State Street Pedestrian Needs Study

Prepared for:

South Central Regional Council of Governments and Town of Hamden

SCRCOG South Central Regional Council of Governments

HAMDEN CONNECTICUT

Prepared by:

AKRF, Inc and VN Engineers

akrf

VN ENGINEERS

December 2024

Table of Contents

Appendices

Executive Summary

The South Central Regional Council of Governments (SCRCOG) requested the State Street Pedestrian Needs Study (the "Study") be conducted to evaluate the existing pedestrian infrastructure and to identify conceptual multimodal design improvements along the State Street (Route 5) corridor in the Town of Hamden. The goal of the Study is to identify conceptual design improvement opportunities to better accommodate pedestrians, bicyclists, and transit on State Street. The study area, developed in coordination with the Town of Hamden, focused on approximately 2.5 miles of State Street between the New Haven City Line and the North Haven Town Line.

The Study identified the following multimodal transportation improvement strategies that would systemically improve safety along the State Street corridor. These strategies include:

- Providing or enhancing pedestrian facilities
- Enhancing transit facilities
- Evaluating posted speed limits for appropriateness
- Evaluating the feasibility and appropriateness of rumble strips

The Study also identified conceptual intersection improvements at eight locations along the State Street corridor, which could be implemented in the short-term or mid-term. Furthermore, the Study identified two potential corridor improvement concepts which could be programmed for implementation over a longer period of time. The conceptual intersection improvements can be incorporated into each of the potential corridor improvement concepts identified herein. It is important to note that all improvements require coordination between the Town of Hamden and CTDOT as State Street is a State roadway.

The Town of Hamden should use this Study to seek funding and partners to implement the improvements identified herein. Once funding is identified, multimodal transportation improvement strategies and conceptual corridor/intersection improvements would be advanced to engineering design and construction.

Additional funding would allow for a Preliminary Engineering study to be performed to confirm project extents, help establish the potential impacts to environmental and natural resources, identify potential property and utility impacts, and help refine the expected project costs.

Once Preliminary Engineering is complete, final design would take place to include all the necessary details that contractors require for construction including grading, signage and striping, work zone, traffic control plans, and signal design (if applicable). Final design culminates with construction documentation to facilitate bidding and construction of the project. If necessary, a right-of-way acquisition process would be conducted to obtain additional property for purposes of the project.

Chapter 1: Introduction

The South Central Regional Council of Governments (SCRCOG) requested the State Street Pedestrian Needs Study (the "Study") be conducted to evaluate the existing pedestrian infrastructure and to identify conceptual design improvements along the State Street (Route 5) corridor in the Town of Hamden. The goal of the Study is to identify conceptual design improvement opportunities to better accommodate pedestrians, bicyclists, and transit on State Street. The study area (**Figure 1**), developed in coordination with the Town of Hamden, focused on approximately 2.5 miles of State Street between the New Haven City Line and the North Haven Town Line. In addition to the corridor, 21 intersections were evaluated as part of this Study:

1. State Street at Park Road / Armstrong Street
2. State Street at Atlas Street
3. State Street at Benton Street
4. State Street at Hyde Street
5. State Street at Cook Street
6. State Street at Farm Road
7. State Street at Merritt Street
8. State Street at Ridge Road
9. State Street at CT DMV Driveway
10. State Street at Edmund Street / Potter Place
11. State Street at Batti Road
12. State Street at Hubbard Place
13. State Street at London Drive
14. State Street at Fernwood Road
15. State Street at Foote Street
16. State Street at Wayne Street
17. State Street at Stevens Street
18. State Street at Sebec Street
19. State Street at Daniel Road
20. State Street at Craft Street
21. State Street at Olds Street

State Street is one of four signed State roadways within the Town of Hamden. It is classified by the Connecticut Department of Transportation (CTDOT) as a north/south urban minor arterial roadway with speed limits ranging from 35 miles per hour (mph) to 45 mph. Average Daily Traffic (ADT) volumes on State Street range from 9,500 vehicles per day (vpd) near the North Haven Town Line to 14,300 vpd near the New Haven City Line.

Table 1
State Street Corridor – Posted Speed Limits and Average Daily Traffic (ADT) Volumes

Roadway Segment	Posted Speed Limit (mph)	Average Daily Traffic Volume (ADT)
New Haven City Line to Edmund Street	35	14,300
Edmund Street to Stevens Street	45	9,500
Stevens Street to North Haven Town Line	45*	9,500

Sources: CTDOT AADT and Hourly Volume Map and May 2024 Traffic Counts.
Notes: * The posted speed limit on State Street reduces to 40 mph just south of the North Haven Town Line.

Per the CTDOT, the State Street corridor is designated as a State roadway with a high likelihood of pedestrian and bicycle use. State Street consists of a mix of residential, commercial, and industrial (manufacturing) uses. Moderate intensity business / residential and high intensity business zones surround the corridor.

Much of the State Street corridor lacks basic pedestrian infrastructure such as sidewalks and crosswalks, which impact pedestrian mobility, pedestrian safety, and access to transit. Furthermore, the lack of basic pedestrian infrastructure disincentivizes the use of active transportation for travel to, from, and along the corridor.

Figure 1
State Street Pedestrian Needs Study Area
(Source: Google Earth)

Chapter 2: Existing Corridor Conditions

This section summarizes existing conditions along the State Street corridor, with a focus on pedestrian infrastructure and other modes of active transportation. The baseline pedestrian conditions were assessed utilizing the data sources identified herein and were utilized to identify multimodal deficiencies and inform the development of multimodal transportation improvement concepts.

MULTIMODAL INFRASTRUCTURE ASSESSMENT

AKRF performed a field investigation along the State Street corridor in May 2024 to qualitatively assess the multimodal infrastructure and identify deficiencies along the State Street corridor. The investigation focused on corridor needs and deficiencies as it relates to current pedestrian and bicyclist travel demand, sidewalk conditions, crosswalk conditions, transit infrastructure (bus stops, shelters), roadway geometry, driveway access, and on-street parking demand. There are no bicycle lanes along the State Street corridor. Principal findings of the May 2024 pedestrian infrastructure assessment are summarized below.

New Haven City Line to Farm Road

Entering the Town of Hamden from the south, State Street is generally surrounded by residential land uses along both sides of the corridor. The posted speed limit for State Street entering the Town of Hamden is 35 mph. There are limited commercial uses located along the east side of the corridor between the New Haven City Line and Atlas Street. A 4-foot sidewalk is provided along the eastern side of the corridor. The curb-to-curb width is approximately 44 feet, allowing for one travel lane and one parking lane in each direction. The shoulders are actively used for on-street parking, and AKRF observed high levels of on-street parking along the State Street corridor during the evening.

Figure 2
State Street, looking north at Benton Street

CTtransit Route 224 operates along the State Street corridor and bus stops are located at most intersections. With the exception of Benton Street, northbound bus stops do not have boarding pads flush with the curb of the roadway. Southbound bus stops are generally located on grass buffer areas west of the roadway curb. No amenities such as benches or shelters are provided at any of the bus stops.

Only one marked crosswalk is provided for pedestrians to cross State Street between the New Haven City Line and Farm Road, located at the signalized intersection of Park Road/Armstrong Street. Marked crosswalks are not provided at the southern and western legs of the intersection which make it difficult for pedestrians to access the existing bus stop at the southwestern corner. In addition, the traffic signal infrastructure is antiquated, and pedestrian push buttons are not compliant with the Public Right-of-Way Accessibility Guidelines (PROWAG).

Marked crosswalks are either not provided or in poor condition (faded markings) at the following intersections where curb ramps are provided for pedestrians:

- Atlas Street
- Benton Street
- Cook Street

Curb ramps are not provided to cross State Street at the above intersections. Utility poles with overhead wires and lighting are provided along both sides of the corridor, alternating in sections to illuminate the roadway and to provide aerial electrical service to the adjacent land uses.

Figure 3
Southbound Bus Stop at Park Road / Armstrong Street (looking north)

Farm Road to Ridge Road

Between Farm Road and Ridge Road, State Street is surrounded by commercial uses along both sides of the corridor. The posted speed limit for State Street continues to be 35 mph. Multiple driveways provide access to the commercial properties abutting the corridor, and sidewalks (approximately 4 feet in width) are provided along both sides. The curb-to-curb width of State Street ranges from approximately 46 feet to 50 feet, allowing for three travel lanes – one northbound lane, one southbound lane, and one left-turn lane at the intersection approaches to Ridge Road and Merritt Street. A northbound left-turn lane is also provided along the northbound State Street intersection approaches to Farm Road. Shoulders are provided along both directions of State Street between Farm Road and Merritt Street, and range from approximately 6 feet to 8 feet in width. The shoulders are utilized by CTtransit buses to access existing bus stops. Vehicles were also observed to temporarily park in the shoulder areas immediately north of Merritt Street.

Figure 4
State Street, looking north at Farm Road

Marked crosswalks are provided at the intersections of Farm Road (western leg), Merritt Street (northern leg and eastern leg), and Ridge Road (northern leg and western legs). A marked crosswalk is not provided at the southern legs of the Farm Road, Merritt Street, and Ridge Road intersections. There is no sidewalk along the western side of State Street south of Farm Road.

Utility poles with overhead wires and lighting are provided along both sides of the corridor, alternating in sections to illuminate the roadway and to carry the overhead wires to the adjacent land uses.

Bus stops are located at the intersection of Merritt Street. A bus shelter is provided at the southbound bus stop on the southwest corner of the intersection and a bench is provided at the northbound bus stop on the southeast corner of the intersection.

Figure 5
State Street, looking north at Edmund Street / Potter Place

Ridge Road to London Drive

This segment of State Street is surrounded by residential land uses along the western side of the corridor and commercial land uses and a cemetery along the east side of corridor. The Hamden office of the Connecticut Department of Motor Vehicles (CTDMV) is located immediately north of Ridge Road, and the CTtransit Hamden Garage is located immediately south of Edmund Street. North of Edmund Street / Potter Place, the posted speed limit of State Street increases from 35 mph to 45 mph, although the roadway cross section of State Street remains the same. The curb-to-curb width along this segment of State Street is approximately 40 feet, allowing for one travel lane and shoulder in each direction. On-street parking is permitted for up to 45 minutes along the eastern side of State Street between the CTDMV Driveway and Edmund Street between 9:00 AM and 4:00 PM daily.

Multiple driveways are provided to access each of the commercial properties along the eastern side of the corridor. Sidewalks (approximately 4 feet in width) are also provided along the eastern side of the corridor. Sidewalks are provided along the western side of the corridor from Ridge Road to Batti Road, and from Hubbard Place to London Drive. A sidewalk is not provided along the western side of State Street between Batti Road and Hubbard Place, although the presence of a dirt path indicates pedestrians walk along this portion of State Street regularly. Sidewalk conditions vary from fair to poor condition.

Figure 6
State Street – Sidewalk Conditions north of Ridge Road
(left: east sidewalk north of Ridge Road, right: east sidewalk at 2175 State Street)

There are no marked crosswalks or curb ramps for pedestrians to cross State Street between Ridge Road and London Drive. Marked crosswalks are either not provided or in poor condition (faded markings) at the following intersections where curb ramps are provided for pedestrians:

- Edmund Street/Potter Place
- Hubbard Place
- London Drive

Utility poles with overhead wires and lighting are provided along both sides of the corridor, alternating in sections to illuminate the roadway and to carry the overhead wires to the adjacent land uses. Utility poles are primarily located along the western side of the corridor within this section.

Bus stops are provided at the CTDMV Hamden Office (northbound only), Edmund Street / Potter Place, Batti Road, Hubbard Place, and London Drive. A concrete pad is provided at the northbound bus stop south of Edmund Street. Although a bus shelter is provided at the southbound bus stop at Edmund Street / Potter Place, the bus shelter is only accessible to the sidewalk and there is no concrete pad to enable transit users to access the curb from the sidewalk.

London Drive to Fernwood Road

This segment of State Street is surrounded by a mix of commercial and industrial land uses. Residential land uses are present immediately west of the State Street corridor. The posted speed limit of State Street remains at 45 mph, and the curb-to-curb width along this segment of State Street continues to be approximately 40 feet, allowing for one travel lane and shoulder in each direction. On-street parking is not permitted. Numerous driveways are located along both sides of the corridor providing access to the various land uses. Sidewalks (approximately 4 feet in width) are provided along the western side of the corridor, and the sidewalk terminates at River Ridge Apartments (2364 State Street), just to the north of Fernwood Road. Except for the frontage along 2335 State Street (across from Fernwood Road), there are no sidewalks along the eastern side of the corridor. There are no marked crosswalks at the intersection of Fernwood Road.

The Ridge Hill Elementary School is located northwest of the intersection of State Street and Fernwood Road. A pedestrian pathway (concrete sidewalk) is provided to provide a connection between the school building and Fernwood Road west of State Street.

AKRF observed a school bus dropping off students at the intersection of Fernwood Road in the afternoon and students walking with parents to the bus stop at Fernwood Road. The school bus was observed parking diagonally in the center of the intersection, forcing traffic to stop in all directions to safely drop off students.

Utility poles with overhead wires and lighting are provided along both sides of the corridor, alternating in sections to illuminate the roadway and to provide overhead wires to the adjacent land uses.

Bus stops are provided at London Drive and Fernwood Road. Most bus stops are located in grass areas. The northbound bus stop at Fernwood Road is located in the shoulder of the roadway (**Figure 7**).

Figure 7
State Street, looking north of Fernwood Road at River Ridge Apartments

Fernwood Road to North Haven Town Line

North of Fernwood Road, State Street is surrounded by a mix of residential, commercial, and industrial land uses. The posted speed limit of State Street remains at 45 mph continuing north to Olds Street. North of Olds Street, the posted speed limit reduces to 40 mph. The curb-to-curb width along this segment of State Street remains at approximately 40 feet, allowing for one travel lane and shoulder in each direction. On-street parking is not permitted along this entire segment of State Street. Except for the frontage along 2642 State Street (immediately north of Sebec Street), there are no sidewalks along either side of the corridor. Utility poles with overhead wires and lighting are provided along both sides of the corridor, alternating in sections to illuminate the roadway and to carry the overhead wires to the adjacent land uses.

Bus stops are provided at most intersections and pedestrians have to board and disembark from the roadway shoulder or from grass areas adjacent to the corridor. Concrete pads are not provided at any of the bus stop locations. Some of the grass areas have dirt paths, which are indicative of pedestrian activity at bus stop locations.

Figure 8
State Street – Typical Bus Stop Conditions north of Fernwood Road
(left: southbound bus stop at Highvue Manor in the grass buffer area, right: northbound bus stop at Craft Street in the roadway shoulder)

TRANSIT RIDERSHIP

CTtransit Route 224 provides local bus service along the State Street corridor. Buses operate with approximately 15-to-30-minute headways during the weekday morning and weekday afternoon commuting periods. Route 224 bus service operates with approximately 40-minute headways on Saturdays, and on an hourly basis on Sundays. Bus service is not provided north of Edmund Street on Sundays.

CTtransit ridership data from April 2024 is presented in **Table 2**. Route 224 experienced a monthly ridership of approximately 5,300 passengers along the State Street corridor in April 2024. The five busiest bus stop locations are Merritt Street, Edmund Street / Potter Place, North Haven Town Line (Goodwill Outlet Store), Park Road / Armstrong Street, and Sebec Street. Of the top five busiest bus stop locations, two locations have no or minimal pedestrian infrastructure such as sidewalks and only one bus stop location provides the necessary infrastructure for transit users to access the bus from the sidewalk.

Table 2
Route 224 April 2024 Ridership by Bus Stop – State Street Corridor

Bus Stop Location (Nearest Intersection or Landmark)	Northbound	Southbound
1665 State Street	51	57
Armstrong Street	203	
Park Road		225
Atlas Street	4	31
Benton Street	103	27
Hyde Street	128	
Cook Street		195
Merritt Street	422	924
CT DMV Driveway	273	
Edmund Street	359	
Potter Place		146
Batti Road	89	27
Hubbard Road	4	84
London Drive	105	1
Fernwood Road	83	70
WB Mason (2460 State Street)	22	64
Foote Street	31	66
Stevens Street	17	22
Sebec Street	267	78
Highvue Manor (2730 State Street)	14	149
Daniel Rd	128	4
Craft Street	29	1
Olds Street	77	90
North Haven Town Line (Goodwill Outlet Store)	309	124
Bus Stop Locations Outside of the State Street Corridor[1]		
Edmund Street (East of State Street)	48	
CTtransit Maintenance Facility	189	

Source: CTtransit
Notes: [1] A limited number of trips either terminate or originate at the CTtransit Maintenance Facility east of the intersection of State Street and Edmund Street.

CRASH ANALYSIS

Crash data for the most recent three-year period (January 1, 2021 through December 31, 2023) were obtained from the University of Connecticut's Crash Data Repository to assess safety along the entire study corridor. The data obtained quantify the total number of reportable crashes (involving fatality, injury, or more than $1,000 in property damage), fatalities, and injuries during the study period.

During the January 1, 2021 to December 31, 2023 period, a total of 104 crashes occurred along the State Street corridor, and a majority of crashes occurred at intersections. Of the 104 crashes, 70 crashes involved property damage only (no apparent injury) and 34 crashes involved injuries. Five of the crashes involved serious injuries and none of the crashes involved fatalities. The highest concentration of crashes along the State Street corridor occurred at the intersections of Park Road / Armstrong Street (15 crashes), Ridge Road (12 crashes), and Cook Street (10 crashes). **Table 3** depicts total crashes by intersection during the three-year analysis period, as well as total crashes by severity.

Table 3
State Street Corridor Crash Summary

State Street Corridor	Crashes by Year				Crashes by Severity			
Intersection or Roadway Segment	2021	2022	2023	Total	Property Damage Only	Possible or Suspected Minor Injury	Serious Injury	Fatality
New Haven City Line	0	2	1	**3**	3	0	0	0
Park Road / Armstrong Street	8	3	4	**15**	14	0	1	0
Atlas Street	2	2	1	**5**	4	1	0	0
Benton Street	0	2	0	**2**	1	1	0	0
Hyde Street	2	1	1	**4**	3	1	0	0
Cook Street	2	5	3	**10**	5	5	0	0
Farm Road	4	1	1	**6**	4	2	0	0
Merritt Street	1	3	1	**5**	3	2	0	0
Ridge Road	4	3	5	**12**	8	4	0	0
Potter Place / Edmund Street	0	0	1	**1**	0	1	0	0
Batti Road	0	1	1	**2**	2	0	0	0
Between Batti Road and Hubbard Place	0	1	1	**2**	1	1	0	0
Hubbard Place	1	0	1	**2**	1	1	0	0
London Drive	3	3	2	**8**	2	5	1	0
Between London Drive and Fernwood Road	0	1	0	**1**	1	0	0	0
Fernwood Road	0	0	0	**0**	0	0	0	0
Between Fernwood Road and Foote Street	2	1	0	**3**	3	0	0	0
Foote Street	1	0	0	**1**	1	0	0	0
Wayne Street	0	0	0	**0**	0	0	0	0
Stevens Street	0	1	0	**1**	1	0	0	0
Sebec Street	3	2	0	**5**	2	2	1	0
Between Sebec Street and Daniel Street	0	0	2	**2**	2	0	0	0
Daniel Road	0	1	0	**1**	1	0	0	0
Craft Street	0	1	0	**1**	0	0	1	0
Olds Street	1	2	2	**5**	4	1	0	0
Goodwill Store (2901 State Street)	1	2	1	**4**	3	0	1	0
North Haven Town Line	0	2	1	**3**	1	2	0	0
Grand Total – State Street Corridor	**35**	**40**	**29**	**104**	**70**	**29**	**5**	**0**

Source: UConn Crash Data Repository (January 2021 through December 2023). Data downloaded from the repository on May 14, 2024.

As shown in **Table 4**, rear-end and angle crashes account for over 60 percent of all crashes along the corridor. Fixed object crashes accounted for nearly 15 percent of all crashes, and half of the crashes occurred north of Fernwood Road where vulnerable users must travel in grass buffer areas or in the shoulder of the roadway due to a lack of a sidewalk. It should be noted that fixed object crashes are coded in the repository as “Not Applicable” but involved a fixed object as the first harmful event. One pedestrian crash occurred over the three-year analysis period at the State Street intersection with Edmund Street.

Table 4
State Street Corridor Crash Types

Crash Type	Number	Percentage
Rear End	39	38%
Angle	26	25%
Fixed Object	15	14%
Sideswipe	14	13%
Not Applicable / Other	5	5%
Head On	4	4%
Pedestrian	1	1%
Total	**104**	**-**

Source: UConn Crash Data Repository (January 2021 through December 2023).

CORRIDOR TRAVEL SPEEDS

AKRF collected speed data along State Street in May 2024 to understand travel speeds along the corridor, particularly near Fernwood Road in proximity to Ridge Hill Elementary School and where the pedestrian infrastructure terminates. The results, presented below, indicate the 85th percentile speed for both directions of State Street is 45 mph when rounded to the nearest 5 mph, which is identical to the posted speed limit for this portion of State Street. The 85th percentile speed indicates the speed which most (85%) drivers travel at or below and is often considered for design purposes.

Table 5
Speed Study Summary – State Street south of Fernwood Road

State Street	Speed Limit (mph)	Average Travel Speed (mph)	85th Percentile Speed (mph)
Northbound	45	40	46
Southbound		38	44

Source: May 2024 speed data collected by New England Traffic Counts

The May 2024 speed data is also provided in **Appendix A**.

SUMMARY OF CORRIDOR PEDESTRIAN NEEDS AND DEFICIENCIES

Sidewalks are a vital component in the pedestrian network that promotes walking by providing a safe and dedicated facility for pedestrian connectivity. If there are no sidewalks along a corridor, or gaps in the sidewalk network, it deters walking as a mode of transportation. The lack of pedestrian infrastructure impacts overall travel demand. If pedestrians are not comfortable traveling unsafely in the vehicular right-of way, pedestrian trips do not occur or pedestrian trips are replaced with other forms of transportation such as driving or ridesharing.

The existing pedestrian infrastructure, bus stops, and crashes along the State Street corridor are illustrated in **Figure 9**, **Figure 10**, and **Figure 11**. Although designated as a State roadway with a high likelihood of pedestrian and bicycle use, State Street lacks adequate pedestrian infrastructure along the western side of the corridor south of Farm Road and along both sides of the corridor north of Fernwood Road. State Street lacks bicycle lanes for the entirety of the corridor. Most of the infrastructure are not considered PROWAG compliant. The lack of adequate pedestrian and bicycle infrastructure likely contributes to less pedestrian and bicycle usage on State Street. There is demand for pedestrian and bicycle trips as the corridor is within a moderate intensity business and residential business zone and there are several high transit ridership locations where sidewalks are not provided.

The posted speed limits along State Street range from 35 mph to 45 mph, which change expectations for motorists, bicyclists, and pedestrians although there are no changes to the cross section of the roadway or to the surrounding communities. Although the operating (85th percentile) speed is equivalent to the posted speed limit, the multimodal nature of the corridor suggests that traffic calming and other engineering measures should be considered to reduce speed and improve multimodal safety. It should be noted that there are several planned developments along or in proximity to State Street which are expected to generate additional travel demand along the corridor in the future.

Based on a review of the State Street corridor, the corridor should be redesigned to enhance the pedestrian and bicycle environment while improving transit facilities.

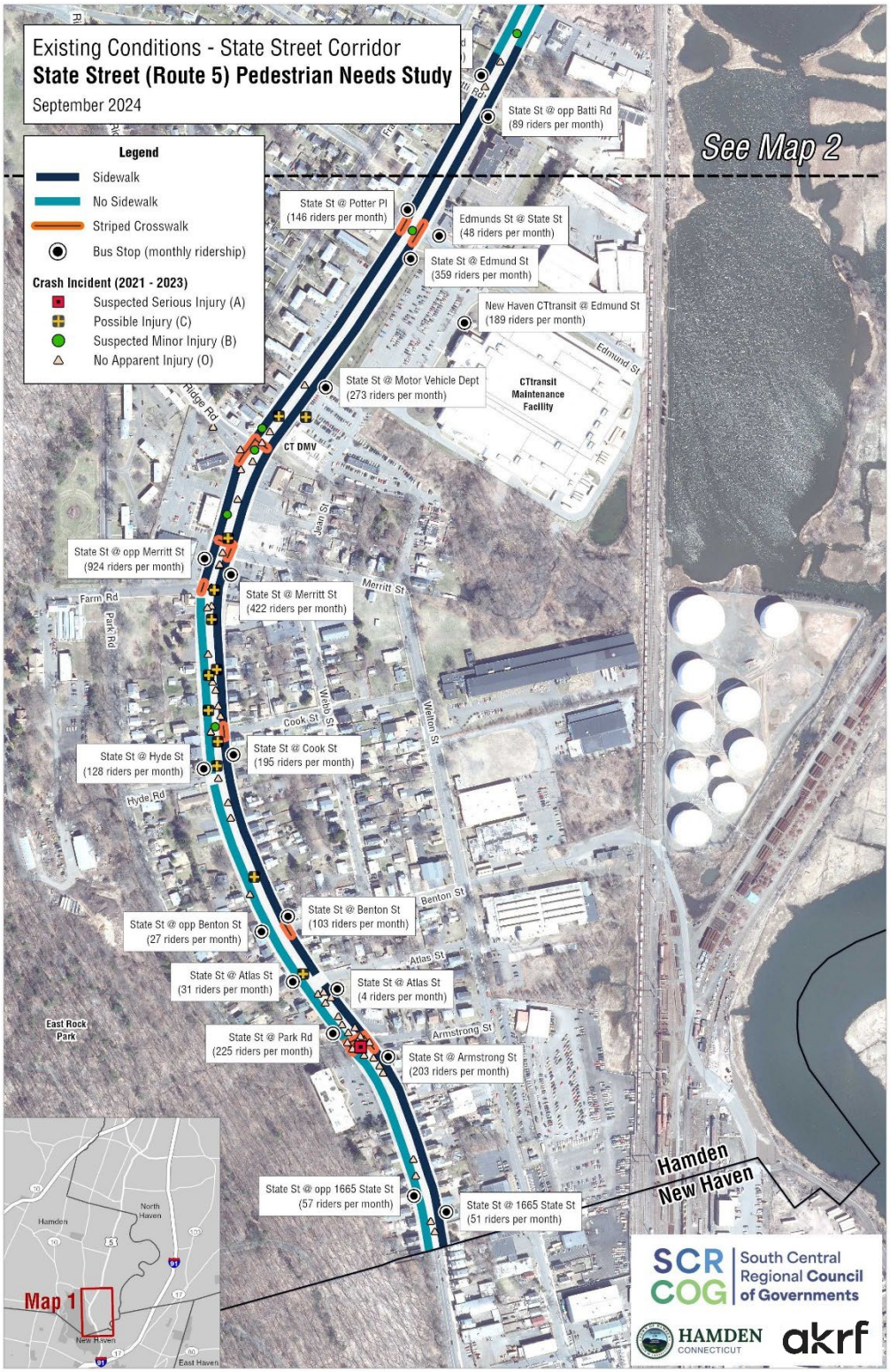


Figure 9
Existing Conditions – State Street Corridor (New Haven City Line to Edmund Street)

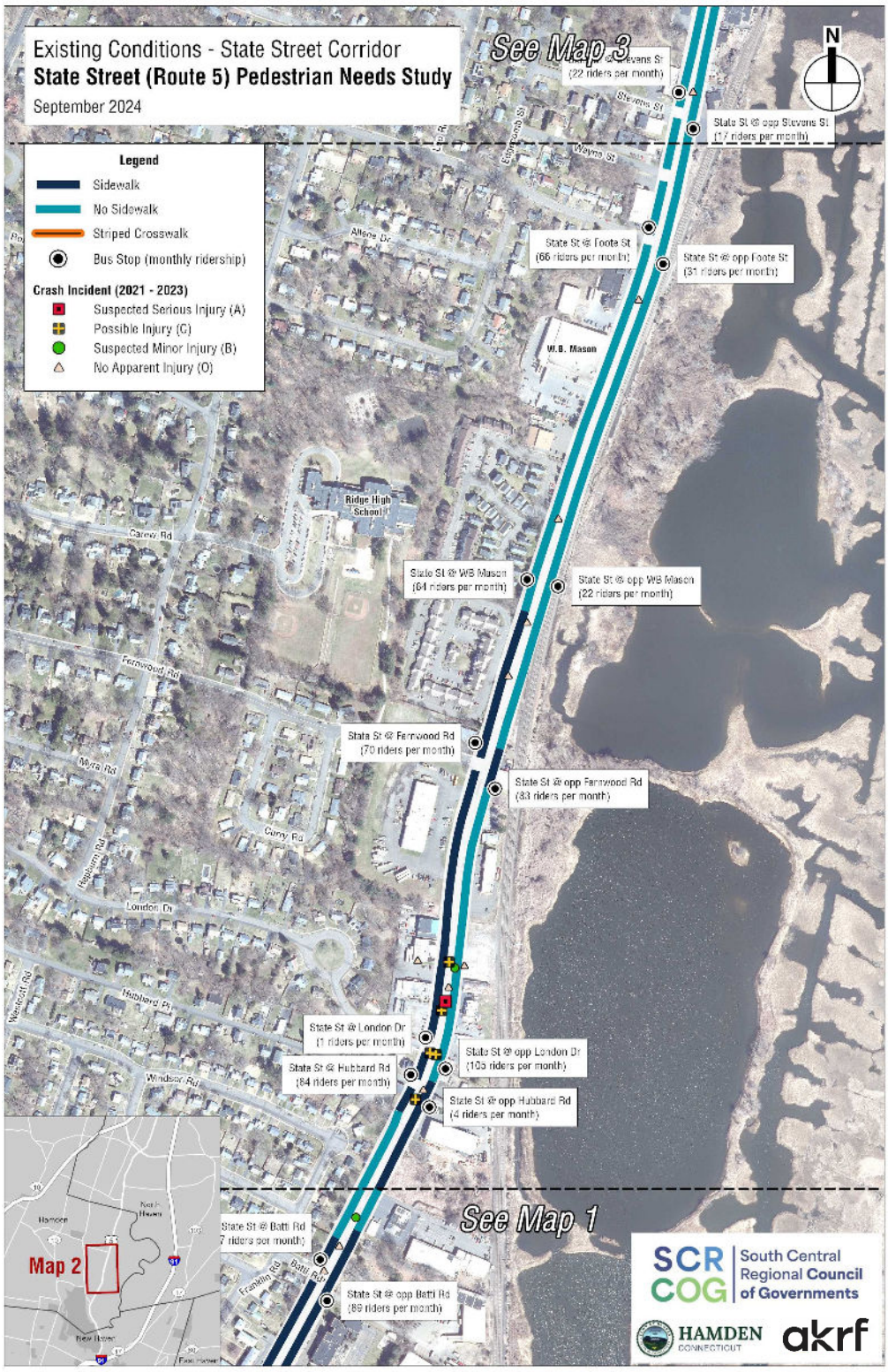


Figure 10
Existing Conditions – State Street Corridor (Edmund Street to Stevens Street)

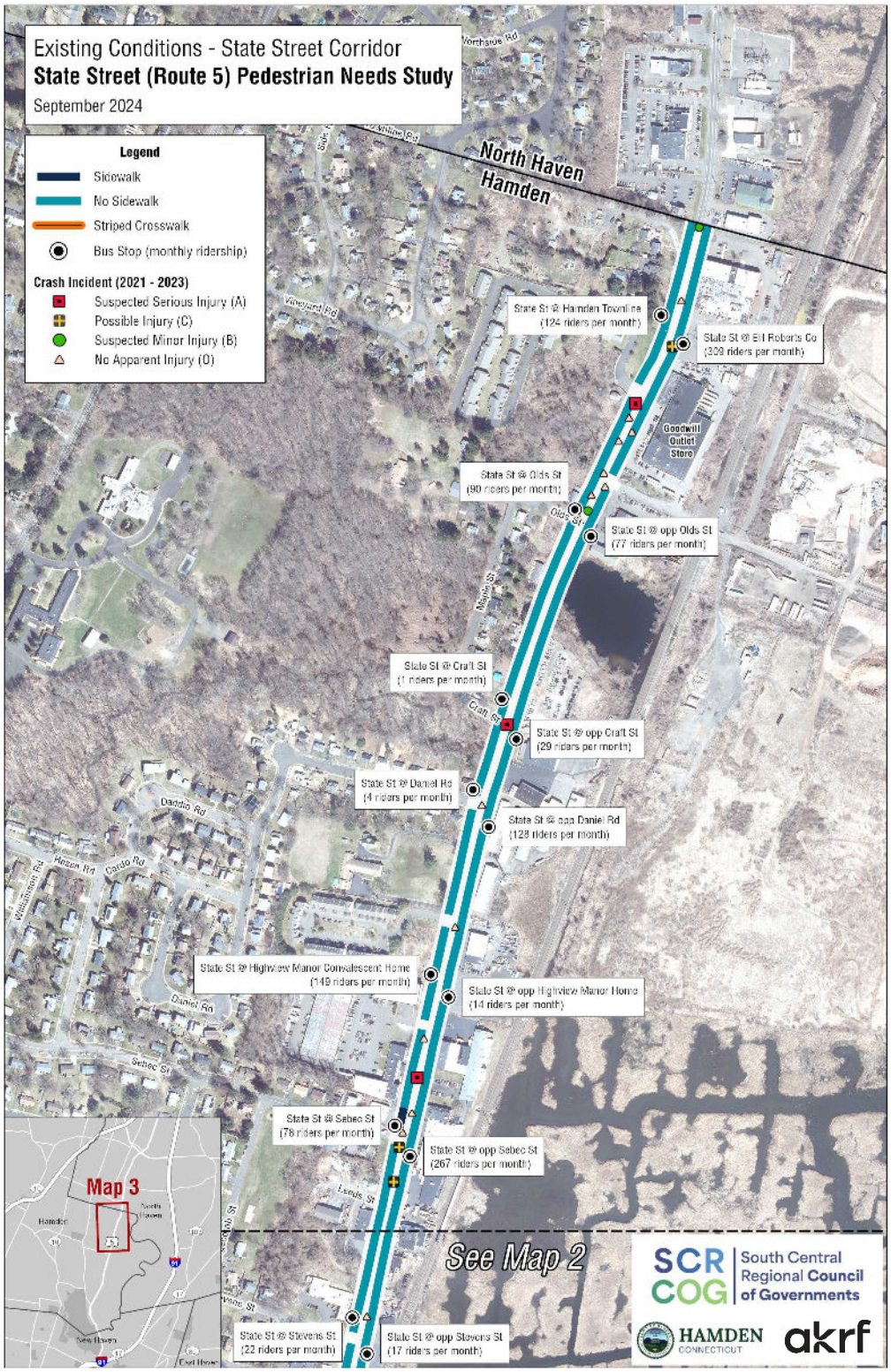


Figure 11
Existing Conditions – State Street Corridor (Stevens Street to North Haven Town Line)

Chapter 3: Public Involvement

Public involvement is key to developing recommendations informed by the community of residents, businesses, and other stakeholders who use the corridor the most. Two public meetings were held over the course of the seven-month study on the following dates to provide opportunities for public input:

- September 25, 2024 at Memorial Town Hall
- October 30, 2024 at Memorial Town Hall and on Zoom

The study team developed flyers (**Figure 12**) to inform the public about each meeting. The flyers were marketed to the Town's social media accounts (Facebook, Instagram, Threads), the Hamden Patch, City Spark, Hello Hamden application, and on the town's website as a banner on the top of the homepage. In addition, the Town printed flyers and placed them on the communications table at the Government Town Center (2750 Dixwell Avenue).

Key findings for each of the public meetings are summarized below. The public meeting presentations are provided in **Appendix B**.

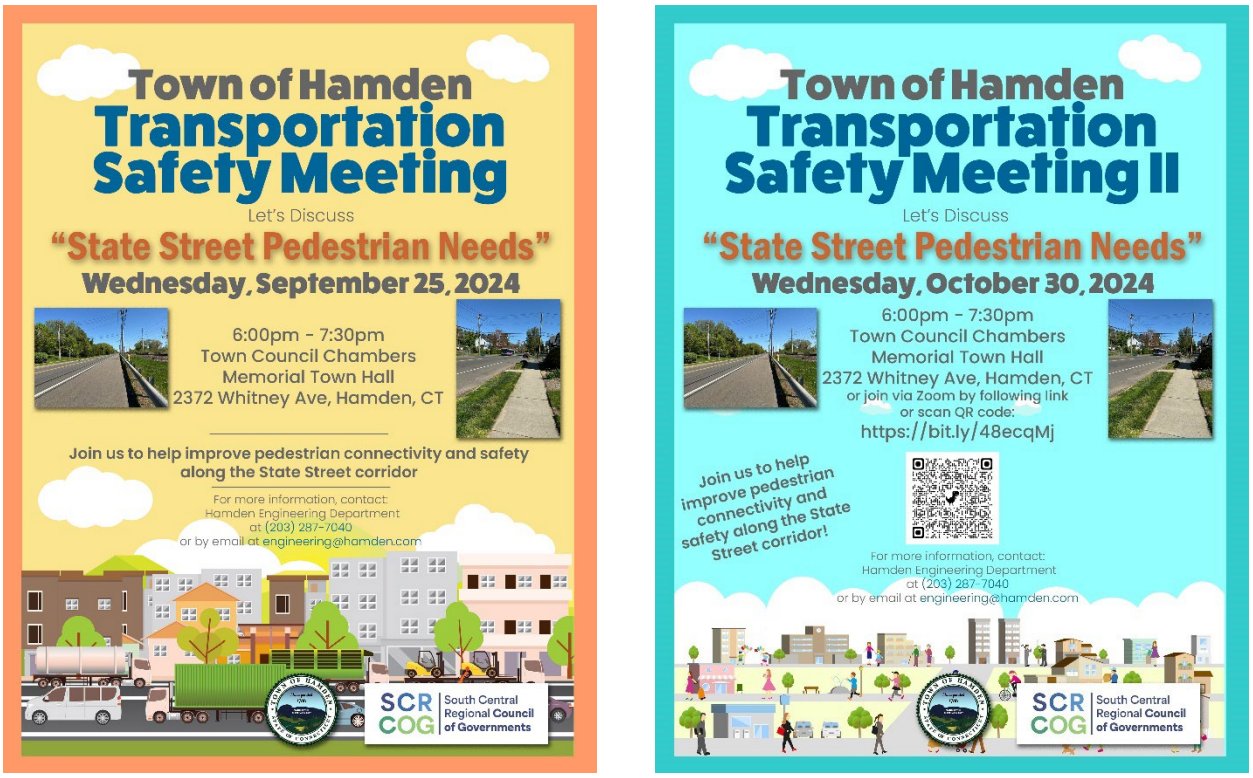


Figure 12
Public Meeting #1 and #2 Flyers

SEPTEMBER 25, 2024 – PUBLIC MEETING #1

This in-person public meeting took place at Memorial Town Hall on Dixwell Avenue. The study team introduced the study to several community members, reviewed existing conditions, and discussed preliminary thoughts on potential improvements to the State Street corridor. Community members concurred with the study team's assessment of the existing conditions along the corridor and were also in agreement with preliminary thoughts on the potential multimodal improvements. Community members emphasized traffic calming as a strategy for the study team to consider.

OCTOBER 30, 2024 – PUBLIC MEETING #2

This hybrid public meeting took place at Memorial Town Hall on Dixwell Avenue and on Zoom. Several community members attended in person and virtually. The study team briefly reintroduced the project for community members who were not able to attend Public Meeting #1 and presented traffic calming strategies and conceptual design concepts that would improve the pedestrian and bicycle infrastructure along the State Street corridor. The study team emphasized that all strategies and concepts continue to be draft in nature and would require coordination with CTDOT as State Street is a State roadway. Community members did not object to any of the strategies or conceptual design concepts presented by the study team. Key topics discussed with community members are summarized below.

School Buses

Community members raised concerns regarding school buses, particularly the amount of school bus stops along the corridor south of Ridge Road and the routes assigned to school buses. AKRF suggested the community coordinate with the Town Engineer to review school bus routes on an annual basis and identify opportunities to improve school bus routes while maintaining safety for students and parents at school bus stops.

Speed Limit Enforcement

Speeding was identified as a concern by multiple community members. One community member suggested additional enforcement measures should be undertaken by the Town of Hamden Police Department. AKRF noted any measures to reduce speeding would improve safety for all roadway users and noted the increased likelihood for pedestrians to survive a collision if vehicles were traveling at a slower speed. AKRF also noted there are opportunities to calm traffic through redesigning the corridor, such as narrowing travel lanes and reducing crossing distances for pedestrians.

Bus Rapid Transit (BRT)

A community member noted the study team should look at opportunities to implement BRT along the State Street corridor and the potential implications to pedestrian needs.

Comments Received via Email

At the second public meeting, the study team announced an additional opportunity for stakeholders to provide comments to the Town of Hamden Engineering Department. Stakeholders were given until November 8, 2024, to submit additional questions or comments. The following comments were received and considered by the study team as part of the development of traffic calming strategies and conceptual design concepts:

- The proposed improvements would make State Street safer and more attractive to residents and businesses.
- The school bus STOP-arm is not always obeyed, and motorists also do not stop for other vans which transport children to and from school.
- Sidewalks are a good place to start but safety is greatly compromised if speed and traffic laws are not enforced.
- Posted speed limits are ignored, and distracted driving is an issue throughout the corridor.
- Traffic calming measures such as narrowing the road may not be a solution for State Street.

Chapter 4: Multimodal Transportation Improvements

This section of the Study summarizes the multimodal transportation improvements developed by the study team based on a review of the existing corridor conditions, identification of corridor pedestrian needs and deficiencies, and public input. The improvements and strategies provided herein can be utilized by the Town of Hamden to improve pedestrian mobility and safety along the State corridor, with the understanding that coordination would be required with CTDOT and other agencies (e.g., CTtransit). The below strategies and concepts could also be adopted to other corridors in the Town as appropriate.

MULTIMODAL TRANSPORTATION IMPROVEMENT STRATEGIES

STRATEGY 1: PROVIDE OR ENHANCE PEDESTRIAN FACILITIES

Sidewalks are preferred for pedestrians and provide safety, accessibility, and health benefits to communities. As previously stated, the State Street corridor lacks adequate pedestrian infrastructure along much of the corridor. This Study identified several corridor and intersection improvement strategies to improve the pedestrian environment, and these strategies are discussed later in this document.

Crosswalk Visibility Enhancements

Marked crosswalks alert motorists to the potential presence of pedestrians and establish the right of way for pedestrians at the crosswalk. Although State Street is a State roadway, all minor street approaches are owned and maintained by the Town of Hamden. It is recommended the Town paint crosswalks at the following locations where curb ramps are provided to improve visibility and safety:

- Atlas Street
- Benton Street
- Cook Street
- Edmund Street / Potter Place
- Hubbard Place
- London Drive
- Fernwood Road

It should be noted the Town has begun to paint crosswalks at some of the above locations as of the date of this document.

In addition, the Town of Hamden should also investigate whether Rectangular Rapid Flashing Beacons (RRFB) are warranted at crosswalk locations along the corridor. Pedestrian actuated RRFB's further alert motorists to the presence of pedestrians at a crosswalk.

Furthermore, the Town should coordinate with CTDOT to install curb ramps and high visibility crosswalks as part of any CTDOT planned improvements to the State Street corridor.

STRATEGY 2: ENHANCE TRANSIT FACILITIES

CTtransit Route 224 provides local bus service along the State Street corridor. There are a total of 41 bus stops along the corridor, and most of the bus stops are not considered PROWAG compliant. Continuing to promote transit as an alternative mode of transportation requires infrastructure that provides safe and efficient mobility to and from the bus stops along the State Street corridor.

The Town of Hamden should coordinate with CTtransit and the CTDOT Office of Transit and Ridesharing to evaluate the appropriate type of bus stop at each location along the State Street corridor and to identify whether some bus stops should be consolidated. Accessible bus stops would provide improved safety for all transit users. The Town of Hamden should also coordinate with CTDOT to install high-visibility crosswalks and/or pedestrian actuated RRFB's at transit bus stops to improve the visibility and safety for pedestrians at bus stop locations.

Figure 13
State Street – Examples of Accessible Bus Stops
(left: State Street at Albert Street (New Haven); right: State Street at Cook Street (Hamden))

STRATEGY 3: EVALUATE POSTED SPEED LIMITS FOR THE STATE STREET CORRIDOR

Properly set speed limits to protect all roadway users. The posted speed limits along State Street range from 35 mph to 45 mph, which change expectations for motorists, bicyclists, and pedestrians even though there are no changes to the roadway cross section or to the surrounding communities. A review of CTDOT's speed limit list indicates the posted speed limits for State Street in the Town of Hamden were last approved on May 21, 1991. The current multimodal nature of the corridor along with planned developments within and in proximity to the corridor suggests that State Street should be reevaluated to determine whether the posted speed limits are appropriate.

The Town should investigate reducing the posted speed limit on State Street north of Edmund Street to 35 mph. Given pedestrians are currently forced to travel unsafely in the vehicular right-of way north of Fernwood Road, a reduction in the posted speed limit would increase safety for all roadway users. It should be noted that CTDOT would need to review any requests to modify the posted speed limit on State Street.

In addition, the Town should consider developing a speed management strategy to improve safety for all roadway users (one of several objectives in the Town's Complete Streets Policy). The speed management strategy should be a collaborative effort between various town entities (Town Engineer, Police Department, Local Traffic Authority), CTDOT, and other key stakeholders. In the short term, the Town should consider increased enforcement of speeds on State Street. A digital speed feedback sign could also be installed along the State Street corridor to inform motorists of their current traveling speed.

STRATEGY 4: EVALUATE RUMBLE STRIPS FOR THE STATE STREET CORRIDOR

Based on a review of the crash data, fixed object crashes accounted for approximately 15 percent of all crashes on the State Street corridor. Over half of the fixed object crashes occurred north of Fernwood Road, where no pedestrian infrastructure is provided.

The Town should coordinate with CTDOT to determine whether the State Street corridor meets the criteria for the installation of longitudinal rumble strips along the shoulders or centerline of the roadway. Rumble strips are raised or milled elements of pavement which alert drivers through vibration and sound that their vehicle is leaving the travel lane. The Town should also investigate the systemic installation of rumble strips along other corridors in the Town which have a significant history of fixed object crashes.

CONCEPTUAL CORRIDOR TRANSPORTATION IMPROVEMENTS

The amount of existing and potential multimodal traffic along State Street is a function of the surrounding residential homes, apartment buildings, local businesses, restaurants, schools, and other facilities. Two conceptual corridor improvement options were identified to improve multimodal mobility and safety along State Street. Each conceptual corridor improvement option proposes to reallocate the existing right-of-way to provide or enhance the pedestrian infrastructure along State Street to better accommodate all roadway users.

The segment of State Street north of Fernwood Road was chosen as part of the preliminary identification of conceptual corridor improvements. Potential benefits and disadvantages associated with each conceptual corridor improvement option are identified herein. Both conceptual corridor improvement options are considered long-term improvements and would require coordination with CTDOT and public engagement with abutting property owners and other key stakeholders to identify the appropriate corridor improvement option for each segment of the corridor. These improvements can be evaluated further in the future through a separate effort.

State Street North of Fernwood Road – Existing Conditions

The existing curb-to-curb right-of-way width along the State Street corridor varies from 40 feet to 50 feet. Generally, a maximum of an additional 10 feet is available on at least one side of the corridor to the approximate right-of-way line (either as a grass area or as a grass buffer area and a sidewalk).

An existing cross section of State Street north of Fernwood Road is illustrated in **Figure 14**. The total roadway right-of-way is approximately 50 feet. A sidewalk is provided along the western side of the corridor north of Fernwood Road to the River Ridge Apartments (2364 State Street). There is no available right-of-way east of the corridor due to the proximity to the railroad tracks (Amtrak).

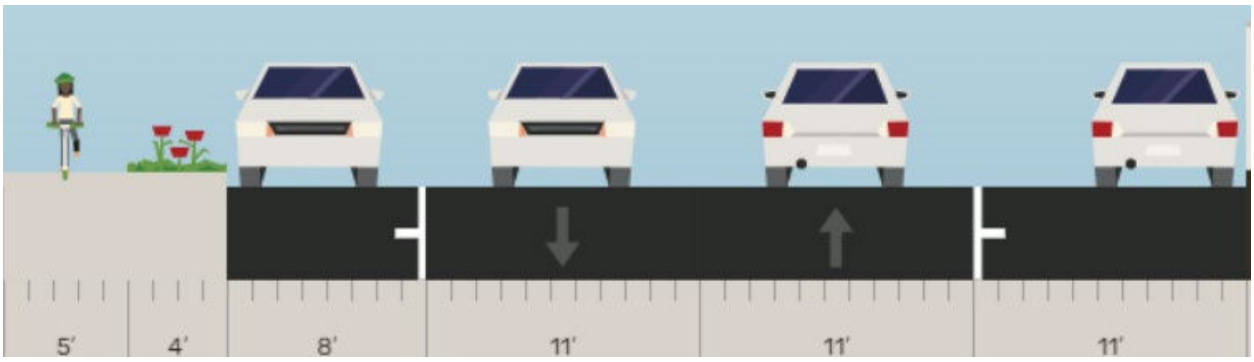


Figure 14
State Street north of Fernwood Road – Existing Conditions

State Street Corridor North of Fernwood Road – Option A (Sidewalks on Both Sides)

This conceptual corridor improvement option reallocates the existing right-of-way to provide pedestrian infrastructure on both sides of the corridor, improving pedestrian mobility along State Street (**Figure 15**). The existing roadway shoulders and the grass buffer area would be reduced to accommodate the additional sidewalk. Transit access would be improved as bus stops would be located on sidewalks and not in grass areas or in the shoulder of the roadway. Improvements such as raised crosswalks, raised intersections, or crosswalks with bump-outs could be installed at intersections to enable pedestrians to safely cross the State Street corridor. Option A assumes no changes to the existing shoulder widths of the roadway to accommodate bus stops along the corridor.

Option A would require significant reconstruction of the roadway, including relocation of drainage facilities and utilities. Temporary or permanent sliver acquisitions of properties may be required to install continuous sidewalks along both sides of the corridor. In addition, dedicated bicycle facilities would not be provided along the corridor under this option.

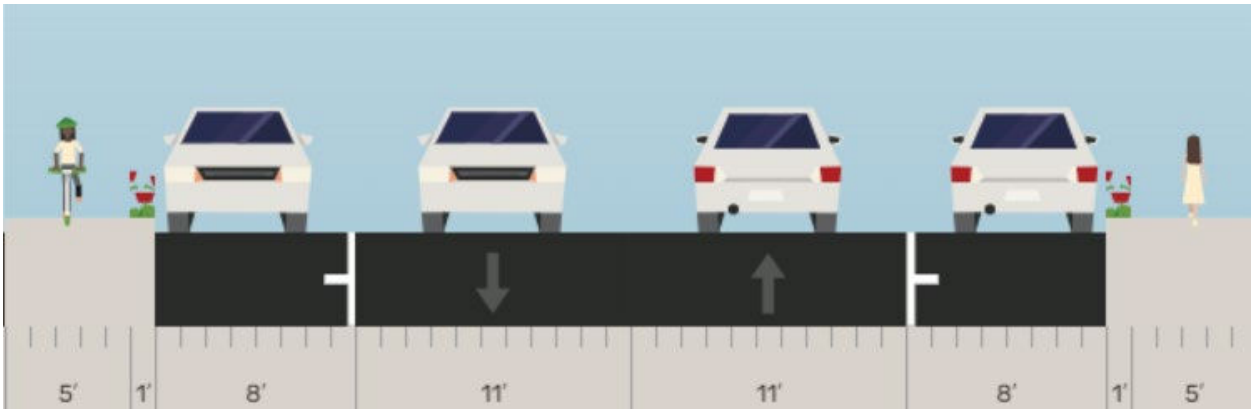


Figure 15
State Street north of Fernwood Road – Option A
Sidewalks on both sides of State Street

State Street Corridor North of Fernwood Road – Option B (Shared Use Path on One Side of State Street)

Option B proposes to reallocate the existing right-of-way to provide pedestrian infrastructure on the western side of the State Street corridor (**Figure 16**). A shared use path is proposed along the western side of State Street. Shared use paths are separated facilities intended for use by pedestrians, bicyclists, and other non-motorized users. A 10-foot shared use path is proposed, which allows for five-foot paths in each direction of travel. Although Option B shows modifications to the proposed curb-to-curb right-of-way, it may be possible to construct the shared use path without significantly reconstructing the roadway and impacting drainage facilities and utilities. Accessible bus stops would be constructed along the northbound side of State Street to improve transit access, and crosswalks would be provided for pedestrians to safely cross State Street. Option B achieves mobility goals for both pedestrians and bicyclists.

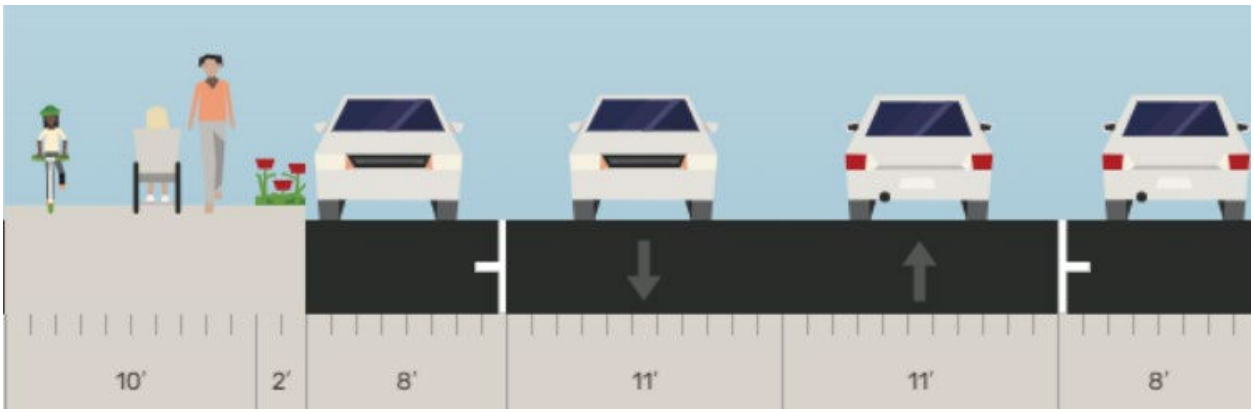


Figure 16
State Street north of Fernwood Road – Redesign Option B
Shared Use Path on one side of State Street

CONCEPTUAL INTERSECTION TRANSPORTATION IMPROVEMENTS

Conceptual design improvements were developed for key intersections along the State Street corridor. These intersections were identified based on a review of serious injury crashes, transit ridership, and potential connections to nearby pedestrian facilities. All conceptual intersection improvements discussed herein are considered short-term to medium-term improvements and would require coordination with CTDOT and CTtransit, and public engagement with abutting property owners and other key stakeholders.

While the recommended improvements identified herein focus on a limited number of intersections along the entirety of the corridor, there were common themes and recommended improvements that should be considered throughout the corridor including:

- Upgrading all pedestrian ramps for PROWAG compliance; and
- Recommending the installation of sidewalks, crosswalks, and other intersection treatments as part of future site plan applications for any parcels along the State Street corridor.

Recommended conceptual intersection transportation improvements at each of the eight locations are summarized below.

STATE STREET AT PARK ROAD / ARMSTRONG STREET

AKRF's conceptual design improvements for the Park Road / Armstrong Street intersection are illustrated in **Figure 17**. The proposed improvements include:

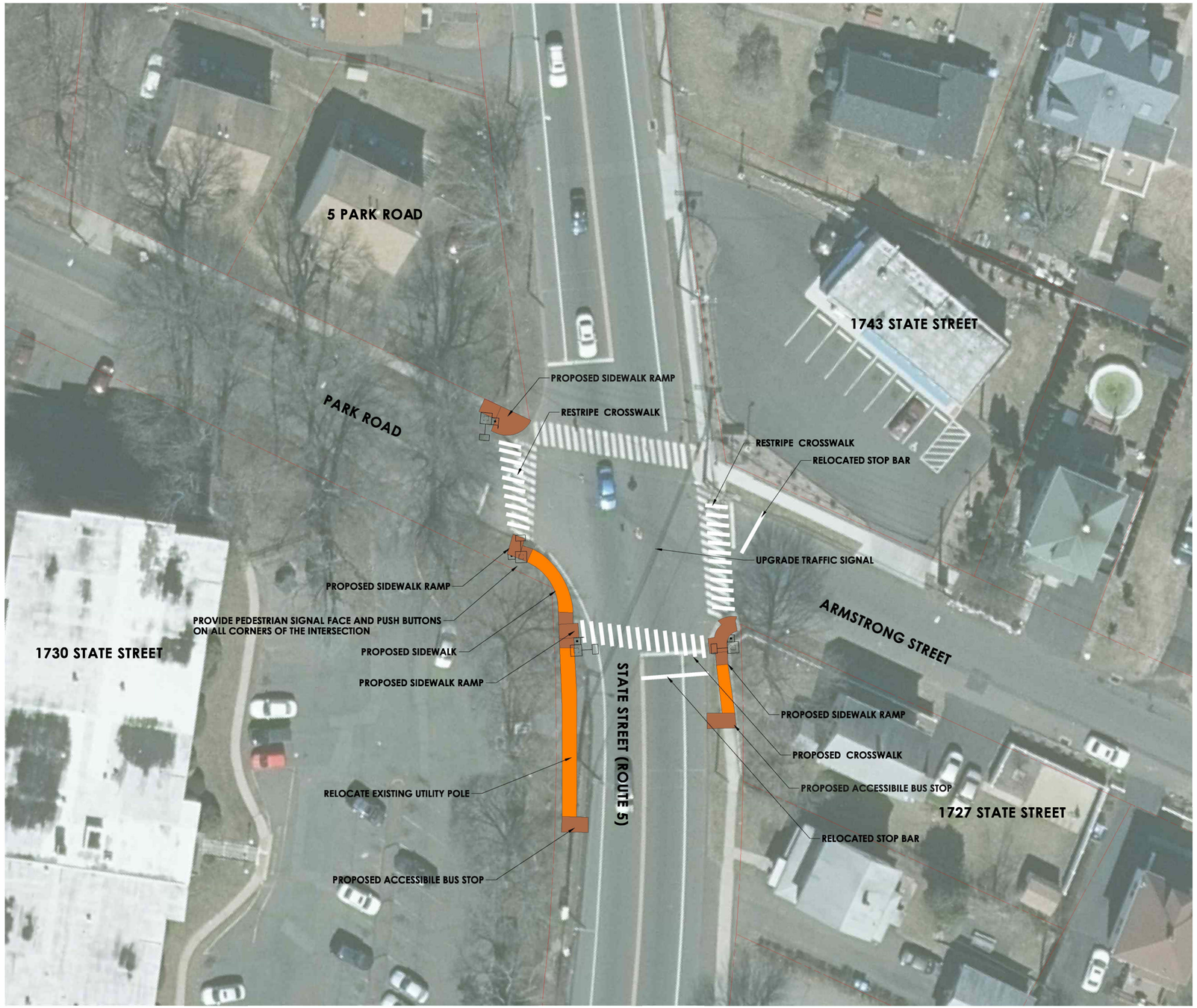
- Upgrading the existing sidewalk ramps on the southeast and northwest corners of the intersection;
- Constructing a new sidewalk ramp along the southwest corner of the intersection;
- Constructing a sidewalk along the western side of State Street south of the intersection to improve access to the existing CTtransit bus stop in front of 1730 State Street. The proposed sidewalk would require location of one utility pole southwest of the intersection;
- Constructing a curb extension on the northern side of Park Road west of the intersection to increase pedestrian visibility and reduce the pedestrian crossing distance along Park Road;
- Constructing high visibility crosswalks on the western, eastern, and southern portions of the intersection;
- Constructing two accessible bus stops south of the intersection (one northbound and one southbound); and
- Upgrading the existing traffic signal at Park Road / Armstrong Street to improve mobility and accessibility at the intersection.

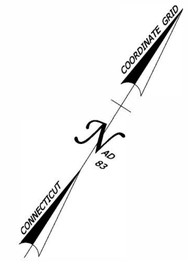
STATE STREET AT FARM ROAD AND MERRITT STREET

AKRF developed two options to improve the pedestrian infrastructure in proximity to Farm Road and Merritt Street. The western sidewalk terminates south of Farm Road, and there is no pedestrian crossing in proximity to Farm Road for pedestrians to safely cross the corridor.

Option A (**Figure 18**) proposes to construct a high visibility crosswalk and sidewalk ramps at the southern portion of the signalized intersection of State Street at Merritt Street. In addition, a curb extension would be constructed along the southeastern corner of the intersection to increase pedestrian visibility and reduce the pedestrian crossing distance along State Street. The curb extension is not expected to impact the existing northbound CTtransit bus stop at the southeastern corner of the intersection. Although Option A would require modification to the existing traffic signal at State Street and Merritt Street, it is preferred given the pedestrian crossing would be provided at a signalized intersection. Additional signage could be installed at Farm Road to direct pedestrians to cross State Street at Merritt Street.

Option B (**Figure 19**) proposes to construct a high visibility crosswalk and sidewalk ramps at the southern portion of the intersection of State Street at Farm Road. In addition, a sidewalk would be constructed along the western side of State Street south of the intersection to improve pedestrian mobility in proximity to the intersection. The construction of the sidewalk may require the removal of some trees along the side of the roadway. The sidewalk could be continued further south under a separate effort. No improvements are proposed to the intersection of State Street at Merritt Street under Option B.





LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

NOTES

1. AERIAL MAPPING OBTAINED FROM 2019 UCONN ORTHOPHOTOGRAPHY AERIAL IMAGERY.
2. R.O.W. AND PROPERTY LINES OBTAINED FROM SCRCOG (HAMDEN 2023 CEMA PARCELS FROM NEGEO).

Figure 17

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G. CHECKED BY: L.S.

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: **STATE STREET PEDESTRIAN NEEDS STUDY**

TOWN(S): **HAMDEN**

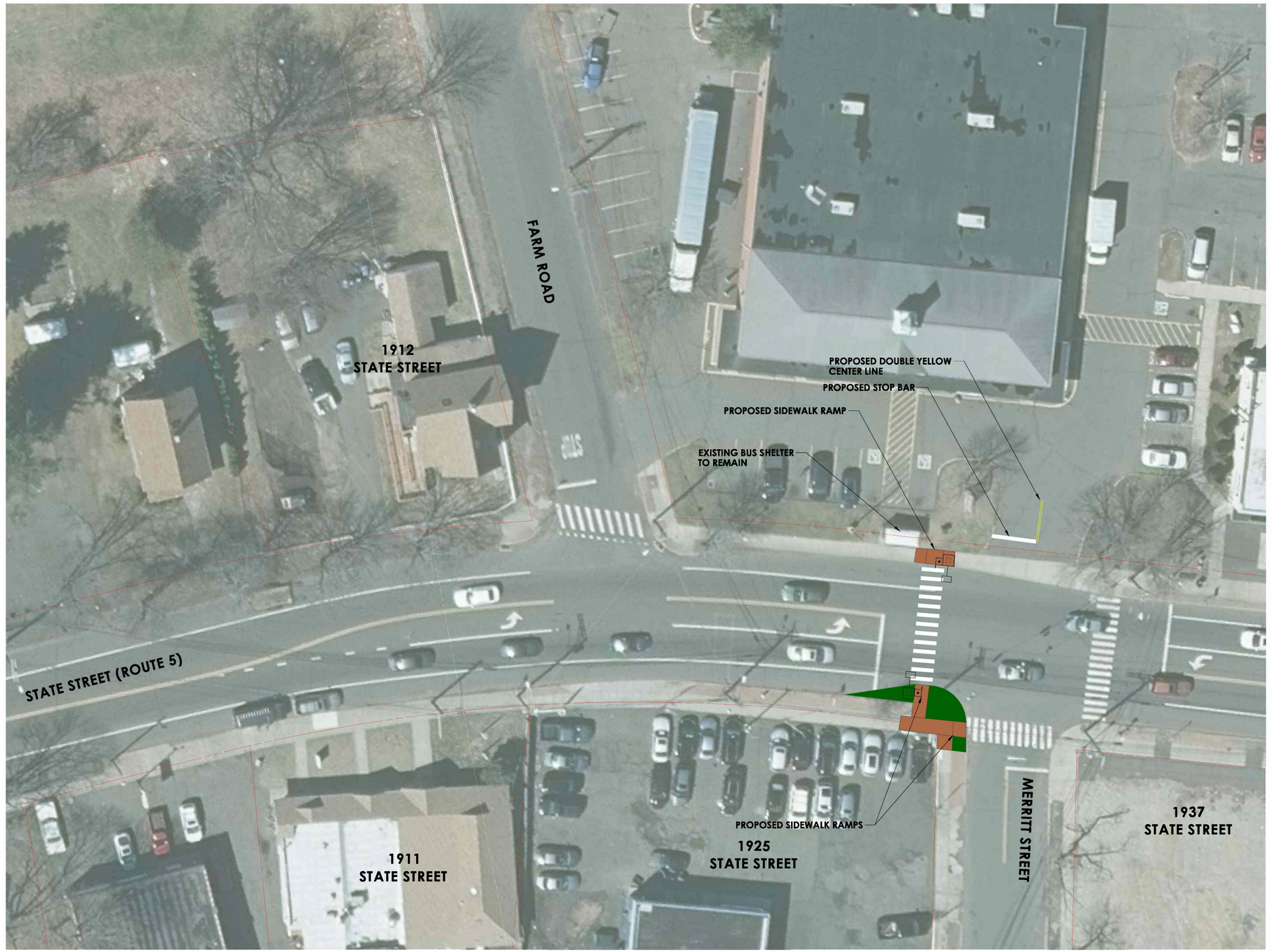
DRAWING TITLE: **STATE STREET (ROUTE 5) AT PARK ROAD AND ARMSTRONG STREET**

PROJECT NO.:

DRAWING NO.: **001**

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$



CONNECTICUT

COORDINATE GRID

LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

Figure 18

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G CHECKED BY: L.S

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: STATE STREET PEDESTRIAN NEEDS STUDY

TOWN(S): HAMDEN

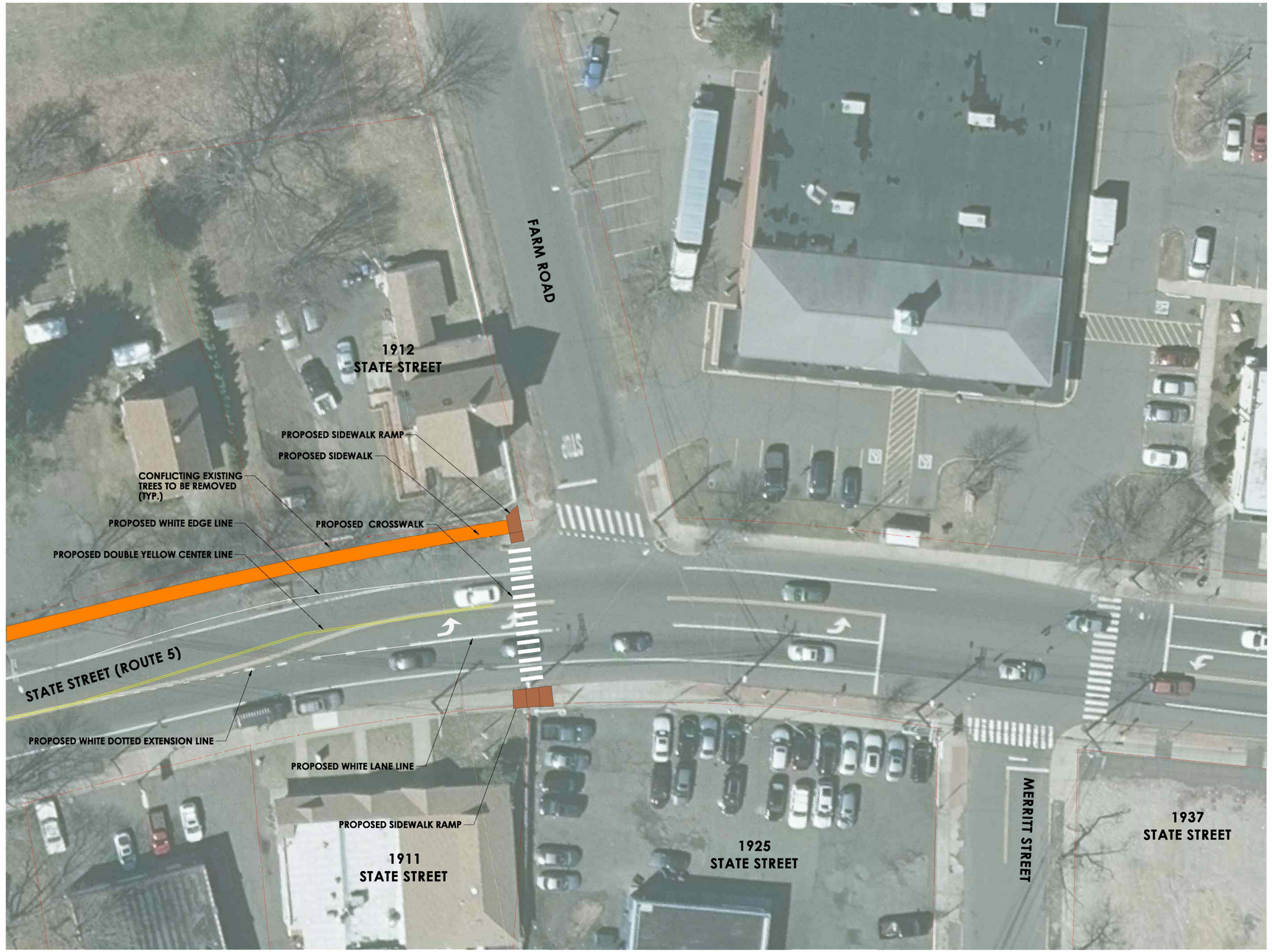
DRAWING TITLE: STATE STREET (ROUTE 5) AT FARM ROAD AND MERRITT STREET OPTION A

PROJECT NO.:

DRAWING NO.: 002

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$



LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

Figure 19

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G CHECKED BY: L.S

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: STATE STREET PEDESTRIAN NEEDS STUDY

TOWN(S): HAMDEN

DRAWING TITLE: STATE STREET (ROUTE 5) AT FARM ROAD AND MERRITT STREET OPTION B

PROJECT NO.:

DRAWING NO.: 003

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$

STATE STREET AT EDMUND STREET / POTTER PLACE

Conceptual design improvements for the Edmund Street / Potter Place intersection are illustrated in **Figure 20**. The proposed improvements include:

- Upgrading the existing sidewalk ramps on the southwest and southeast corners of the intersection;
- Constructing curb extensions along the both sides of State Street south of the intersection to increase pedestrian visibility and reduce the pedestrian crossing distance along State Street;
- Constructing high visibility crosswalks on the western and southern portions of the intersection;
- Realignment of the existing sidewalk along the western side of State Street south of the intersection; and
- Construction of an accessible bus pad to provide access between the curb and the existing rear-facing bus shelter northwest of the intersection.

STATE STREET AT HUBBARD PLACE AND LONDON DRIVE

Conceptual design improvements for the intersections of Hubbard Place and London Drive are illustrated in **Figure 21**. Proposed improvements include:

- Upgrading the existing sidewalk ramps on the southwest and northwest corners of the intersections of Hubbard Place and London Drive;
- Construction of new accessible bus stops and bus shelters south of the intersection of Hubbard Place (near 2196 State Street). This would replace the existing bus stops at Hubbard Place and London Drive.
- Construction of a new unsignalized crosswalk south of Hubbard Place to provide a location for pedestrians to safely cross State Street. Sidewalk ramps and curb extensions are proposed at both sides of the unsignalized crosswalk to reduce pedestrian crossing distances and increase pedestrian visibility.

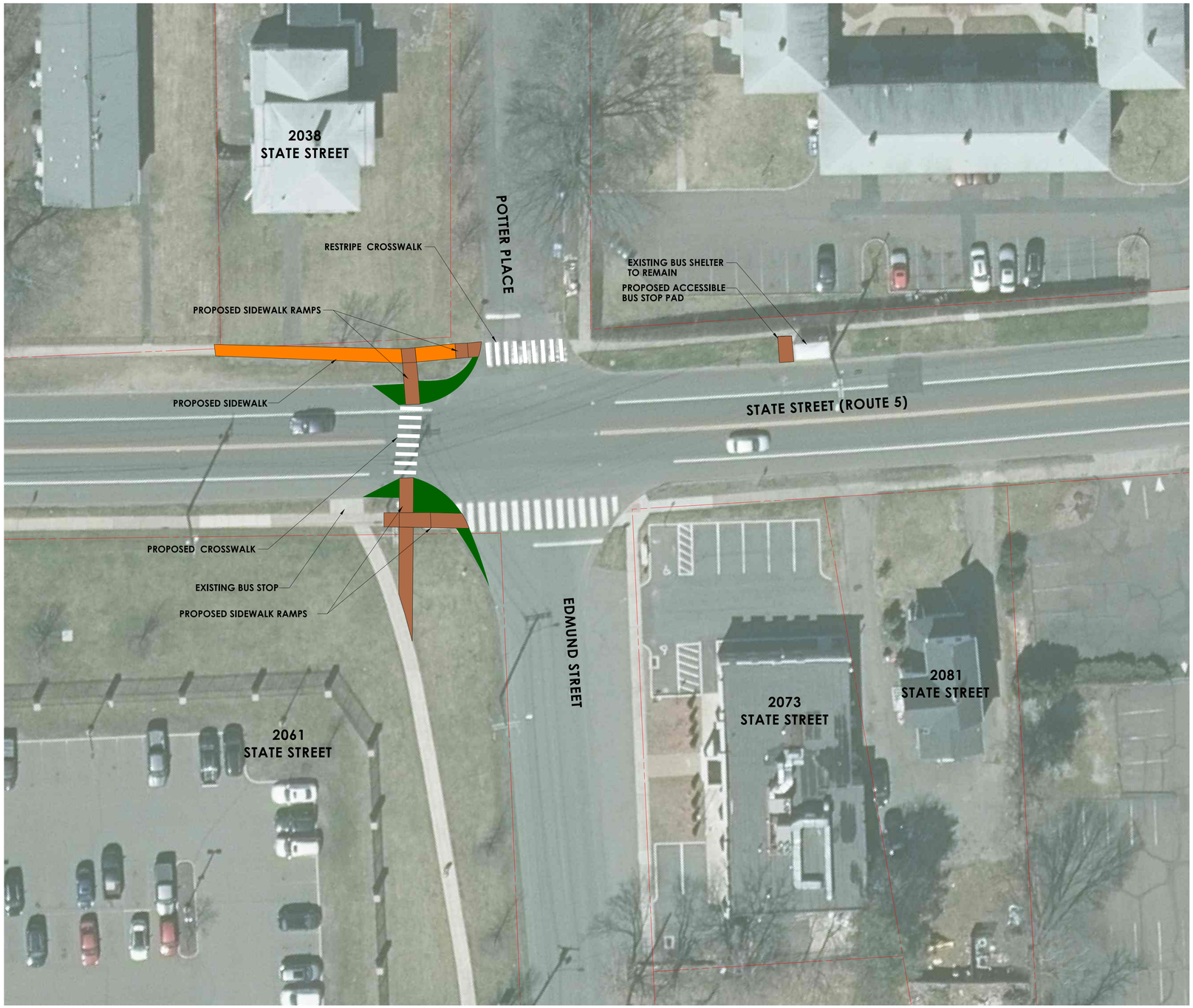
In addition, the conceptual plan also identified an optional sidewalk along the east side of State Street north of its existing terminus of Hubbard Place. Sidewalk ramps would be provided at each of the driveways along 2207 State Street, 2209 State Street, 2215 State Street, and 2239 State Street. If constructed, the sidewalk would improve pedestrian mobility to the Country Food Market and Number One Fish Market.

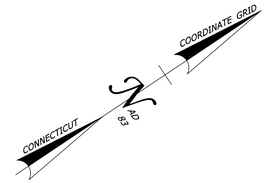
STATE STREET AT FERNWOOD ROAD

Conceptual design improvements for the Fernwood Road intersection (**Figure 22**) include an upgraded sidewalk ramp on the northwest corner of the intersection and the installation of a high visibility crosswalk on the western portion of the intersection; construction of a new high visibility crosswalk and curb extensions on the southern portion of the intersection to reduce pedestrian crossing distances and improve pedestrian mobility; and the relocation of the northbound CTtransit bus stop from its current location across River Ridge Apartments to immediately north of Fernwood Road. Concrete pads would be installed at the relocated northbound bus stop and at the existing southbound bus stop to make those bus stops accessible to transit users. In addition, sidewalks are proposed along the eastern side of State Street to improve pedestrian mobility near the intersection.

STATE STREET AT SEBEC STREET

Conceptual design improvements for the Sebec Street intersection (**Figure 23**) include an upgraded sidewalk ramp on the northwest corner of the intersection and the installation of a high visibility crosswalk on the western portion of the intersection; construction of a new high visibility crosswalk and curb extensions on the northern portion of the intersection to reduce pedestrian crossing distances and improve pedestrian mobility; and enhancements to the existing CTtransit bus stops at Sebec Street. Concrete pads would be installed at the relocated northbound bus stop and at the existing southbound bus stop to make those bus stops accessible to transit users. In addition, sidewalks are proposed along both sides of State Street to improve pedestrian mobility near the intersection.





LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

Figure 20

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G. CHECKED BY: L.S.

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: **STATE STREET PEDESTRIAN NEEDS STUDY**

TOWN(S): **HAMDEN**

DRAWING TITLE: **STATE STREET (ROUTE 5) AT POTTER PLACE**

PROJECT NO.:

DRAWING NO.: **004**

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$

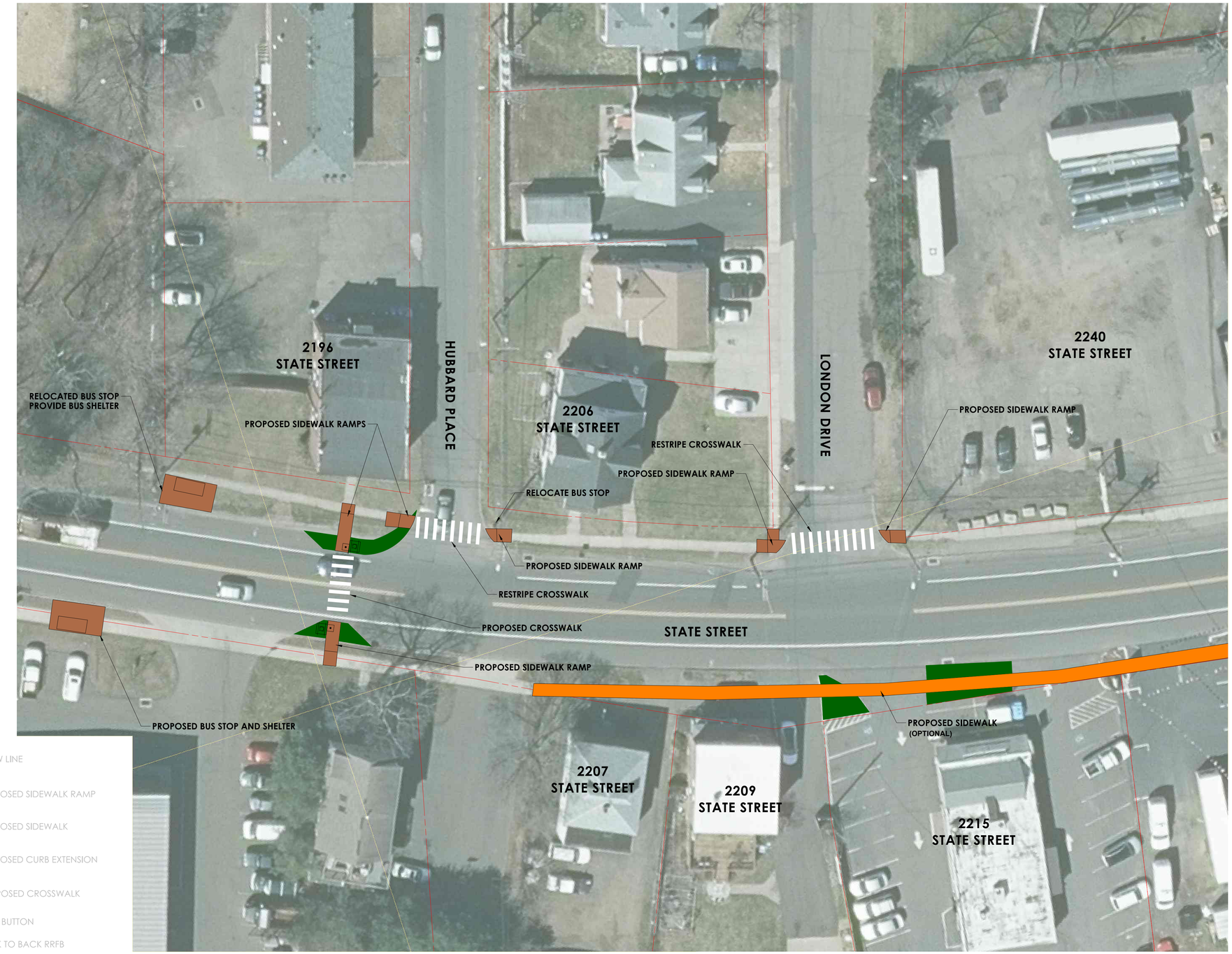


Figure 21

REVISION DESCRIPTION | DATE | REV.

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G. CHECKED BY: L.S.

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: **STATE STREET PEDESTRIAN NEEDS STUDY**

TOWN(S): **HAMDEN**

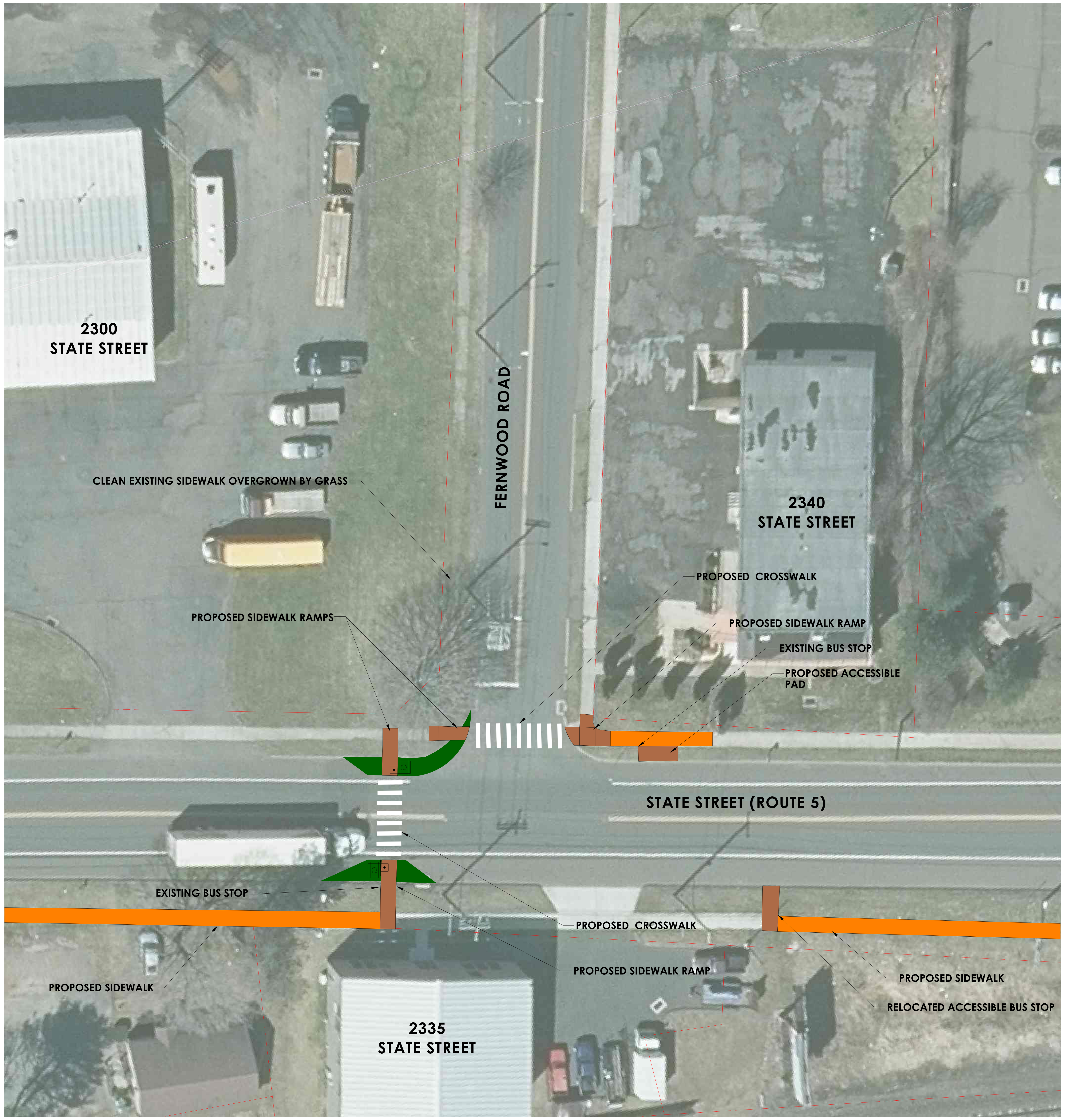
DRAWING TITLE: **STATE STREET (ROUTE 5) AT LONDON DRIVE**

PROJECT NO.:

DRAWING NO.: **005**

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$



LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

Figure 22

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G. CHECKED BY: L.S.

0 20' 40' HORIZONTAL SCALE 1" = 20'

PROJECT TITLE: STATE STREET PEDESTRIAN NEEDS STUDY

TOWN(S): HAMDEN

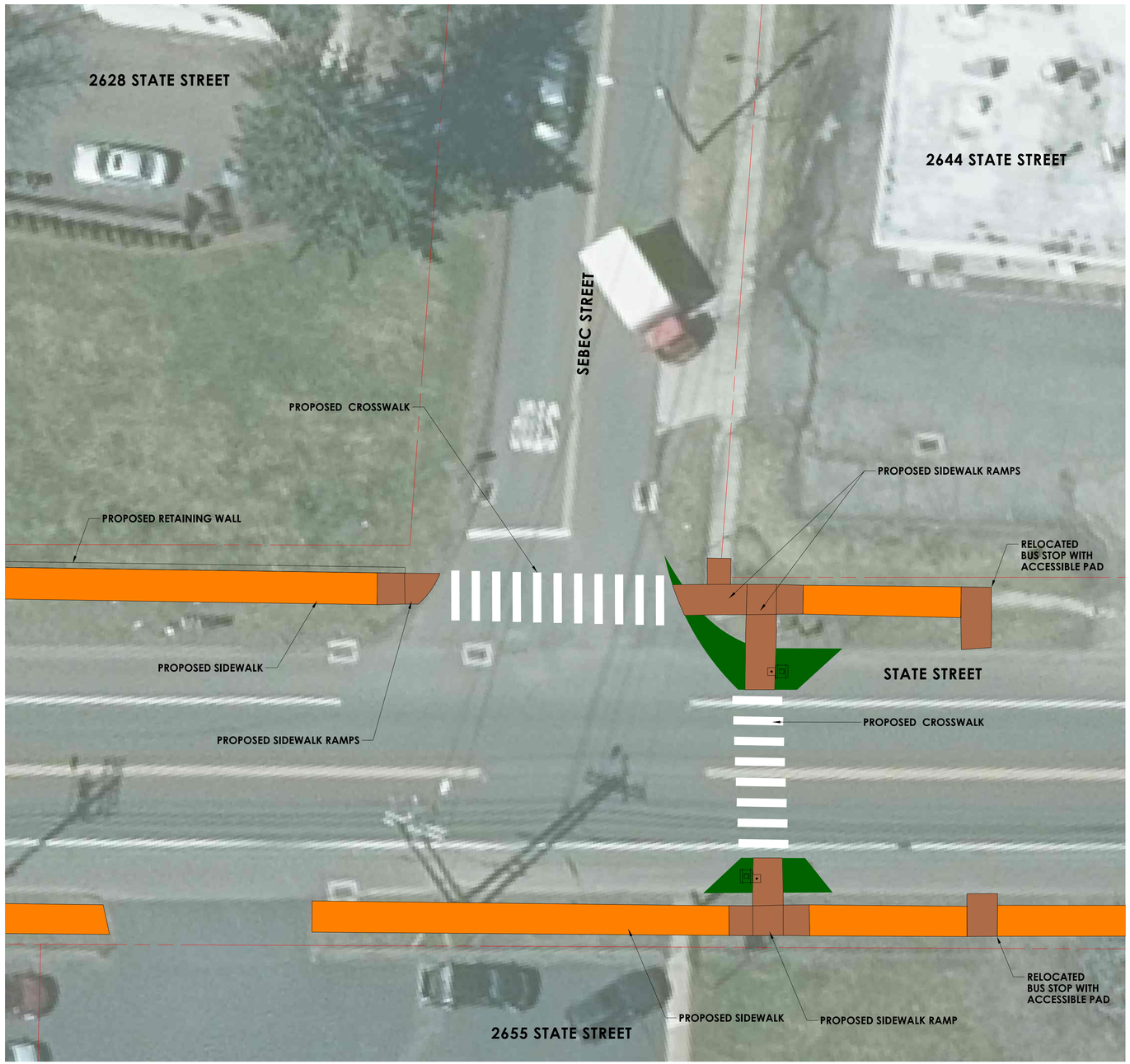
DRAWING TITLE: STATE STREET (ROUTE 5) AT FERNWOOD ROAD

PROJECT NO.:

DRAWING NO.: 006

SHEET NO.:

LASTED SAVED BY: agomez FILE NAME: I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$



CONNECTICUT 27 83 AV COORDINATE GRID

LEGEND

- R.O.W LINE
- PROPOSED SIDEWALK RAMP
- PROPOSED SIDEWALK
- PROPOSED CURB EXTENSION
- PROPOSED CROSSWALK
- PUSH BUTTON
- BACK TO BACK RRFB
- PEDESTRIAN SIGNAL FACE

Figure 23

REV.	DATE	REVISION DESCRIPTION

SIGNATURE BLOCK:

DESIGNER/DRAFTER: A.G. CHECKED BY: L.S.

0 20' 40'
HORIZONTAL SCALE
1" = 20'

PROJECT TITLE: **STATE STREET PEDESTRIAN NEEDS STUDY**

TOWN(S): **HAMDEN**

DRAWING TITLE: **STATE STREET (ROUTE 5) AT SEBEC STREET**

PROJECT NO.:

DRAWING NO.: **007**

SHEET NO.:

LASTED SAVED BY: agomez **FILE NAME:** I:\Projects\224-134 AKRF State St Hamden\Contract Plans\Contract Plans -NEW.dgn
PLOTTED DATE: $DATE$

IMPLEMENTATION PLAN

The Town of Hamden should use this Study to seek funding and partners to implement the improvements identified herein. It is recommended the Town prioritize the implementation of multimodal transportation improvement strategies. Some of the strategies can be implemented by the Town with local funds or programs whereas other strategies can be implemented through coordination with CTDOT, CTtransit, and/or other partners.

Once a concept is identified and funding is secured, a project would proceed into engineering design and construction. A Preliminary Engineering study would need to be performed to confirm project extents, help establish the potential impacts to environmental and natural resources, identify potential property and utility impacts, and help define the expected costs to complete the project.

Once Preliminary Engineering is complete and the decision is made to continue to advance the project, final design would take place to include all the necessary details needed for construction including grading, drainage, lighting, streetscape, signage and striping, work zone traffic control plans, and signal design plans (if applicable). Detailed design will need to address any existing deficiencies of the roadway and existing infrastructure conflicts with the proposed design such as utility conflicts and possible relocations. Final design culminates with construction documentation to facilitate bidding and construction of the project. If necessary, a right of way acquisition process would be conducted to obtain additional property to allow for construction of the project. Generally, projects that are identified as having a low level of complexity can be designed within 12-18 months from initiation of the project. As complexity grows including the requirements of the design and construction funding sources, so does the timeframe required to complete the design phase. The design process for projects identified as highly complex may last three years or more.

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

NE TRAFFIC COUNTS

SCR COG South Central Regional Council of Governments

State Street Pedestrian Needs Study

Town of Hamden Transportation Safety Meeting

Town Council Chambers
Memorial Town Hall

September 25, 2024

akrf VN ENGINEERS

1

Project Team

SCR COG South Central Regional Council of Governments

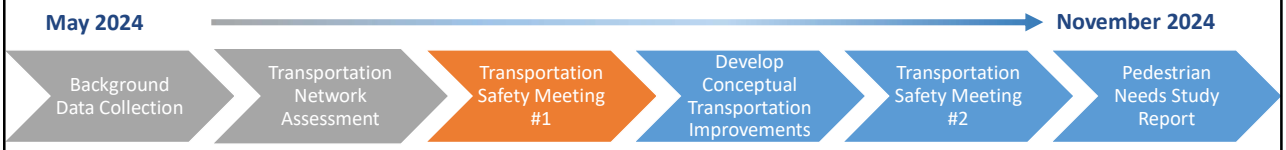
CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

Consultant Team

akrf VN ENGINEERS

2

Study Schedule



3

Agenda

- Study Overview
- Existing Corridor Conditions
- Potential Multimodal Transportation Improvements
- Next Steps
- Interactive Feedback Session

4

Study Overview

5

Study Overview

- Study Limits include State Street (US Route 5) from the New Haven City Line to the North Haven Town Line (approx. 2.5 miles in length)
- High speed minor arterial roadway surrounded by varying land uses
- State Street is designated as a State roadway with a high likelihood for pedestrian and bicycle use by CTDOT
- Much of the corridor lacks basic pedestrian infrastructure such as sidewalks and crosswalks, which impacts pedestrian mobility, pedestrian safety, and access/usage of mass transit

6

Study Overview

Pedestrians walk in the roadway
due to a lack of sidewalks along State Street

In some cases, people use private property to travel along State Street

7

Study Goals

Evaluate the existing pedestrian infrastructure

Identify opportunities to better accommodate Pedestrians, Bicyclists, and Transit on State Street

8

Existing Corridor Conditions

9

Existing Corridor Conditions

A variety of data was collected to establish existing pedestrian conditions along the State Street Corridor

Field Observations / Walking the Corridor

Crash Data (University of Connecticut)

Transit Data (CTtransit)

10

Existing Corridor Conditions

State Street - New Haven City Line to Edmund St

Posted Speed Limit: 35 MPH

Crash History (2021-2023): 63 crashes (1 serious injury crash)

Highest Monthly Transit Ridership Locations: Edmund St, CTDMV, Merritt St, Cook St/Hyde St, Park Rd/Armstrong St

Constraints: Right-of-Way, Utilities, On-Street Parking Demand

11

Existing Corridor Conditions

State Street - New Haven City Line to Edmund St

At Benton Street

A handful of bus stops are ADA compliant, but no crosswalks are provided across State Street for transit users.

At Farm Road

The sidewalk along the western side of State Street terminates at Farm Road, and no crosswalk is provided for pedestrians

North of Ridge Road (at CT DMV)

Some portions of existing sidewalks are in poor condition, causing a tripping hazard to pedestrians

12

Existing Corridor Conditions

State Street - Edmund St to Stevens St

Posted Speed Limit: 45 MPH

Crash History (2021-2023): 20 crashes (1 serious injury crash)

Highest Monthly Transit Ridership Locations: Fernwood Rd, Hubbard St/London Dr

Constraints: Right-of-Way, Guiderail, Utilities, Culverts (adjacent to roadway), Driveway access

13

Existing Corridor Conditions

State Street - Edmund St to Stevens St

At Edmunds Street

Although pedestrian crossing signage is provided, a crosswalk is not provided at Edmunds Street

North of Fernwood Rd (River Ridge)

There are no continuous sidewalks provided north of Fernwood Road, and pedestrians must use either grass or shoulder areas to access transit

South of Foote St (at WB Mason)

Pedestrians were observed using private property to travel along State Street given the lack of sidewalks

14

Existing Corridor Conditions

State Street - Stevens St to North Haven Town Line

Posted Speed Limit: 45 MPH (40 MPH north of Goodwill Store)

Crash History (2021-2023): 21 crashes (3 serious injury crashes)

Highest Monthly Transit Ridership Locations: Sebec St, Olds St, Goodwill Store

Constraints: Right-of-Way, Utilities, Waterbodies (near Olds Street), Driveway access

15

Existing Corridor Conditions

State Street - Stevens St to North Haven Town Line

South of Daniel Rd (Highvue Manor)

Dirt paths indicate pedestrians use the grass area to access transit and walk along State Street

At Craft Street

No sidewalks or crosswalks are provided at most bus stop locations

At Goodwill Outlet Store (near Town Line)

No sidewalks are provided north to the North Haven Town Line

16

Existing Corridor Conditions

Corridor Summary

- The posted speed limit changes three times along State Street within the Town of Hamden
- Over the last 15 years daily traffic volumes north of Edmund Street have increased by 20 percent
- A lack of basic pedestrian infrastructure north of Edmunds Street likely contributes to less pedestrian and bicycle usage on State Street

State Street Segment	Posted Speed Limit (MPH)	Total Crashes (2021-2023)	Total Serious Injury Crashes* (2021-2023)	Average Daily Traffic Volume (VPD)
New Haven City Line to Edmund St	35	63	1	14,300
Edmund St to Stevens St	45	20	1	9,500
Stevens St to North Haven Town Line	45**	21	3	9,500

* There were no fatal crashes along the corridor from 2021 to 2023
** Posted Speed Limit reduces to 40 MPH just south of the North Haven Town Line

17

Potential Multimodal Transportation Improvements

18

Potential Multimodal Transportation Improvements

Guiding Principles

- FHWA Safe System Approach
- CTDOT Complete Streets Policy
- Town of Hamden Complete Streets Policy
- Improve pedestrian, bicycle, and transit user mobility and safety
- Make walking, biking, and transit usage more viable and accessible to residents and visitors

19

Potential Multimodal Transportation Improvements

Provide high visibility crosswalks
Provide transit amenities at bus stops
[Example: State St at Albert St in New Haven]

Consider reducing the posted speed limit on State St north of Edmund St to 35 MPH to improve safety for pedestrians traveling along or across State Street

Improve accessibility at bus stops and intersections (e.g., boarding pad, curb ramps)
[Example: State St at Cook St]

Upgrade pedestrian signal infrastructure
[Example: State St at Ridge Rd]

Install Rectangular Rapid Flashing Beacons (RRFBs) at crosswalks
[Example: State Street in New Haven]

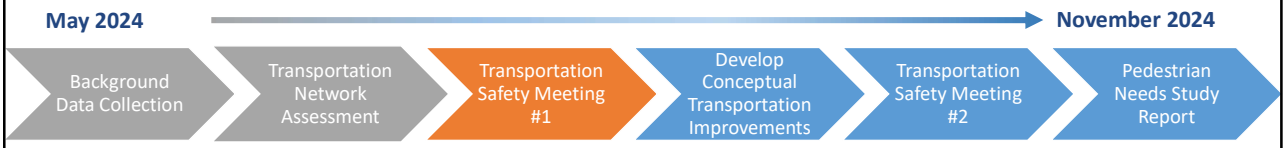
Consider a Shared Use Path in lieu of a sidewalk to accommodate bicycles and pedestrians
[Example: Riverside Drive in Norwalk]

20

Next Steps

21

Next Steps



- **Develop Conceptual Transportation Improvements**
- **Host Transportation Safety Meeting #2 (October/November 2024)**
  - Gather feedback on Conceptual Transportation Improvements
- **Pedestrian Needs Study Report (November 2024)**

Questions or Comments can be submitted to the Town of Hamden Engineering Department at (203) 287-7040 or by email at engineering@hamden.com

22

Questions?

23

Interactive Feedback Session

24

Interactive Feedback Session

We want to hear from you!

- How do you use the corridor today?
- What are your top safety concerns related to the State Street corridor?
  - Unsafe roadway (speeding, roadway is too narrow, sight distances entering State Street)
  - Aggressive or distracted driving
  - General bicycle and pedestrian safety
  - Truck traffic
- What kind of transportation improvements do you want to see on the State Street corridor?

25

Potential Multimodal Transportation Improvements

Provide high visibility crosswalks
Provide transit amenities at bus stops
[Example: State St at Albert St in New Haven]

Consider reducing the posted speed limit on State St north of Edmund St to 35 MPH to improve safety for pedestrians traveling along or across State Street

Improve accessibility at bus stops and intersections (e.g., boarding pad, curb ramps)
[Example: State St at Cook St]

Upgrade pedestrian signal infrastructure
[Example: State St at Ridge Rd]

Install Rectangular Rapid Flashing Beacons (RRFBs) at crosswalks
[Example: State Street in New Haven]

Consider a Shared Use Path in lieu of a sidewalk to accommodate bicycles and pedestrians
[Example: Riverside Drive in Norwalk]

26

Thank you!

27

SCR COG South Central Regional Council of Governments

State Street Pedestrian Needs Study

Town of Hamden Transportation Safety Meeting #2

Town Council Chambers
Memorial Town Hall

October 30, 2024

akrf VN ENGINEERS

1

Agenda

- Introduction & Study Recap
- Multimodal Transportation Improvement Concepts
- Next Steps

2

Introduction & Study Recap

3

Project Team

SCR COG South Central Regional Council of Governments

TOWN OF HAMDEN Incorporated 1786 STATE OF CONNECTICUT

CTDOT CONNECTICUT DEPARTMENT OF TRANSPORTATION

Consultant Team

akrf

VN ENGINEERS

4

Study Overview

- Study includes State Street (US Route 5) from the New Haven City Line to the North Haven Town Line (approx. 2.5 miles in length)
  - State roadway with a high likelihood for pedestrian and bicycle use (per CTDOT)
- Much of the corridor lacks basic pedestrian infrastructure such as sidewalks and crosswalks, which impacts pedestrian mobility, pedestrian safety, and access/usage of mass transit

Pedestrians walk in the roadway due to a lack of sidewalks along State Street

In some cases, people use private property to travel along State Street

5

Study Goals

Evaluate the existing pedestrian infrastructure

Identify opportunities to better accommodate Pedestrians, Bicyclists, and Transit on State Street

6

Existing Corridor Conditions

A variety of data was collected to establish existing pedestrian conditions along the State Street Corridor

Field Observations / Walking the Corridor

Crash Data (University of Connecticut)

Transit Data (CTtransit)

7

Existing Corridor Conditions

State Street - New Haven City Line to Edmund St

Posted Speed Limit: 35 MPH

Crash History (2021-2023): 63 crashes (1 serious injury crash)

Highest Monthly Transit Ridership Locations: Edmund St, CTDMV, Merritt St, Cook St/Hyde St, Park Rd/Armstrong St

Constraints: Right-of-Way, Utilities, On-Street Parking Demand

8

Existing Corridor Conditions

State Street - New Haven City Line to Edmund St

At Benton Street

A handful of bus stops are ADA compliant, but no crosswalks are provided across State Street for transit users.

At Farm Road

The sidewalk along the western side of State Street terminates at Farm Road, and no crosswalk is provided for pedestrians

North of Ridge Road (at CT DMV)

Some portions of existing sidewalks are in poor condition, causing a tripping hazard to pedestrians

9

Existing Corridor Conditions

State Street - Edmund St to Stevens St

Posted Speed Limit: 45 MPH

Crash History (2021-2023): 20 crashes (1 serious injury crash)

Highest Monthly Transit Ridership Locations: Fernwood Rd, Hubbard St/London Dr

Constraints: Right-of-Way, Guiderail, Utilities, Culverts (adjacent to roadway), Driveway access

10

Existing Corridor Conditions

State Street - Edmund St to Stevens St

At Edmunds Street

Although pedestrian crossing signage is provided, a crosswalk is not provided at Edmunds Street

North of Fernwood Rd (River Ridge)

There are no continuous sidewalks provided north of Fernwood Road, and pedestrians must use either grass or shoulder areas to access transit

South of Foote St (at WB Mason)

Pedestrians were observed using private property to travel along State Street given the lack of sidewalks

11

Existing Corridor Conditions

State Street - Stevens St to North Haven Town Line

Posted Speed Limit: 45 MPH (40 MPH north of Goodwill Store)

Crash History (2021-2023): 21 crashes (3 serious injury crashes)

Highest Monthly Transit Ridership Locations: Sebec St, Olds St, Goodwill Store

Constraints: Right-of-Way, Utilities, Waterbodies (near Olds Street), Driveway access

12

Existing Corridor Conditions

State Street - Stevens St to North Haven Town Line

South of Daniel Rd (Highvue Manor)

Dirt paths indicate pedestrians use the grass area to access transit and walk along State Street

At Craft Street

No sidewalks or crosswalks are provided at most bus stop locations

At Goodwill Outlet Store (near Town Line)

No sidewalks are provided north to the North Haven Town Line

13

Existing Corridor Conditions

Corridor Summary

- Varying speed limits within the Town of Hamden (no significant roadway changes)
- Over the last 15 years daily traffic volumes north of Edmund Street have increased by 20 percent
- High transit ridership in areas where there are no sidewalks (Sebec Street, Goodwill Store)
- Lack of basic pedestrian infrastructure north of Edmunds Street likely contributes to less pedestrian and bicycle usage on State Street

State Street Segment	Posted Speed Limit (MPH)	Total Crashes (2021-2023)	Total Serious Injury Crashes* (2021-2023)	Average Daily Traffic Volume (VPD)
New Haven City Line to Edmund St	35	63	1	14,300
Edmund St to Stevens St	45	20	1	9,500
Stevens St to North Haven Town Line	45**	21	3	9,500

* There were no fatal crashes along the corridor from 2021 to 2023
** Posted Speed Limit reduces to 40 MPH just south of North Haven Town Line

14

Multimodal Transportation Improvement Concepts

15

Multimodal Transportation Improvement Concepts

Guiding Principles

- FHWA Safe System Approach
- CTDOT Complete Streets Policy
- Town of Hamden Complete Streets Policy
- Improve pedestrian, bicycle, and transit user mobility and safety
- Make walking, biking, and transit usage more viable and accessible to residents and visitors

16

Potential Multimodal Transportation Improvements

Provide high visibility crosswalks
Provide transit amenities at bus stops
[Example: State St at Albert St in New Haven]

Consider reducing the posted speed limit on State St north of Edmund St to 35 MPH to improve safety for pedestrians traveling along or across State Street

Improve accessibility at bus stops and intersections (e.g., boarding pad, curb ramps)
[Example: State St at Cook St]

Upgrade pedestrian signal infrastructure
[Example: State St at Ridge Rd]

Install Rectangular Rapid Flashing Beacons (RRFBs) at crosswalks
[Example: State Street in New Haven]

Consider a Shared Use Path in lieu of a sidewalk to accommodate bicycles and pedestrians
[Example: Riverside Drive in Norwalk]

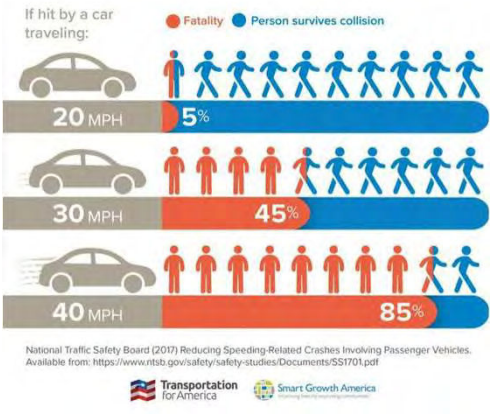
17

Multimodal Transportation Improvement Concepts

Corridor Wide Recommendations

Set an Appropriate Speed Limit for State Street in Hamden

- Investigate reducing the posted speed limit of State Street north of Edmund Street to 35 MPH as part of planned improvements to the State Street corridor. Reduced speeds will improve safety for pedestrians and bicyclists along the corridor.



18

Multimodal Transportation Improvement Concepts

Corridor Wide Recommendations

Improve Bus Stops along the State Street Corridor

- Investigate accessibility improvements at existing bus stops along the State Street corridor. There are a total of 41 bus stops on State Street in the Town of Hamden.
- Coordinate with CTtransit and CTDOT Office of Transit and Ridesharing on the appropriate type of bus stop at each location, and to determine if any bus stops should be consolidated.

Type 1 Basic Coverage Bus Stop
State Street at Cook Street
(Hamden)

Type 3 Rear-Facing Bus Shelter
State Street at Albert Street
(New Haven)

19

State Street Conceptual Corridor Improvements

Provide Marked Crosswalks at intersections where curb ramps are provided

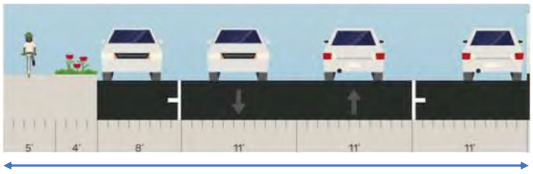
- Striping / markings alert motorists to the potential presence of pedestrians and establish the right of way for pedestrians
- The Town is planning on painting marked crosswalks in the near future at the following locations
  - Atlas Street
  - Benton Street
  - Cook Street
  - Edmund Street / Potter Place
  - Hubbard Place
  - London Drive
  - Fernwood Road

20

State Street Conceptual Corridor Improvements

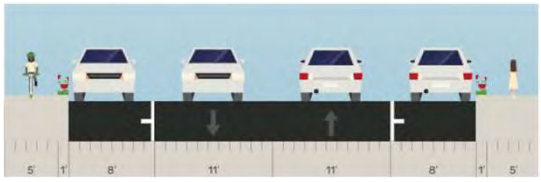
Potential Improvement Options (State Street at Fernwood Road)

Existing Roadway Right-of-Way Width



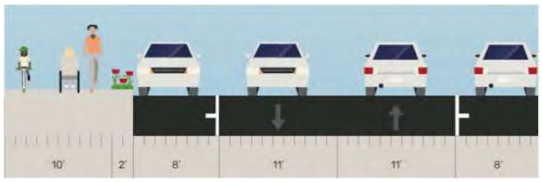
50’

Option A
Sidewalk on Both Sides of State Street



50’

Option B
Shared Use Path on One Side of State Street



50’

21

State Street Conceptual Intersection Improvements

Park Road / Armstrong Street

- Add sidewalk on southwest corner of intersection, improving access to existing bus stop
- Install crosswalk and curb ramps along southern portion of the intersection
- Upgrade traffic signal to improve accessibility at the intersection

22

State Street Conceptual Intersection Improvements

Farm Road / Merritt Street

Option A
Install new crosswalk and curb ramps at Merritt Street

Option B
Install new crosswalk and curb ramps at Farm Road

23

State Street Conceptual Intersection Improvements

Edmund Street / Potter Place

- Install crosswalk and curb ramps along southern portion of the intersection
- Restripe the western crosswalk
- Investigate whether a RRFB is warranted

RRFB at State Street in Hew Haven

24

State Street Conceptual Intersection Improvements

Hubbard Place / London Drive

- Install crosswalk and curb ramps along southern portion of the Hubbard Place intersection
- Install curb ramps along western portion of the Hubbard Place and London Drive intersections
- Restripe crosswalks at Hubbard Place and London Drive
- Investigate whether a RRFB is warranted

25

State Street Conceptual Intersection Improvements

Fernwood Road

- Install crosswalk and curb ramps along southern portion of the intersection
- Relocate northbound CTtransit bus stop from River Ridge Apartments to Fernwood Road
- Investigate whether a RRFB is warranted

26

State Street Conceptual Intersection Improvements

Sebec Street

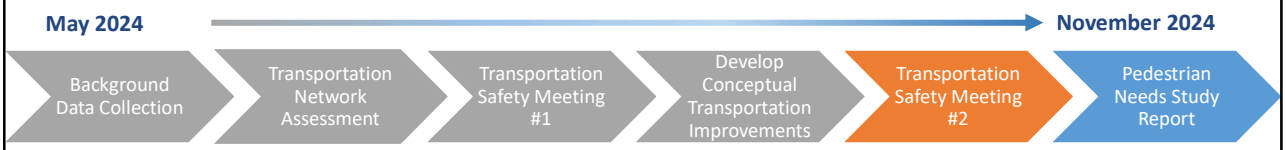
- Add sidewalk on southwest corner of intersection
- Install crosswalks on western and northern portions of intersection
- Relocate northbound CTtransit bus stop further south to Sebec Street
- Investigate whether RRFB is warranted

27

Next Steps

28

Next Steps



- **Prepare Pedestrian Needs Study Report**
  - Incorporate comments received on the conceptual transportation improvements
  - Submit Report to SCRCOG and the Town of Hamden
  - The Town and stakeholders will utilize the report to seek funding
  - Advance conceptual transportation improvements into engineering design and construction once funding is secured

Questions or Comments can be submitted to the Town of Hamden Engineering Department by Friday, November 8th at (203) 287-7040 or by email at engineering@hamden.com

29

Questions?

30