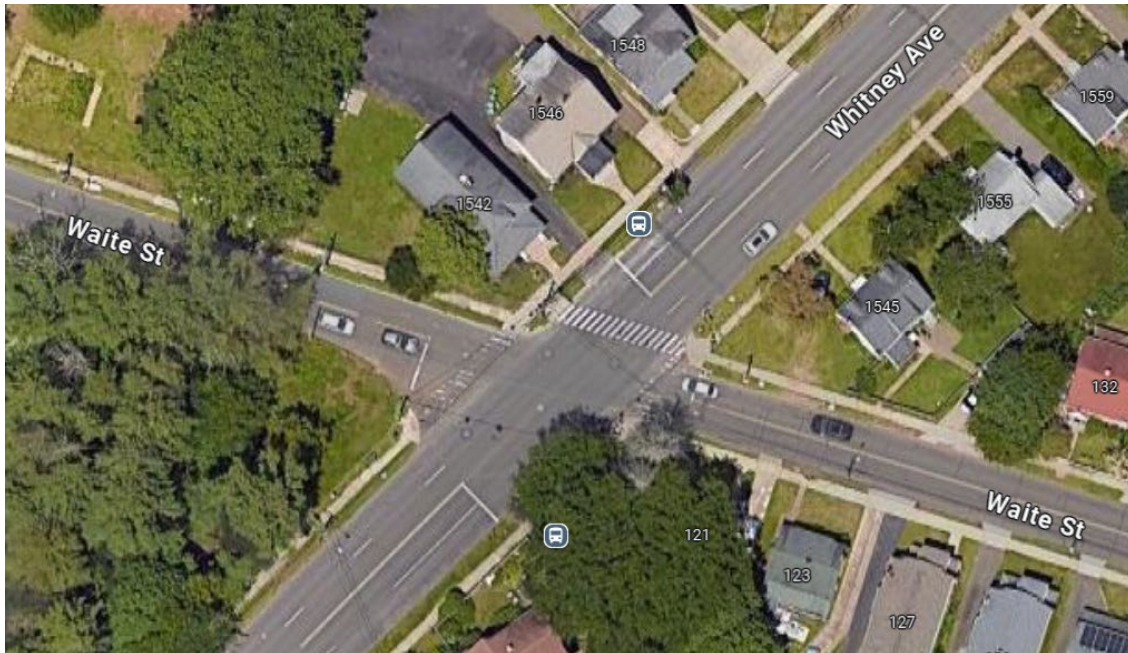


Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Sheet

Location 5: Route 707 in the vicinity of St. Rita School and commercial areas

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.

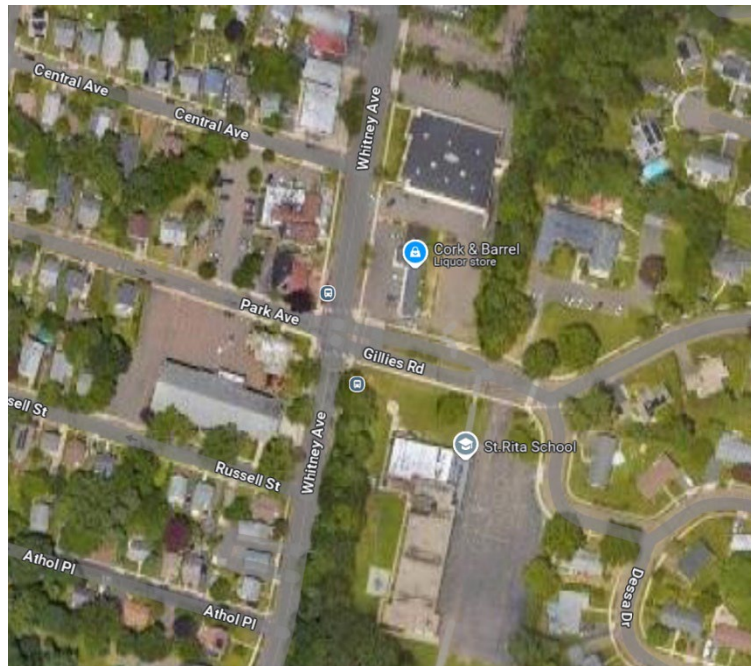


Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Sheet

Location 6: Intersection Route 707 and Skiff Street

For each noteworthy feature that you observe along the walking route, write a number at the location on the map below. Write a brief description of your observation for that number under the Notes section. See the attached RSA Field Considerations list for suggested items to observe.



Image Credit: Google Earth Pro, accessed on October 8th, 2024

Notes:

- 1) _____
- 2) _____
- 3) _____
- 4) _____
- 5) _____
- 6) _____
- 7) _____
- 8) _____
- 9) _____
- 10) _____
- 11) _____
- 12) _____

RSA Field Considerations

Pedestrian Facilities

- Sidewalk - width, slope, condition, drainage, obstruction
- Bus shelter - wheelchair access, boarding area
- Shared use path - width, slope, detectable warning surface

Pedestrian Crossings

- Crosswalks - marked crosswalk, striping, width
- Curb ramps - width, slope, orientation, detectable warning surface, wheelchair accessible grade
- Pedestrian signals - push button height, reach distance
- Crossing time
- Signage
- Sight distance
- Pavement marking
- Refuge island - width, slope, detectable warning surface

Pedestrian Accommodations

- Illumination
- Amenities - benches, trash receptacles

Bicycle Accommodations

- Bicycle facility / design
- Separation from traffic
- Roadway speed limit
- Traffic volume
- Truck / heavy vehicle %
- On-street parking conflict
- Pedestrian conflict
- Visibility
- Bicycle signage / marking
- Shared lane width
- Shoulder condition / width
- Pavement condition
- Debris

Road Facilities

- Access point
- Drainage
- Taper / lane shift
- Roadside clear zone / slope
- Guide rail / barrier
- Capacity issue
- Curbing

Road Surface Condition

- Pavement - roughness or rutting, potholes, loose material
- Edge drop-off
- Drainage

Intersections

- Geometry
- Sight distance
- Traffic control device
- Turning vehicle storage
- Through vehicle bypass width

Signals

- Visibility
- Sight distance
- Operation
- Equipment placement
- Lane capacity

Signage

- MUTCD complaint
- Visibility / placement
- Retro-reflectivity
- Clear / consistent messaging

Pavement Markings

- MUTCD compliant
- Visibility
- Condition
- Snow storage
- Edgeline

Driver Behavior

- Speed limit compliance
- Safe passing
- Distraction
- Unaware of pedestrians / cyclists
- Sight distance

Miscellaneous

- Landscaping / vegetation
- Seasonal events
- Weather impacts

Route 707 (Whitney Avenue) Corridor – Hamden Road Safety Audit (RSA):

- **Location 1: Intersection of Route 707 and Armory Street:**
 - Visibility issues due to grade changes across intersection
 - ADA compliance issues
 - No pedestrian scale lighting
 - Overgrown vegetation on west side sidewalk. Appears to be 4.5' sidewalks here.
 - Sidewalk on east side of the road hugs the damn and is disconnected from the roadway, it also appears to be in fair to poor condition.
 - High speeds observed in this area
 - Bus stop location south of the intersection at this location.
 - Consider extending the sidewalk on the east side of Route 707 to be adjacent to the road
 - Pedestrian signals throughout the corridor are not ADA accessible (countdown heads, APS push buttons, audible locator tones)
- **Location 2: Intersection of Route 707 and Eli Road/Augur Street/Davis Street:**
 - ADA compliance issues
 - Long crossing distances
 - Difficult to merge onto Rt 707 from Eli Road due to sightlines
 - Kids at Hamden Hall cross 707 at Davis Street frequently. There is no other midblock crossing in this area
 - Need to establish the school zone better here. Opportunities for paint in road, make it a regulatory school zone with better designation.
 - High speeds observed in this area
 - No shoulder, frequent collisions with utility poles that are close to the roadway
 - Consider your speed signs in this location
 - Consider T-ing up the intersection of Whitney Avenue and Eli Road to improve site lines and to shorten the crossing distance. Opportunity for a roadway demonstration project with painted bump outs
 - Driveway to Whitney Wood apartments is awkward
 - No pedestrian scale lighting in this area
 - Residents in the area have expressed the desire for speed control
 - Left turns into and out of Augur Street are challenging for visibility. Vehicles come up the hill fast and don't realize the left turning vehicles on Rt 707 are stopped there
- **Location 3: Intersection of Route 707 and Putnam Avenue:**
 - No pedestrian scale lighting
 - Signage for cross street (Putnam Avenue) is lacking
 - Crosswalks are in poor condition
 - Lack of ADA accommodations in this area

- No left turn signals at this intersection. High number of crashes could be a result of people trying to turn left onto Putnam Avenue
- Right roadway geometry here. Bollards have been hit many times
- Bus shelter and stop north of the intersection. Landing zone is not ADA compliant, is overgrown with vegetation and generally in poor condition
- No on street parking in this area despite the businesses
- Higher than expected truck traffic on Putnam Avenue
- **Location 4: Intersection of Route 707 and Waite Street:**
 - Intersection is askew and poor sightlines due to grade change
 - ADA compliance issues
 - Long crossing distances
 - Overgrown vegetation prevalent here and encroaching into sidewalk area
 - No pedestrian scale lighting
 - Signage for cross streets is lacking
 - Opportunity to complete all legs of the crosswalk here
 - North of Waite Street, there is a sharp curve that drivers often take too fast. Opportunity for Chevron signage?
 - Noted that many kids walk or bike in this area to access the reservoir
- **Location 5: Route 707 in the vicinity of St. Rita School and commercial areas:**
 - On-street parking begins and is utilized by the businesses in this area
 - No pedestrian scale lighting
 - On Fridays, students at St. Rita's school cross Rt 707 to get to the church and attend services
 - No bus stop signage despite CTtransit noting it as a stop
 - Many driveways and curb cuts to businesses. Opportunities for access management
 - Consider streetscape design elements
 - Consider raised crosswalk between Park Avenue and Central Avenue across from the Cork & Barrel
- **Location 6: Intersection of Route 707 and Skiff Street:**
 - Very wide intersection. Crosswalks across all legs, but long crossing distances
 - A lot of east/west traffic in this area on Skiff Street
 - It was noted that there are many drivers who disobey the right turn on red signage
 - This area has a different feel and character than the rest of the corridor
 - A new lane configuration was installed on Skiff Street a year ago. Skiff now has a bike lane in either direction between Whitney Avenue and Dixwell Avenue. Access to the Farmington Canal Trail is provided on Skiff Street.
 - Town is hoping to use the TAP grant to continue the Mill River Trail north to Davis Street
- **Location 7: Route 707 in the vicinity of Millbrook Road:**
 - Very high speeds



- Fatal head on collision on New Years Day at this location. Alcohol and high speeds (60 MPH) were cause
- No shoulder, no pedestrian scale lighting
- South of the bridge over RT 15 – the roadway taper has a very quick transition