



COMMUNITY
connectivity program

Prospect

Route 69– Road Safety Audit

April 21- 2017



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Acknowledgements:

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With assistance from AECOM Transportation Planning Group

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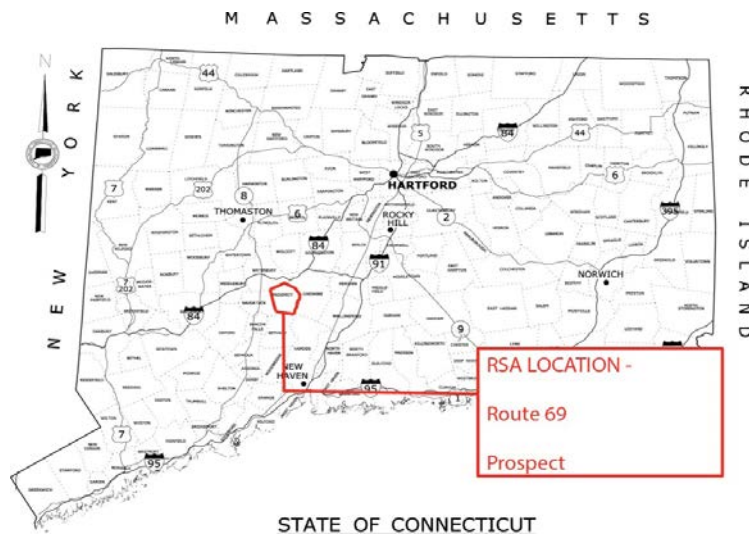
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The Connecticut Department of Transportation (CTDOT) is undertaking a Community Connectivity Program that focuses on improving the state's transportation network for all users, with an emphasis on bicyclists and pedestrians. A major component of this program is conducting Road Safety Audits (RSA's) at selected locations. An RSA is a formal safety assessment of the existing conditions of walking and biking routes and is intended to identify the issues that may discourage or prevent walking and bicycling. 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 or severity.

The RSA team is made up of CTDOT staff, municipal officials and staff, enforcement agents, AECOM staff, and community leaders. An 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, presence or absence of bicycle lanes or sidewalks, and social influences.

Each RSA was conducted using RSA protocols published by the Federal Highway Administration (FHWA). For details on this program, please refer to www.ctconnectivity.com. Prior to the site visit, area topography and land use characteristics are examined using available mapping and imagery. Potential sight distance issues, sidewalk locations, on-street and off-street parking, and bicycle facilities are also investigated using available resources. The site visit includes a "Pre-Audit" meeting, the "Field Audit" itself, and a "Post-Audit" meeting to discuss the field observations and formulate recommendations. This procedure is discussed in the following sections.



1 Introduction to the Route 69, Prospect RSA

The Town of Prospect submitted an application to complete an RSA on the Route 69 (Waterbury Road) corridor to improve safety for pedestrians and bicyclists. The Town's Sidewalk Task Force is currently researching the benefits of installing sidewalks along the Route 69 corridor. Route 69 is a direct link between the Cities of Waterbury and New Haven, and Prospect's location on this route results in high traffic volumes during peak commuter periods and increased traffic and congestion when there are backups on Interstate 84 (I-84) or when construction occurs. In addition, electronic mobile devices often show motorists that Route 69 is a preferred travel route to I-84, adding to the traffic volumes on this road. Operational improvements are being made and planned to address long term needs of I-84. Prospect is in the planning stages of converting a former school building into a Community Center on Center Street. The proposed sidewalk in the RSA area would allow major areas of town on the north and south to connect so that residents have improved access to community recreation activities, town buildings and offices, and retail locations.

The Town of Prospect's application contained information on traffic operations and mapping of the corridor. The application and supporting documentation are included in Appendix A.

1.1 Location

The RSA corridor includes Waterbury Road and New Haven Road (Route 69) from Scott Road to Lombard Drive/Center Street (Figure 1). Route 69 is classified as a Principal Arterial - Other with Average Daily Traffic (ADT) ranging from 8,500 to 14,500 vehicles per day (vpd). These volumes are considered moderately high for a two-lane corridor and make pedestrian and bicycle travel difficult, especially for students of Long River Middle School. The RSA study area is within the municipal district of the Town. The area includes the Town Hall, Public Library, Police Department and Senior Center. The area also includes the newly built Regional School District Offices located near the proposed Community Center. The Route 69 corridor also includes many retail stores, restaurants, and commercial properties. Figure 2 shows the regional context of the study area.

The south end of the RSA study area near Center Street has been added to the National Historic Registry List and is designated the Historic District of Prospect. There are multiple buildings in this area that are on the Registry and hold historical value to the area. The Community Connectivity Program will enable the connection between the Historic District and the Business District of Prospect, thus increasing the use and awareness of both of these areas. However, in order to maintain the originality of the historic buildings, extreme care and planning needs to be taken to ensure that no damage comes to these buildings.

To the north, the study area includes Hotchkiss Field which is one of the largest town parks in Prospect. The nearby Hotchkiss House is on the National Registry List of Historic places and

has original steps to enter into the house. Caution needs to be used to ensure this building stays in its original state.

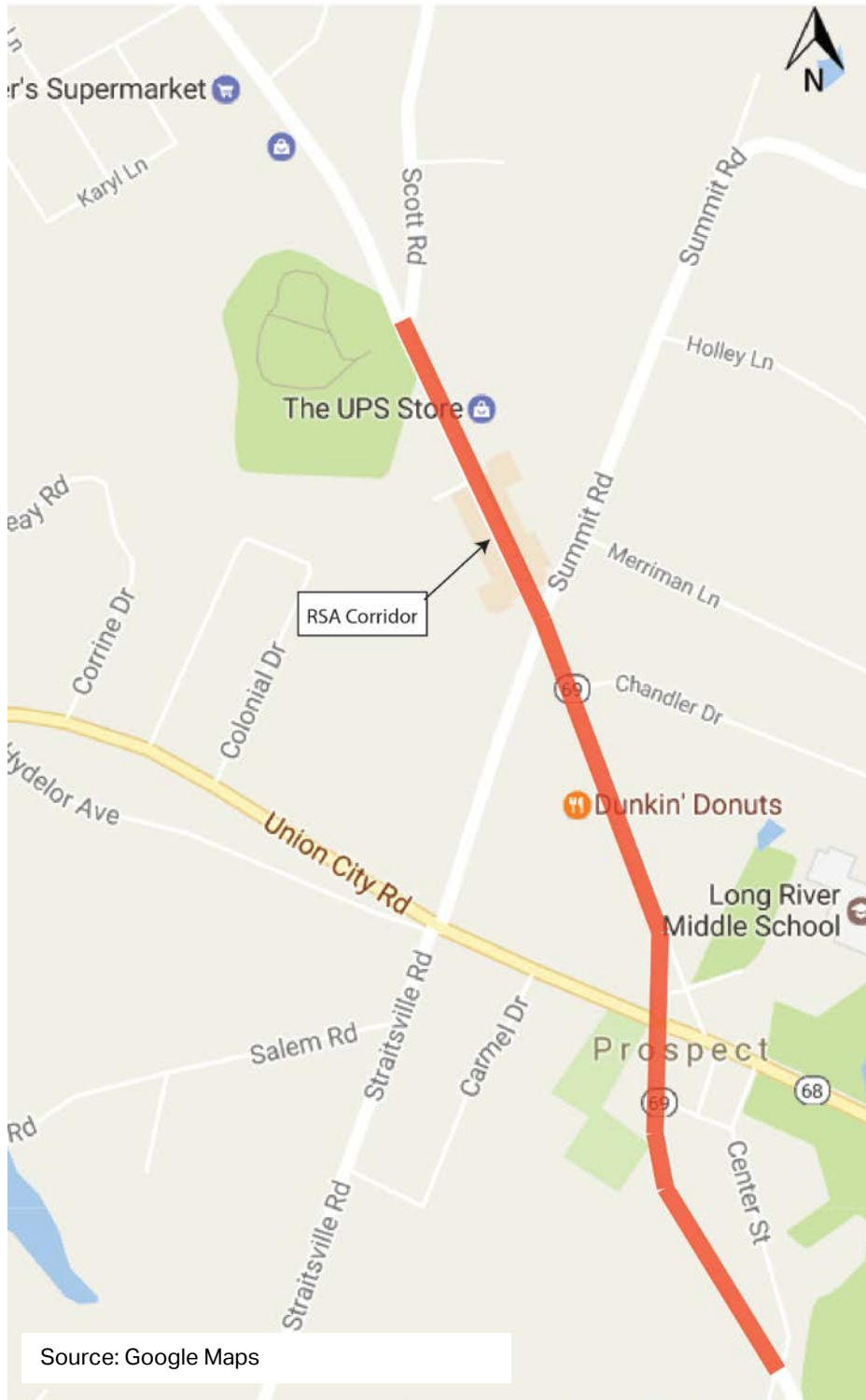


Figure 1: Prospect RSA Corridor

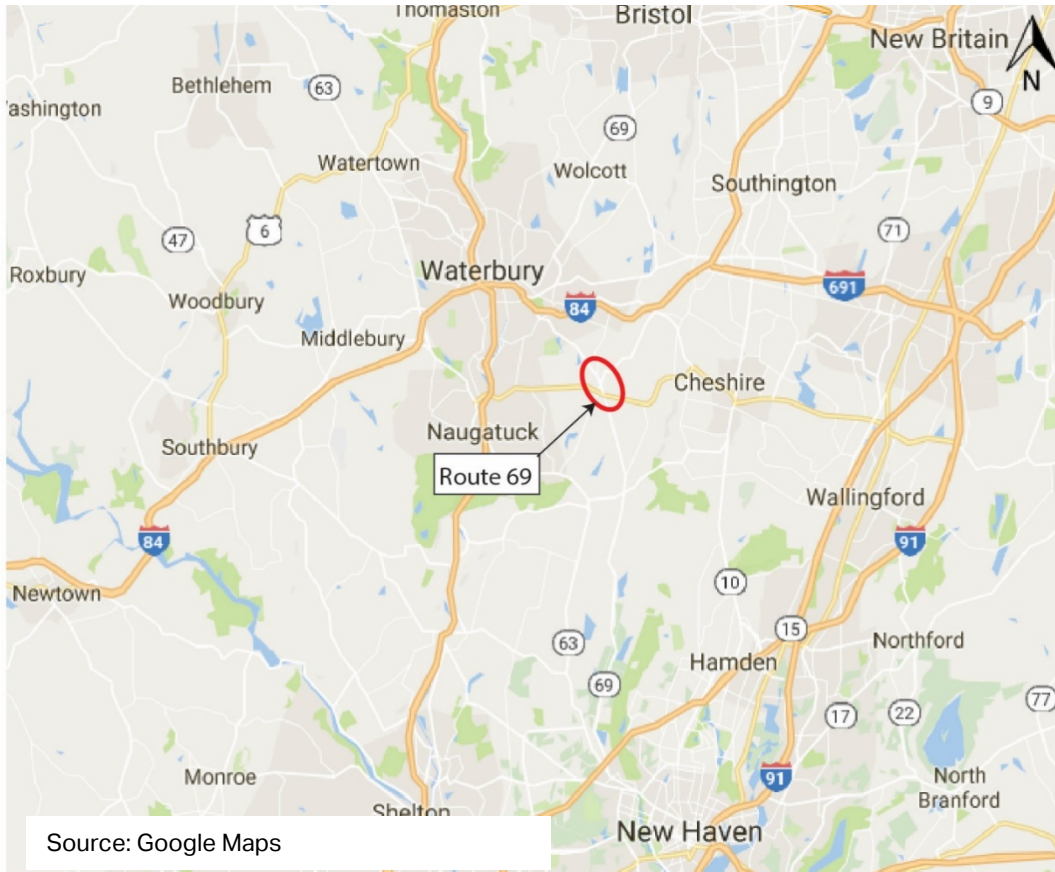


Figure 2: Regional Context for Prospect

2 Pre-Audit Assessment

2.1 Pre-Audit Information

Between 2012 and 2014 there were 121 crashes in the RSA Area. The majority of crashes (77%) reported in this area resulted in property damage only; however 23% of crashes did result in an injury (Table 1 and Table 2). No crashes involved bicyclists or pedestrians. The crash types reported were primarily rear-end (60%). Figure 3 displays crashes that occurred in this area during 2015. The crash history for year 2015 shows that they are dispersed throughout the corridor.

Severity Type	Number of Accidents	
Property Damage Only	93	77%
Injury (No fatality)	28	23%
Fatality	0	0%
Total	121	

Table 1: Crash Severity 2012-2014

Source: UConn Connecticut Crash Data Repository

Manner of Crash / Collision Impact	Number of Accidents	
Unknown	0	0%
Sideswipe-Same Direction	2	2%
Rear-end	73	60%
Turning-Intersecting Paths	20	17%
Turning-Opposite Direction	4	3%
Fixed Object	9	7%
Backing	1	1%
Angle	1	1%
Turning-Same Direction	4	3%
Moving Object	1	1%
Parking	0	0%
Pedestrian	0	0%
Overturn	0	0%
Head-on	0	0%
Sideswipe-Opposite Direction	6	5%
Miscellaneous- Non Collision	0	0%
Total	121	

Table 2: Crash Type 2012-2014

Source: UConn Connecticut Crash Data Repository

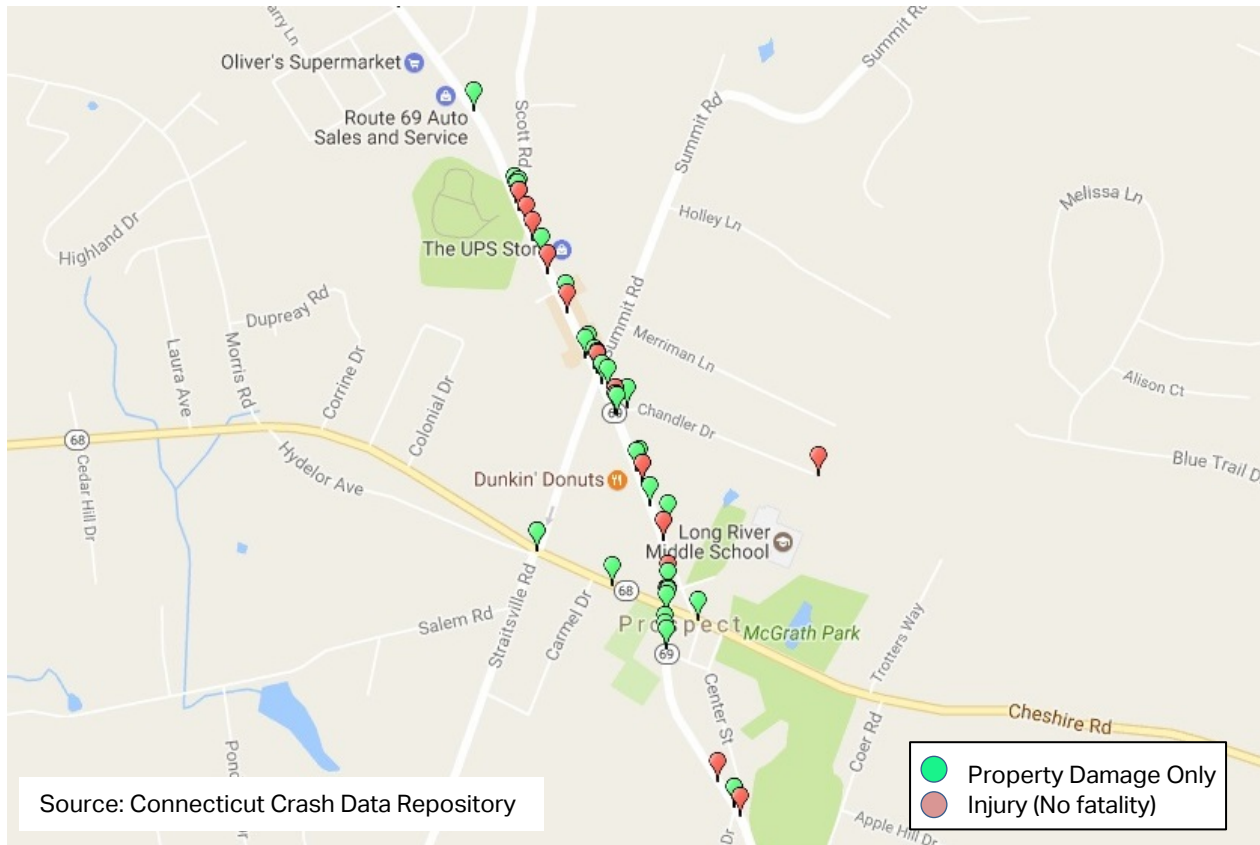


Figure 3: Crashes that Occurred in 2015 (Connecticut Crash Data Repository)

Route 69 is a two-lane, State owned road with a posted speed limit of 35 mph. The corridor lacks sidewalks except on the northeast and southwest corners at the intersection of Route 69 (New Haven Road) and Route 68 (Union City Road). The corridor has unsignalized crosswalks in front of Park Plaza and Crosspointe Plaza and at Orchard Drive. There are 4-leg signalized intersections in the corridor at Waterbury Road/Scott Road, Waterbury Road/Summit Road/Old Schoolhouse Road, and New Haven Road/Union City Road (Route 68). The remaining roadways and driveways along the corridor are controlled by stop signs on the minor approach. The geometry of the corridor is shown in Figure 4 and described in Table 3.

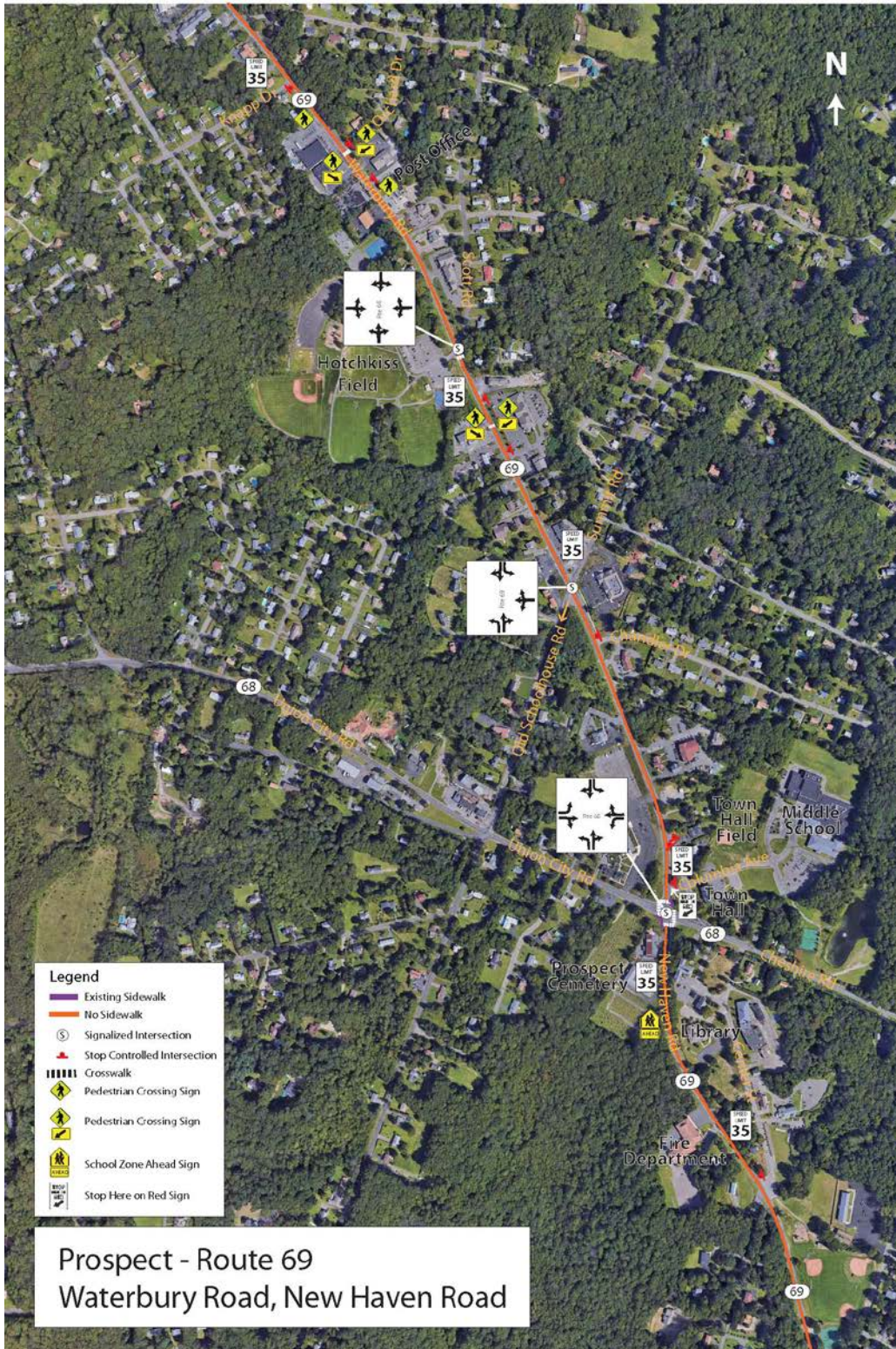


Figure 4. Route 69 Road Geometrics

Prospect – Route 69 Street Inventory

Street Name	Route	Travel Direction	Lane Width	Sidewalk				Curb	Parking	Shoulder	Ramps	
				Side	Type	Width	Condition*				Exist	Compliant
Route 69 at Route 68	69	North	11'	Landing strip	concrete	N/A	Good	Bituminous asphalt	No	3-5'	Yes	Yes
	69	South	12'	Landing strip	concrete	N/A	Good	Bituminous asphalt	No	5'	Yes	Yes
Route 69 at Chandler Drive	69	North	13'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
	69	South	12'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
Route 69 at Summit Road/Old Schoolhouse Road	69	North	Two 11' lanes (LT and TH-RT)	Partial along CVS	Concrete	5'	Good	Bituminous asphalt	No	1'	No	No
	69	South	Two 11' lanes(LT and TH-RT)	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
Route 69 at Scott Road	69	North	13'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
	69	South	11'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
Route 69/Orchard Drive	69	North	11'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No
	69	South	11'	No	N/A	N/A	N/A	Bituminous asphalt	No	1'	No	No

Table 3: Intersection Street Inventory

***CONDITION – “Good” is Serviceable Condition that 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, and generally inadequate for continued long-term use.**

2.2 Prior Successful Efforts

In the center of town there is a State funded project that is anticipated to start in the Spring/Summer of 2017 that will rebuild and extend sidewalks along Center Street and Columbia Avenue in front of the Town Hall (Figure 5). Also anticipated to begin in 2017 is the purchase and reconstruction of the Community School. This building is being purchased by the Town of Prospect and will be renovated into a Community Recreation Center for Town. The Route 69 corridor is the main location for Prospect's businesses. A new CVS was recently constructed on Route 69 in the study corridor.



Figure 5: Center Street Sidewalk Improvement Plan

The Town of Prospect's Sidewalk Task Force has been researching the benefits of installing sidewalks along the Route 69 corridor. This Task Force is made up of a group of local volunteers who are concerned with Prospect's economic development as well as enhancement of community development that sidewalks would provide.

The Route 69 corridor was evaluated as part of the Route 69 Traffic Operations Study conducted by the Council of Governments. The specific improvements identified for the Town of Prospect included:

- Addition of westbound lanes at the Route 68/69 intersection;
- Wider shoulders for by-pass capability;
- Addition of sidewalks in the Route 69 Business District;
- Access management strategies including minimizing curb cuts, consolidating driveways, and creating/revising zoning and subdivision regulations; and
- Creation of a Village Center.

2.3 Pre-Audit Meeting

The RSA was conducted on April 21, 2017. The pre-audit meeting was held at 8:30 AM at the Prospect Firehouse Conference Room.

The RSA Team was comprised of staff from CTDOT, AECOM and VN Engineers, and representatives from several Prospect departments and organizations including the Police Department, Town Council, Fire Department, Mayor's office, Sidewalk Task Force, and local business owners. The complete list of attendees can be found in Appendix B. Materials

distributed to the RSA Team, including the agenda, audit checklist, ADT counts, crash data and road geometrics, can be found in Appendix C.

RSA Team members from Prospect presented relevant information for the audit, including:

- The Town of Prospect population is 9,516.
- Route 69 is classified as a Principal Arterial-Other.
- Just north of the RSA study area, Route 69 drops from two lanes to one lane in the southbound direction. There have been high speed crashes in this area, including fatalities.
- Route 69 northbound traffic is limited to one travel lane within the study area.
- ADT on Route 69 varies from 8,500 vehicles on the south to 14,500 vehicles on the north.
- The Town does not think this reflects the current travel volumes due to diverted traffic from construction and delays on I-84. The Town stated that since I-84 reconstruction started, traffic volume has doubled along Route 69. Detoured traffic through Prospect may get even worse when reconstruction of the Mix-Master interchange begins.
- About three years ago, traffic volume started increasing on Scott Road and Austin Road when I-84 on- and off-ramps were completed.
- Social media and mobile electronic devices direct motorists to drive through Prospect neighborhoods (such as Maria Hotchkiss) as a cut-through route.
- Crashes along Route 69 have increased over the last two years.
- The Town has used bollards at crosswalks, but they get hit by vehicles.
- The CTDOT installed new signal equipment recently at the intersection of Route 69/Route 68.
- The Town is considering constructing a rumble strip on Straitsville Road, similar to Scott Road.
- All oversized trucks are routed through this corridor from I-84.
- Due to the congestion on Route 69, emergency services have difficulty responding promptly to incidents.
- This congestion has also negatively affected businesses, discouraging residents to patronize the businesses along the corridor due to high traffic volume. It is difficult to make left turns in and out of driveways during peak periods.
- The Town wants to preserve the overall small town charm of Prospect and to provide a community that benefits all residents, visitors, and businesses. High traffic volumes, speeds and congestion are not conducive with these goals.
- The Town has been coordinating with the Town of Cheshire to learn from their recent Main Street Revitalization Project and to incorporate best practices.
- The posted speed limit is 35 MPH along the Route 69 corridor.

- There are handicap ramps with sidewalk on two corners at the intersection of Route 68/ Route 69.
- There is an intermittent segment of new sidewalk along the CVS frontage on the east side of Route 69.
- There is narrow shoulder striping along both lanes of Route 69.
- The Town discussed the feasibility of driveway consolidation, reducing egress and ingress movements, and minimizing curb cuts to improve the flow of traffic and safety.
- The Town is currently working with the State to widen certain sections of Route 69 to allow cars to pass on the right, especially at Dunkin Donuts where traffic backs up due to turning movements.
- The Route 69 corridor is scheduled to be resurfaced in July or August of this year as part of the Vendor In-Place (VIP) program.
- The relocation of the CVS from the former site on the west side of Route 69 in the Oliver's Plaza to the east side of Route 69 at the intersection of Summit Road has alleviated some congestion along the corridor.
- The Town has installed LED lighting throughout the entire town, including this corridor.
- The Town said that there are cyclists on the corridor despite the lack of amenities.
- Long River Middle School is located at 38 Columbia Avenue, east of the Town Hall. Students from the Middle School often walk along Route 69 after school to patronize local businesses and to play at Hotchkiss Park located at 61 Waterbury Road. The Town representatives stated that the students do not typically cross at the signalized intersections.
- The Town is concerned with southbound traffic approaching the Town from Waterbury. There are two southbound lanes that drop to one lane at Jim Juliani Motor Car Company, Inc. at 69 Waterbury Road. The audit attendees stated that vehicles travel at high speeds until the roadway drops to one lane. This is a concern because there are many pedestrians in this area and there is a lack of driver awareness. The Town noted there have been fatal crashes in this area.
- There are no wayfinding or town entrance signs to enhance the visibility of the village center.
- The Mayor would like to have the signal timing reevaluated and optimized along Route 69, primarily during the afternoon hours of 4-6 PM.
- There are crosswalks along the Route 69 corridor at the following locations:
 - Unsignalized intersection with Orchard Drive.
 - Signalized intersection with Scott Road and entrance to Hotchkiss Field.
 - Unsignalized mid-block crosswalk at Park Plaza and Crosspointe Plaza.
 - Signalized intersection of Route 69/Route 68.
- The Town wants to install sidewalks along this corridor. The west side has utility poles that may be a constraint.

- There are 30 driveways on the east side of Route 69 in the study area and 26 on the west side.

3 RSA Assessment

3.1 Field Audit Observations

This RSA study area is within the municipal district of Prospect. Current employers include the Town Hall, Public Library, Police Department, and Senior Center. This area includes the newly built Regional School District Offices and the proposed Community Center for Prospect. The area includes many retail stores, restaurants, and commercial properties.

Route 69/Route 68

- Four-way signalized intersection, with crosswalks and pedestrian push buttons (see Figure 6).
- The pedestrians cross concurrently with traffic, but there are no pedestrian signal heads. The push button on the southwest corner activates the vehicle green signal but does not provide an indication if the button has been pushed.
- There are ramps with detectable warning strips, but there are no sidewalks that extend beyond this quadrant, and some of the ramps are diagonal (Figure 7).
- To the northeast of this intersection the Town plans to install sidewalks along Center Street north of Route 68.
- There appears to be adequate space on the east side of Route 69 to install a sidewalk from Route 68 to connect with the new sidewalk segment along the CVS frontage.
- There is a business at 11 Waterbury Road with monument signs that may be in the State right-of-way (Figure 8).
- Figure 8 shows the slight slope in front of 11 Waterbury Road.
- Motorists attempting to turn left on northbound Route 69 into Dunkin Donuts (19 Waterbury Road) often create delays for motorists behind them. As a result, motorists use the unpaved area off the right of the road to drive around left-turning vehicles.



Figure 6: Route 68/69 Intersection



Figure 7: Crosswalks at Route 69/68 intersection



Figure 8: Route 69 looking north at signs in front of 11 Waterbury Road

Route 69/Summit Road/Old Schoolhouse Road

- Skewed, four-way, signalized intersection.
- Old Schoolhouse Road is one way southwest-bound, Summit Road is bidirectional.
- There are pedestrian buttons for concurrent crossing with the traffic signals on the northeast and northwest corners. There are no pedestrian signal heads.
- There are no crosswalks (Figure 9).
- There is a new section of sidewalk along the CVS frontage (Figure 10).
- To the north of the intersection, the east side has multiple curb cuts with vehicles entering and exiting driveways (75 feet wide), especially at the corner where a Shell gas station is located (Figure 11).
- The west side of Route 69 proceeding north of Old Schoolhouse Road has wide driveways, but also the opportunity for reducing widths and consolidation (Figure 12).



Figure 9: Route 69 northbound at Summit Road



Figure 10: Sidewalk in front of CVS

Route 69/ Park Plaza/Cross Pointe Plaza

- Non-MUTCD compliant mid-block crosswalk with outdated pedestrian crossing signs connecting Park Plaza on the west side with Crosspointe Plaza on the east side (Figure 13).
- No Ramps or Tactile Warning Strips.
- No Sidewalks on either side.
- Large paved parking on both sides area does not connect to the crosswalk.



Figure 11: East side of Route 69 north of Summit Road



Figure 13: Mid-block crosswalk



Figure 12: West side of Route 69 north of Old Schoolhouse Road

Route 69/Scott Road/Hotchkiss Field

- Four-way signalized intersection with Scott Road to the east and Hotchkiss Field entrance to the west (Figure 14).
- There is a crosswalk across Route 69 (south leg) that connects Hotchkiss Field on the west with Scott Road on the east side. There is a ramp on the east side but no tactile warning strip.
- There is no ramp on the west side.
- There are pedestrian buttons on each side of the road to allow pedestrians to cross concurrently with traffic (Figure 15), but the west side is behind plantings. There are no pedestrian signals.
- There are no sidewalks at the intersection.
- Pavement markings (stop bar) for possible signal loop detectors were noted on the Hotchkiss Field approach to the intersection.



Figure 14: Route 69/Scott Road/Hotchkiss Field



Figure 15: Pedestrian button at Route 69/Hotchkiss Field

3.2 Post Audit Discussion

- There was discussion of using Town right-of-way and property to install sidewalks along Center Street from the intersection of Route 69, adjacent to the Senior Center, north to the intersection with Route 68. This appears more feasible than along Route 69 which has grade constraints. This section could potentially link to the proposed sidewalks along Center Street north of Route 68 (Figure 5).
- The sidewalk could then connect to the proposed sidewalks along the eastern side of Center Street across Colombia Avenue and then proceed north to link to the new CVS sidewalk section.
- At the Summit Road/Old Schoolhouse Road intersection, the Town concluded that adding a crosswalk(s) and continuing the sidewalk along the west side to Hotchkiss Park would be optimal.
- There was discussion of making the intersection of Colombia Avenue and Center Street an all-way (3-way) Stop (Figure 16).



Figure 16: Center Street looking north at Colombia Avenue

- The Town discussed the need for access management along this corridor, including the installation of turn lanes on Route 69 near CVS.
- There was discussion of installing a granite curb with 10 inch reveal along the future sidewalk for safety measures.
- Consider coordinating with the CTDOT VIP program to reduce the travel lane width in both directions on Route 69 to 11 feet and provide a wider shoulder for bike accommodation. It is uncertain if this could be done as part of the re-pavement project on Route 69 scheduled for this year.
- The Town has hired an engineering firm to create conceptual plans for sidewalks in the Town Center area (Figure 5).
- The Town would like to provide advanced warning signs for the Route 68 crosswalk at Center Street. There is a vertical curve on Route 68 east of the crosswalk that restricts sight distance for westbound motorists.
- The CTDOT has been contacted by the Town to fix the damaged sensor in the pedestrian push button at the intersection of Route 68/Route 69.
- The Town wants to reclaim its small town feel by adding sidewalks, providing pedestrian and bicycle accommodations and creating a more vibrant business area.

4 Recommendations

From the discussions during the Post-Audit meeting, the RSA team compiled a set of recommendations that are divided into short-term, mid-term, and long-term categories. For the purposes of the RSA, **Short-term** is understood to mean modifications that can be expected to be completed very quickly, perhaps within six months, and certainly in less than a year if funding is available. These include relatively low-cost alternatives, such as striping and signing, and items that do not require additional study, design, or investigation (such as right-of way acquisition). **Mid-term** recommendations may be costlier and require establishment of a funding source, or they may need some additional study or design. Nonetheless, they are relatively quick turn-around items. Generally, they should be completed within a window of eighteen months to two years if funding is available. **Long-term** improvements are those that require substantial study and engineering, and may require significant funding mechanisms

and/or right-of-way acquisition. These projects generally fall into a horizon of two years or more depending upon funding.

Note:

Short-term recommendation number 3:

The Division of Traffic Engineering is finalizing our review of the section of Route 69 scheduled to be paved in the VIP resurfacing program this year. 11-foot lanes are our standard recommendation. We are also proposing to upgrade the current southbound climbing lane markings to current standards.

Short-term recommendation number 10:

The Division of Traffic Engineering has evaluated the intersection of Route 69/Summit Road/Old Schoolhouse road for signal timing optimization with the two adjacent signals (at Route 68 and at Scott Road). Signal timing coordination changes have been made and are being evaluated.

4.1 Short Term

1. The Town to coordinate with CTDOT and CVS to construct turn lanes on Route 69 in the vicinity of the CVS store.
2. Town to request that the CTDOT evaluate options for improving access/egress and through traffic on Route 69 adjacent to the Dunkin Donuts shop on the west side of Route 69. Northbound motorists currently drive over the curb into the grass on the right (east side) to drive around vehicles stopped to make a left turn in the Dunkin Donuts (Figure 17).
3. The CTDOT to check the status of Route 69 re-pavement project planned for summer/fall 2017 as part of Vendor In-Place (VIP) program and determine if 11-foot lanes and wider shoulders can be striped and if there is an opportunity to include new sidewalks as part of the project.
4. Town to request the CTDOT to evaluate providing an exclusive pedestrian phase and new pedestrian countdown signals (Figure 18) at the intersection of Route 69/Route 68.



Figure 17: Looking north on Route 69 with Dunkin Donuts on the left and worn area on right where vehicles drive over curb



Figure 18: Countdown Pedestrian Signal

5. Town to develop a preliminary sidewalk plan for the Route 69 corridor. The first phase of the plan will include the section between Center Street on the south and Hotchkiss Field on the north. Phase 2 will continue north from Hotchkiss Field. The plan should include connections to the new sidewalks that are planned to be installed by the Town in the vicinity of Town Hall. Figure 23 shows a preliminary alignment identified during the RSA.
6. Town to evaluate options to provide a sidewalk/path along Center Street between Route 69 on the south near the playing fields and Route 68 on the north. There may be opportunities to use Town-owned land adjacent to the library and Community School. This new pedestrian facility will connect with the existing crosswalk on Route 68 west of Center Street.
7. Town to request the CTDOT to evaluate the crosswalk on Route 68 west of Center Street for enhancements to improve visibility for motorists such as a rectangular rapid flashing beacon (Figure 19).
8. Town to change the traffic control at the intersection of Columbia Avenue/Center Street (northbound one-way connector road) to all-way (3-way) Stop control. Currently the two Columbia Avenue approaches are Stop controlled and the Center Street northbound approach is uncontrolled. The Town needs to confirm that this intersection is under local jurisdiction and not controlled by the CTDOT. All-way Stop plaques and crosswalks should also be installed at this intersection.
9. Town to research State highway right-of-way layout in front of the 11 Waterbury Road commercial property (Tudor building across from St. Anthony's Church parking lot). Based on CTDOT monument markers observed during the audit, it appears there may be enough room to construct a new sidewalk within State right-of-way on the east side of Route 69 in front of this property. However, some existing commercial signs may need to be relocated (Figure 8 above). A new sidewalk in this location may require a retaining wall depending on the State right-of-way boundary.
10. Town to request the CTDOT to evaluate the intersection of Route 69/Summit Road/Old Schoolhouse Road for signal timing optimization and detection improvements.



Figure 19. Rectangular Rapid Flashing Beacon

Figure 21, Figure 22 and Figure 23 depict these recommendations.

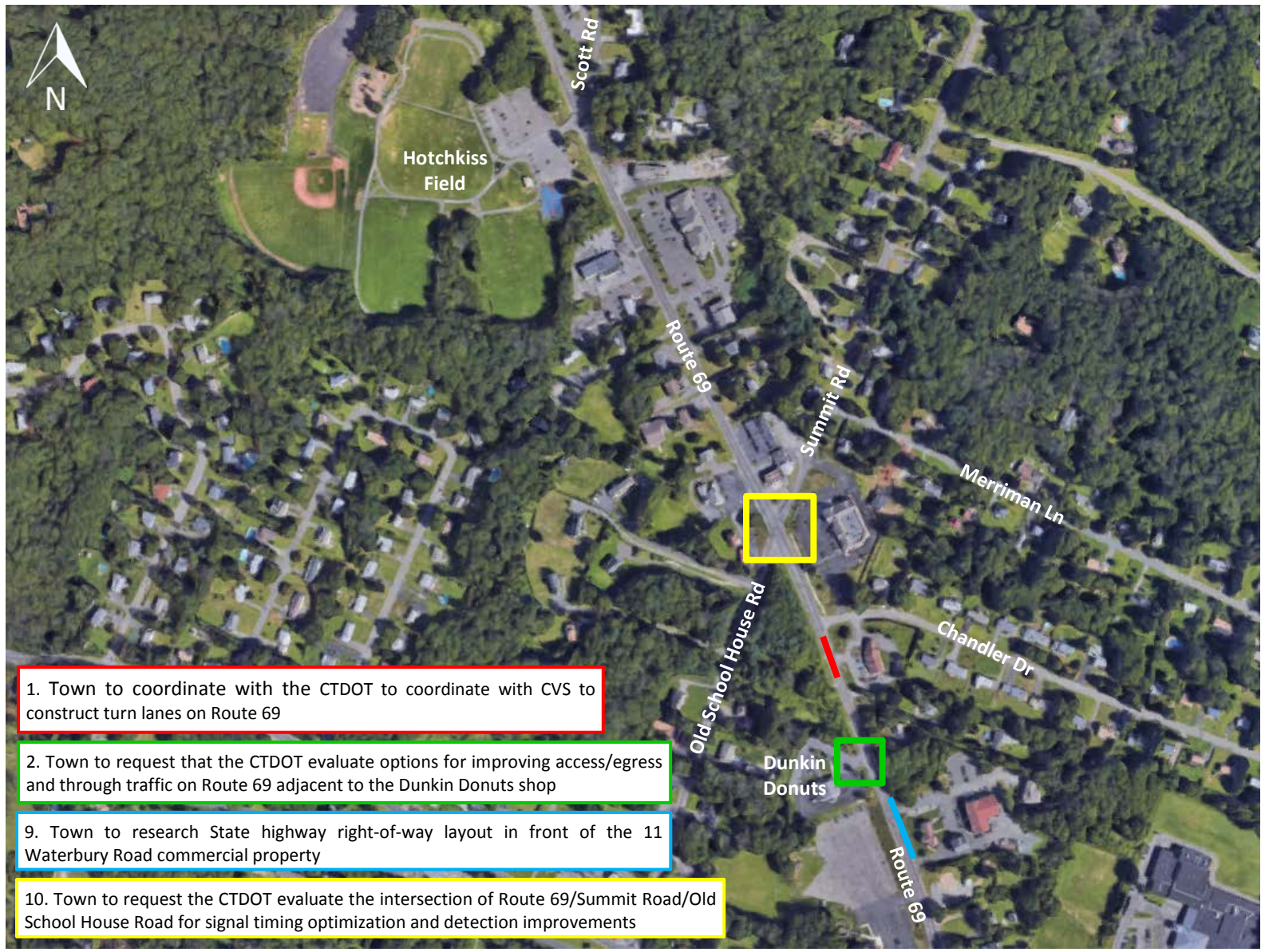


Figure 20. Short Term Recommendations



Figure 21. Short Term Recommendations

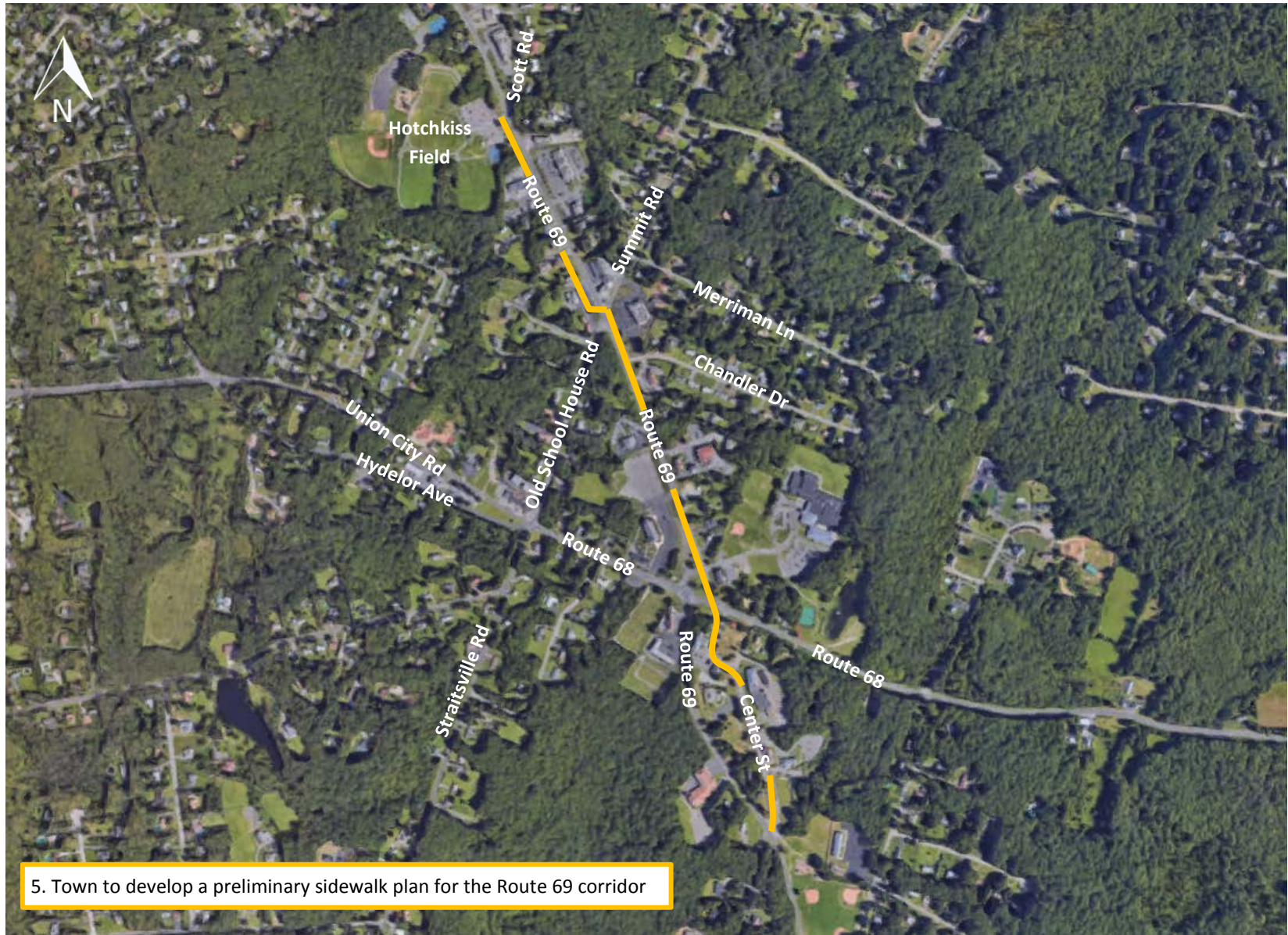


Figure 22. Short Term Recommendations

4.2 Medium Term

1. Town to finalize plans and design for a new sidewalk for Phase 1 in the Route 69 corridor and pursue funding for the project. The plan should address access management for land uses along the corridor, including opportunities to reduce driveways widths, make driveways one-way in and out, and driveway consolidation.
2. Provide improvements for through traffic on Route 69 at the Dunkin Donuts.
3. Install new pedestrian phase, ADA compliant devices and new pedestrian countdown signals at the intersection of Route 69/Route 68.
4. Provide visibility enhancements for the crosswalk on Route 68 west of Center Street.
5. Town to coordinate with property owners along proposed sidewalk alignment to discuss opportunities to modify driveways to accommodate future sidewalk construction.
6. Town to coordinate with the CTDOT to improve the mid-block crosswalk on Route 69 in front of Park Plaza to provide new retro-reflective advance pedestrian signs, handicap ramps, detectable warning strips and a rectangular rapid flashing beacon.
7. Town to coordinate with the CTDOT to provide the following at the intersection of Route 69/Scott Road/Hotchkiss Field:
 - a. Install handicap ramps and detectable warning strips at the crosswalk on Route 69 (Figure 20).
 - b. Evaluate optimizing the signal timing and phasing with an exclusive pedestrian phase with new pedestrian countdown signal heads (Figure 18) and pedestrian buttons; and providing No Turn on Red signage. Evaluate providing a lead or lag phase for the northbound Route 69 approach left turners and prohibiting the southbound left turn onto Scott Road.
8. Town, in coordination with the CTDOT, to evaluate developing gateways on Route 69 for traffic approaching the center of Town.

Figure 24 and Figure 25 depict these recommendations.



Figure 23. Example of Detectable warning Strips



Figure 24. Medium Term Recommendations



Figure 25. Medium Term Recommendations

4.3 Long Term

1. Coordinate with the CTDOT to construct a new sidewalk along Route 69.
2. Town to coordinate with the CTDOT to evaluate the intersection of Route 69/Summit Road/Old Schoolhouse Road to provide an exclusive pedestrian phase and countdown pedestrian signals in conjunction with the planned new sidewalk. At this intersection the new pedestrian path will cross from the east side to the west side of Route 69 and continue north. Options for crosswalk locations should be evaluated.

Figure 26 depicts these recommendations.

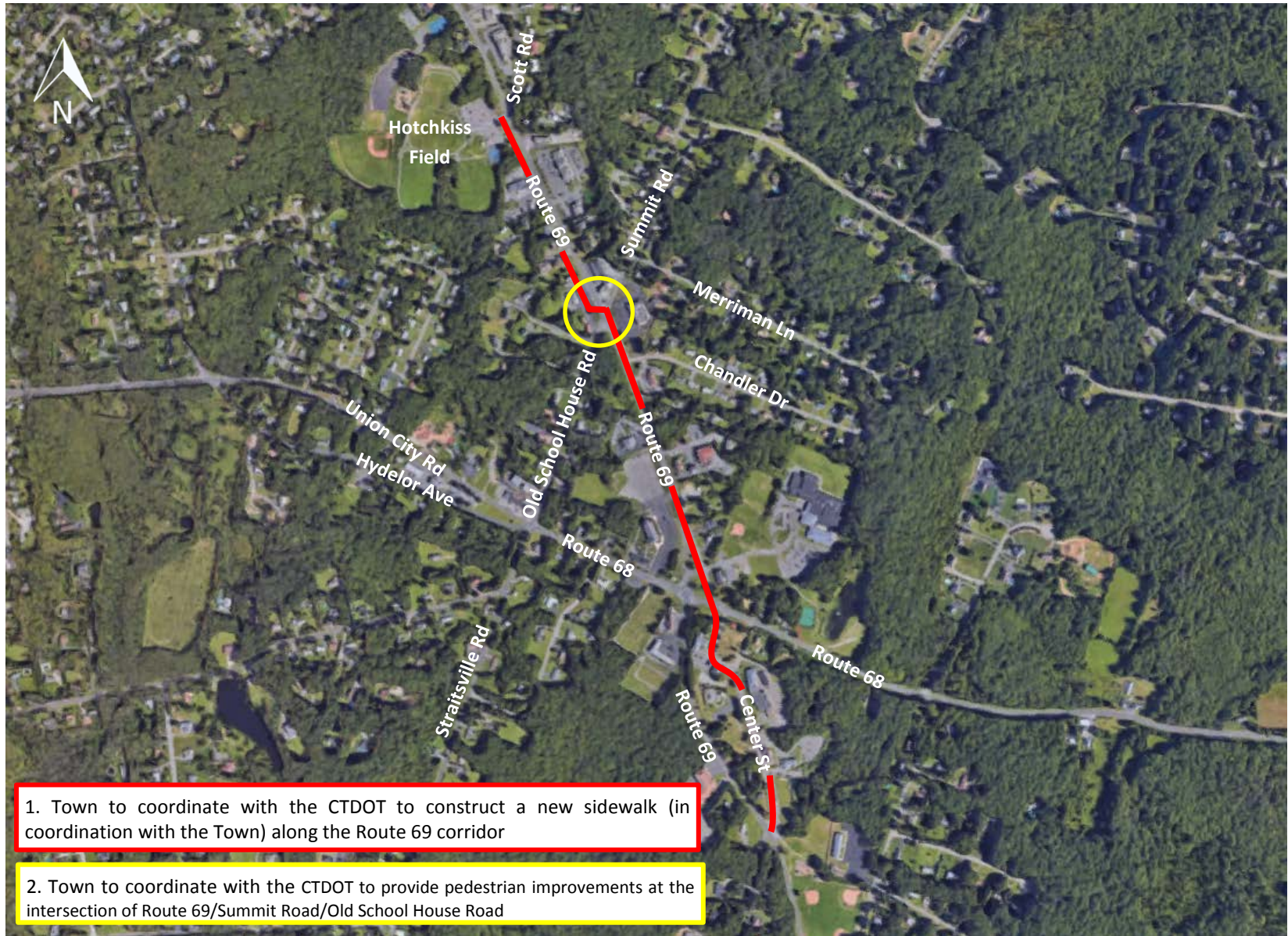


Figure 26. Long Term Recommendations

4.4 Summary

This report outlines the observations, discussions and recommendations developed during the RSA. It documents the successful completion of the Town of Prospect RSA and provides Prospect with an outlined strategy to improve the transportation network along Route 69 for all road users, particularly focusing on pedestrians and cyclists. Moving forward, Prospect may use this report to prepare strategies for funding and implementing the improvements, and as a tool to plan for including these recommendations into future development on Route 69.



COMMUNITY
connectivity program

Appendix A



AECOM
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Welcome to the Community Connectivity Program Application



Please fill in the following information to provide the Audit team leaders with a comprehensive description of the area contained in this application.

1. Applicant contact information

Name	<input type="text"/>
Title	<input type="text"/>
Email Address	<input type="text"/>
Telephone Number	<input type="text"/>

2. Location information

Address	<input type="text"/>
Description	<input type="text"/>
City / Town	<input type="text"/>

3. Roadway type
(Please select all that apply)

State road

Local road

Private Road

Other (please specify)

4. Zoning
(Please select all that apply)

Industrial

Residential

Commercial

Mixed Use

Retail

N/A (not applicable)

Other (please specify)

5. Approximate mile radius around the location

Other (Please Specify)

6. Community Sites
(Please select all that apply)

Community Centers

Business Districts

Restaurant/Bar Districts

Churches

Housing Complexes

Proximity to Schools

Tourist Locations (examples – Casino, Malls, Parks, Aquarium, etc...)

N/A (not applicable)

Other (please specify)

7. Employment Facilities
(Retail, Industrial, etc...)

Yes

No

If Yes please describe (please specify)

8. Educational facilities

(Please select all that apply)

Public, Parochial, Private Schools (more than 1 school within a ½ mile)

University / Community Colleges

N/A (not applicable)

Other (please specify)

9. Transit facilities

(Please select all that apply)

Bus

Rail

Ferry

Airport

Park and Ride Lot

N/A (not applicable)

Other (please specify)

10. Safety Concerns
(Please select all that apply)

Traffic (volumes & speed)

Collisions

Sidewalks

Traffic Signals

Traffic Signs

Parking Restrictions / Additions

Drainage

ADA Accommodations

Agricultural & Live Stock crossing

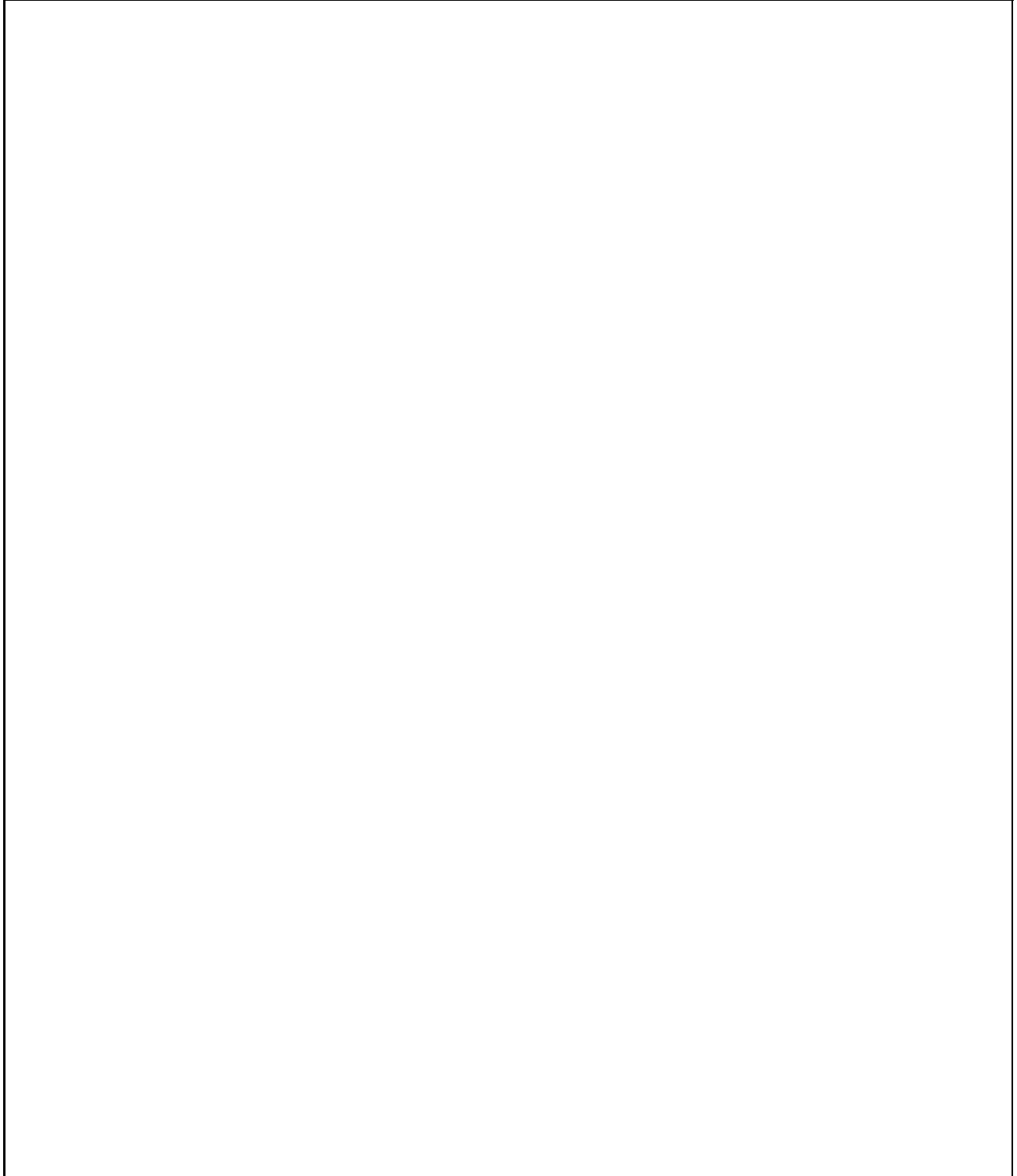
Maintenance issues (cutting grass, leaves, snow removal)

N/A (not applicable)

Other (please specify)

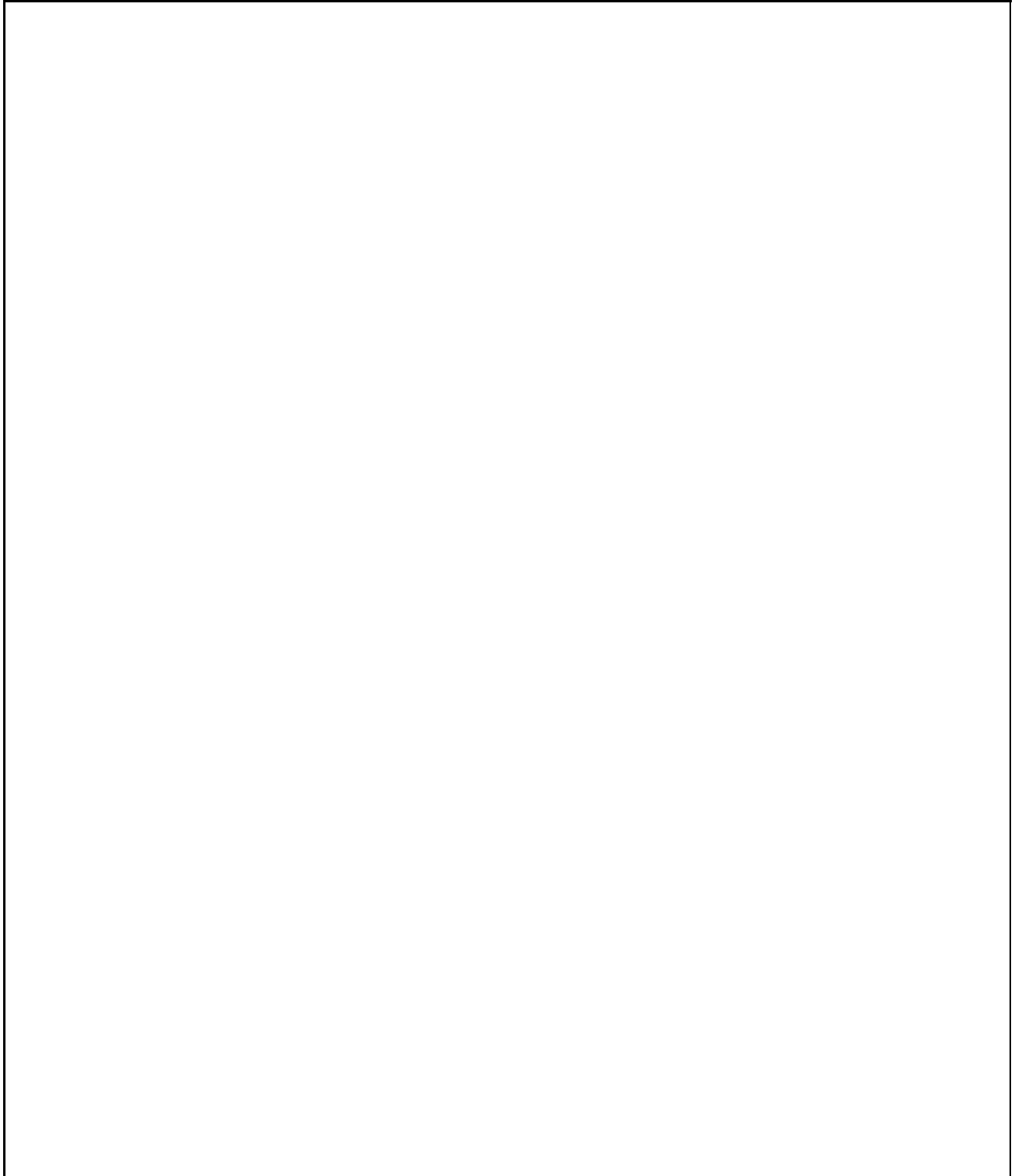
11. Are there any past, current or future transportation/economic development projects near this location (i.e. Federal, State or local projects)?

If Yes please describe and list all projects.

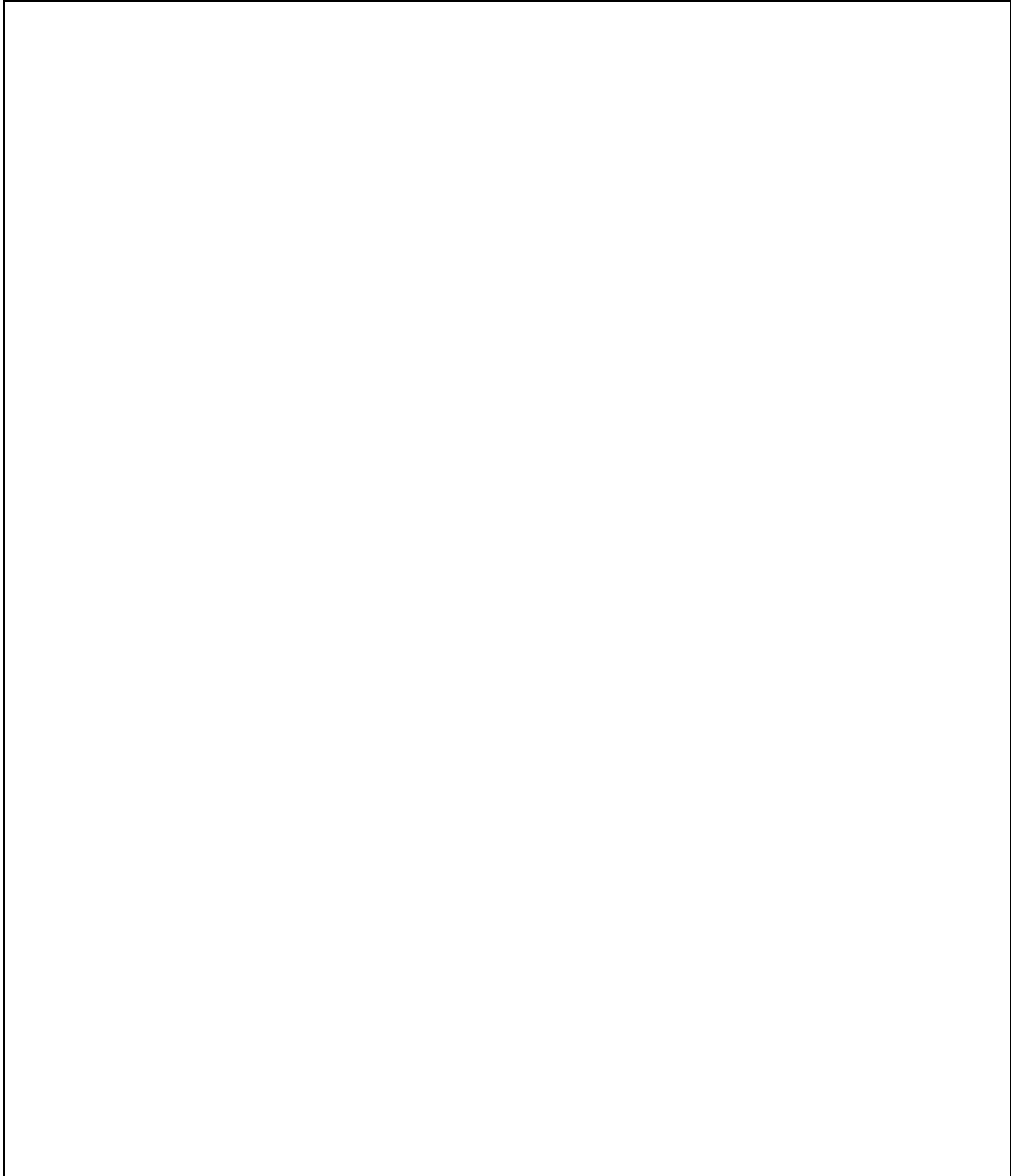
A large, empty rectangular box with a thin black border, intended for the user to describe and list any past, current, or future transportation or economic development projects near the location. The box is currently blank.

12. Environmental Concerns:

If Yes please describe and list.

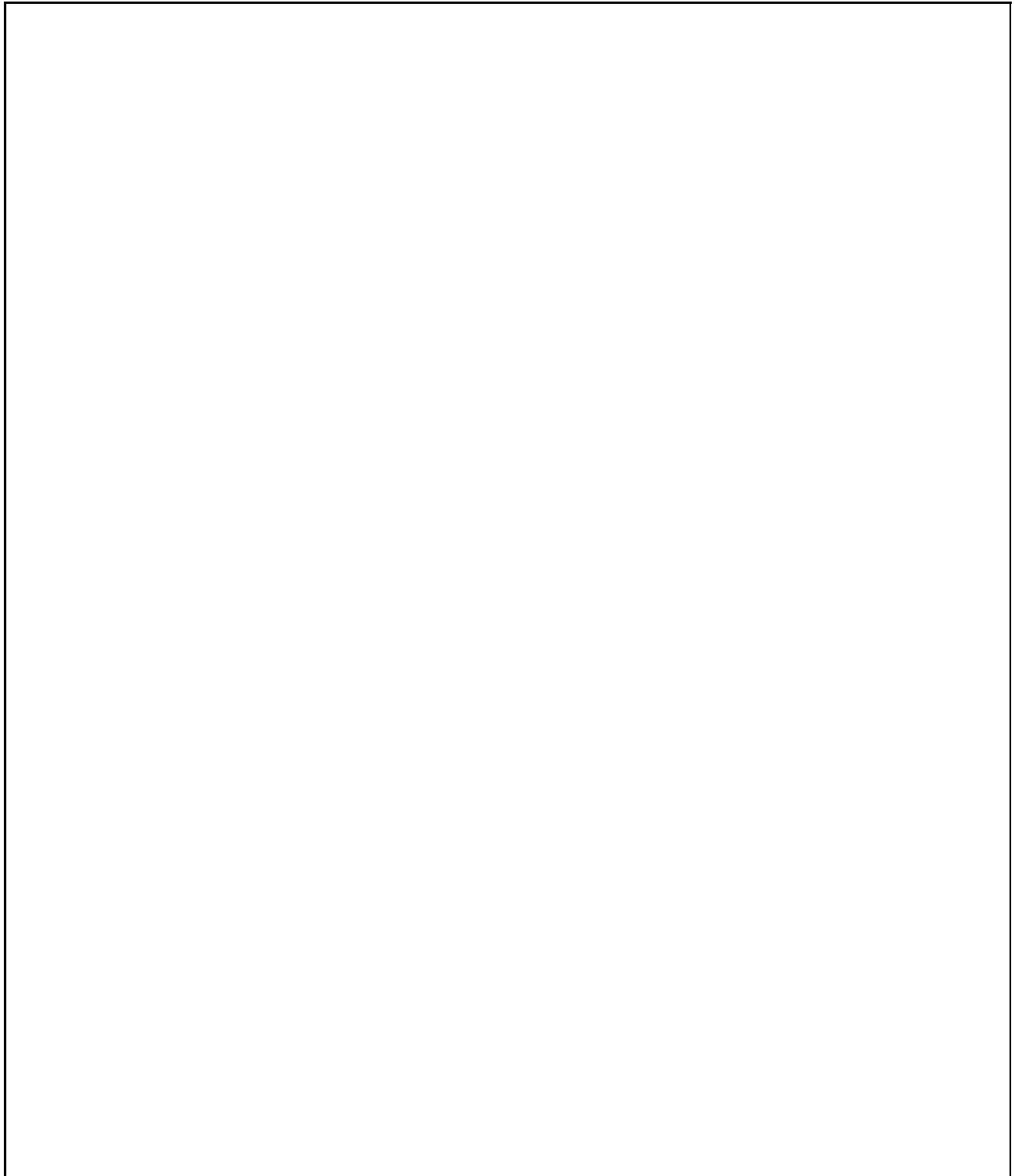
A large, empty rectangular box with a thin black border, intended for the user to describe and list any environmental concerns. The box occupies most of the page's vertical space below the instruction.

13. Please explain why this location should be considered for an RSA

A large, empty rectangular box with a thin black border, intended for the user to provide an explanation for why a location should be considered for an RSA. The box occupies most of the page's vertical space below the question.

14. Are there plans to expand the area?

(Transportation Oriented Development, Economic Development, housing, etc...)



15. Any other pertinent information that is unique to this location?

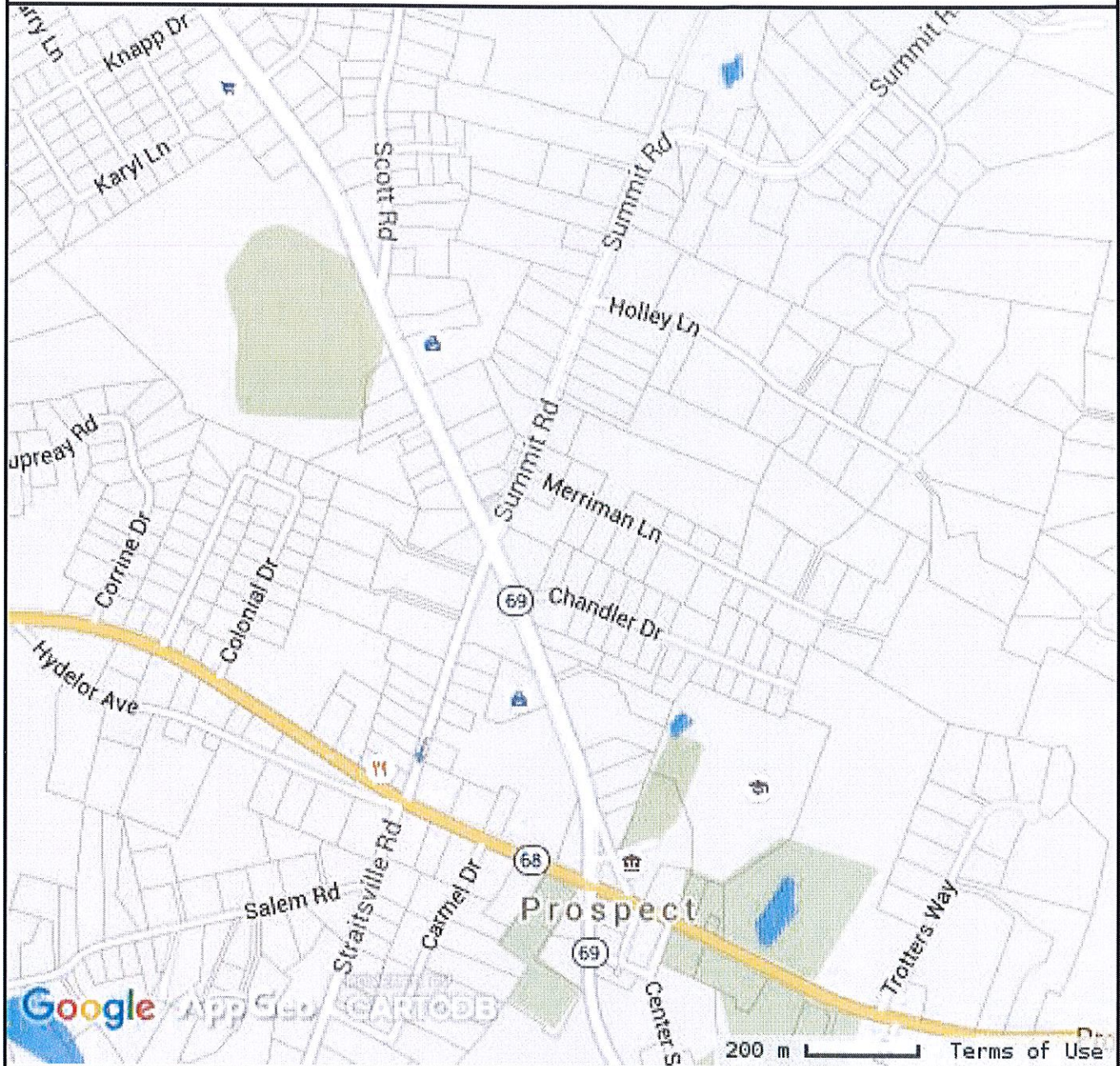
A large, empty rectangular box with a thin black border, intended for the user to provide any other pertinent information unique to the location.

Thank you for completing the Community Connectivity application.

Please click on the "submit button" below and include the following attachments

- 1 Location map (google, GIS) **(Required)**
- 2 Collision data (If available)
- 3 Traffic data (ADT or VMT) (If available)
- 4 Pedestrian/bicycle data (If available)

Aerial View



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Prospect, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated 10/1/2014
Properties updated daily

Map Theme Legends

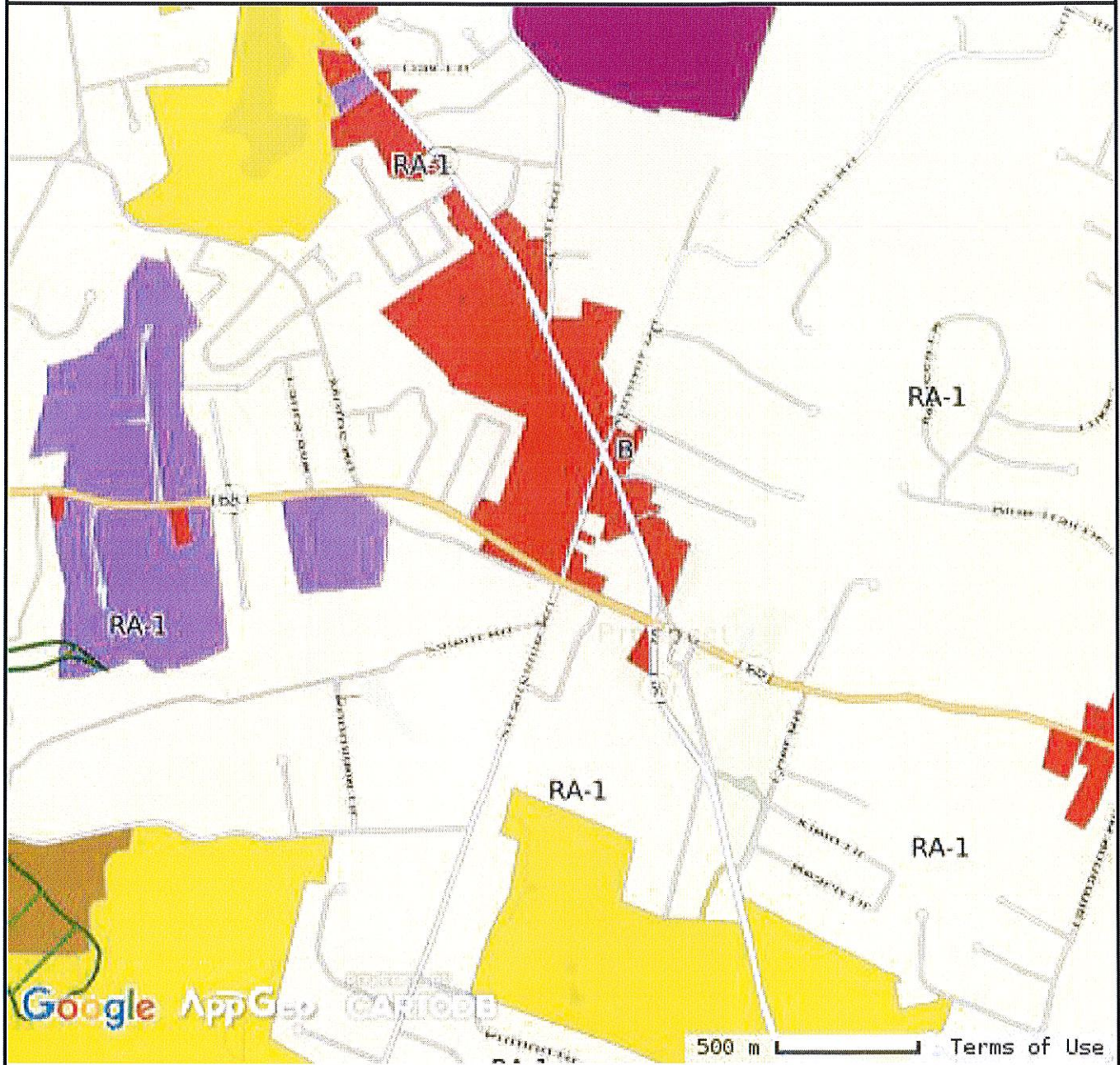
Aerial Photo, 2012



Aerial Photo, 2006



Zoning View



**MAP FOR REFERENCE ONLY
NOT A LEGAL DOCUMENT**

Town of Prospect, CT makes no claims and no warranties, expressed or implied, concerning the validity or accuracy of the GIS data presented on this map.

Parcels updated 10/1/2014
Properties updated daily

Map Theme Legends

Aerial Photo, 2012



Aerial Photo, 2006



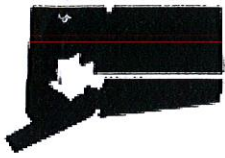
Zoning & Districts

Indian Field Aquifer Protection Area - LEVEL A



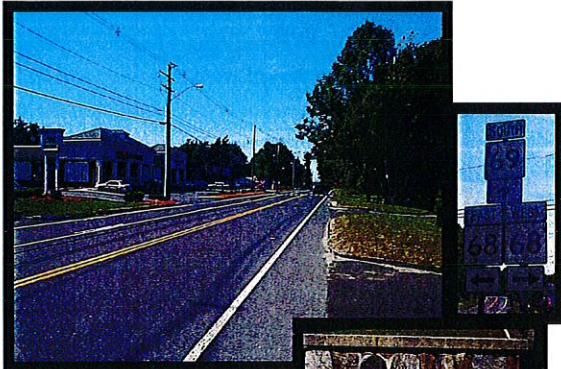
Zoning

-  Residential 1 Acre (RA-1)
-  Residential 2 Acre (RA-2)
-  Business District (B)
-  Commerce Park District (CP)
-  Industrial 1 District (IND-1)
-  Industrial 1 District (IND-2)
-  Earth Excavation District (EE)



Route 69 Traffic Operations Study

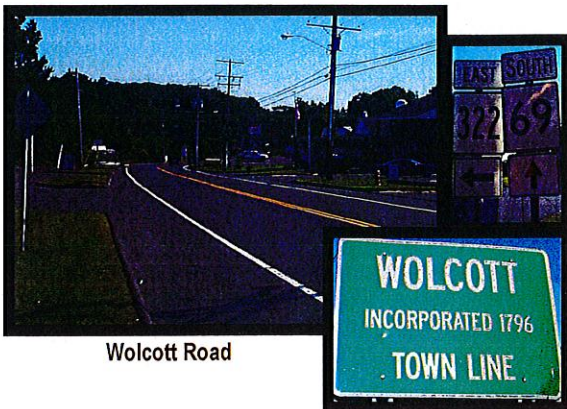
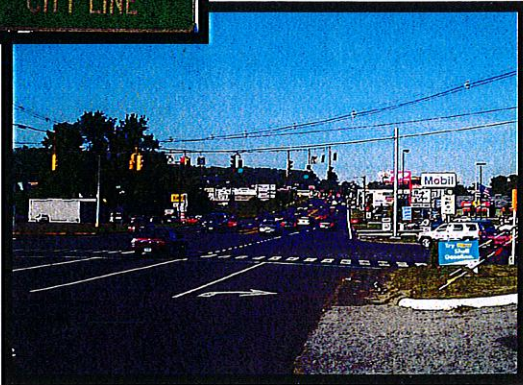
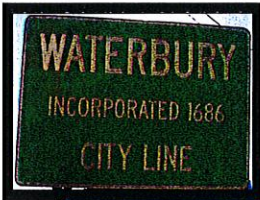
Prospect, Waterbury, Wolcott



Prospect Business District



Wolcott Street



Wolcott Road

The Route 69 Traffic Operations Study was undertaken to develop cost effective solutions to improve the capacity and safety of the highway. Recommendations were formulated to solve both existing deficiencies and to account for future traffic growth.

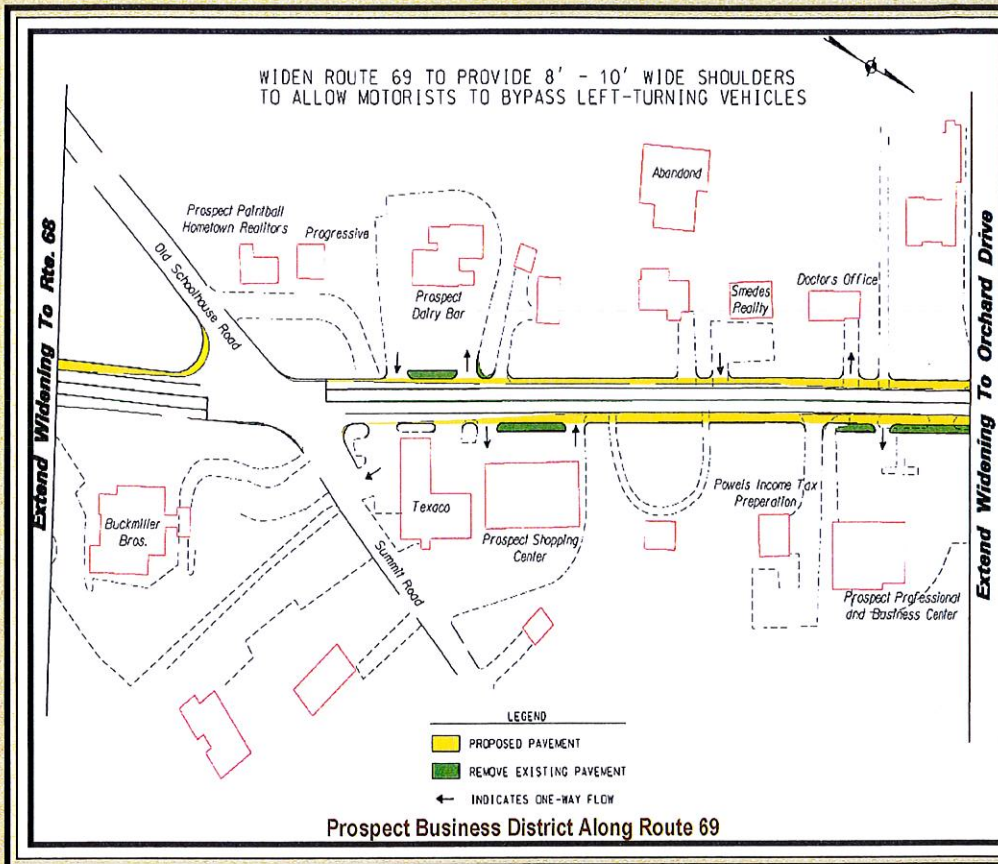
Study sponsors were the Council of Governments of the Central Naugatuck Valley, the Connecticut Department of Transportation and the Federal Highway Administration. URS Corporation and its subconsultant, Fitzgerald & Halliday, Inc. conducted the work.

The study corridor covered Route 69 from Route 68 in Prospect, through the City of Waterbury, to Route 322 (Center Street) in Wolcott. A portion of Wolcott Street, south from Stillson Road, in Waterbury and Manor Avenue were also included as these two segments function as a partial bypass of the state route. In all, the study corridor contained approximately 10 miles of roadway.

To assist URS in understanding existing issues of concern within each community and to obtain feedback on possible remedial measures, a Corridor Advisory Committee was established. In addition to the study sponsors, the committee included representatives of each town and private citizens. Further, in an effort to solicit additional viewpoints and opinions, an outreach program was initiated, consisting of a series of workshop meetings, public information meetings, and a public hearing.

Study recommendations can be divided into five basic groupings: additional traffic lanes, traffic operation/safety improvements, access management, transit operations, and pedestrian improvements. Highlighted in this brochure is an overview of the study's recommended corridor improvements. More specific information may be obtained through the Council of Governments of the Central Naugatuck Valley, 20 E. Main St., Suite 303, Waterbury (203-757-0535).

Town of Prospect Recommended Roadway Improvements

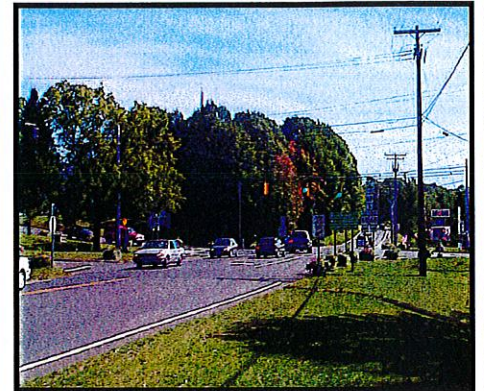


Waterbury Road @ Route 68
— Additional westbound lane

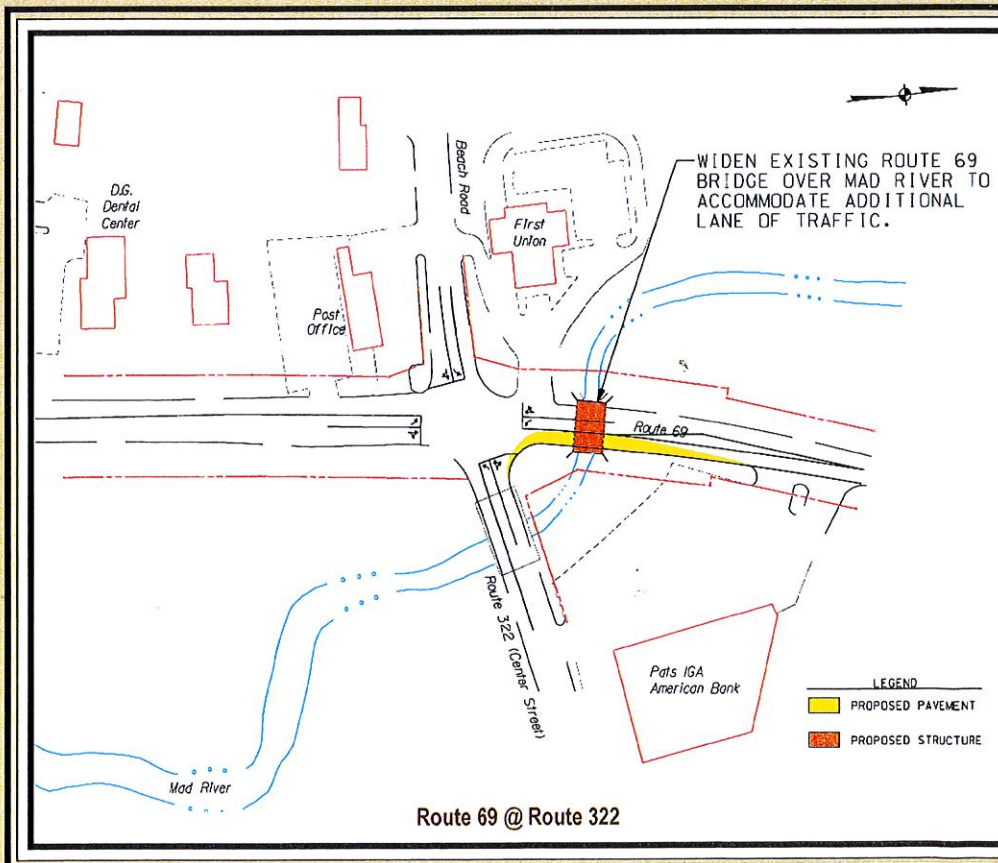
Waterbury Road @ Business District
— Wider shoulders for by-pass capability [see figure to left]

Waterbury Road @ Maria Hotchkiss Road
— Clear brush and vegetation for increased safety

Route 69 Looking South at Route 68



Town of Wolcott Recommended Roadway Improvements



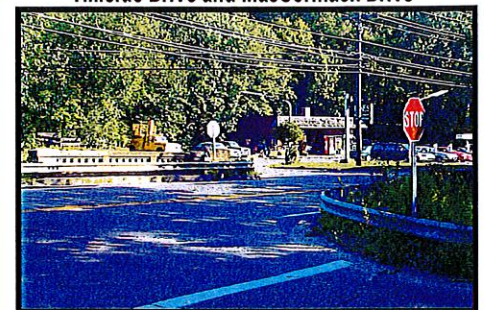
Wolcott Road @ Wakelee Road
— Realign Wakelee Road to Nutmeg Valley Road

Wolcott Road @ Hillside Drive/ MacCormack Drive
— Widen bridge over river / create four-way intersection

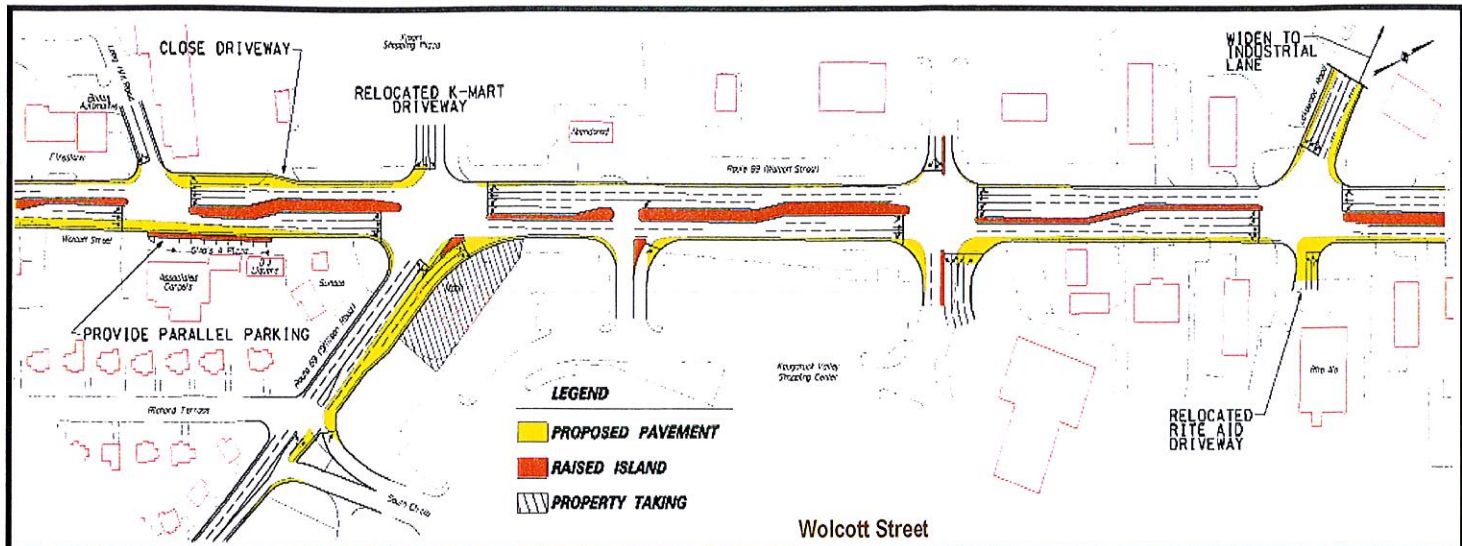
Wolcott Road @ Longmeadow Road
— Relocate Rite-Aid driveway to intersection

Wolcott Road @ Route 322
— Reconfigure intersection with bridge widening [see figure to left]

Hillside Drive and MacCormack Drive



City of Waterbury Recommended Roadway Improvements



Prospect Rd. @ Hamilton Ave. (near Terry Rd.) — Relocate fencing for sight lines

Prospect Road @ Hamilton Avenue (near Piping Rock Road) — Create “T” intersection for increased safety

Silver St./Meriden Rd. from East Main Street to Manor Avenue — Additional lanes with property taking [see figure below]

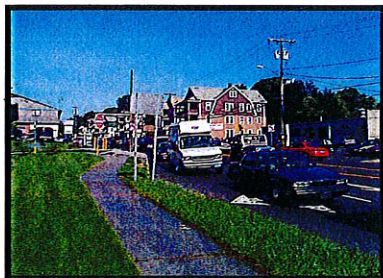
Meriden Rd. @ Beecher Ave. and Store Ave. — Realignment with property taking

Meriden Road @ Southmayd Road — Create “T” intersection for increased safety

Meriden Rd. @ Woodtick Rd. — Convert Woodtick Rd. to one-way northbound



Route 69 at Naugatuck Valley Shopping Center



Rte. 69 Looking North from Main St.

Stillson Road @ Wolcott Street — Provide a four lane approach to Wolcott Street

Wolcott Street from Long Hill Road to Lakewood Ave. — Provide double turning lanes with property taking / center island [see figure above]

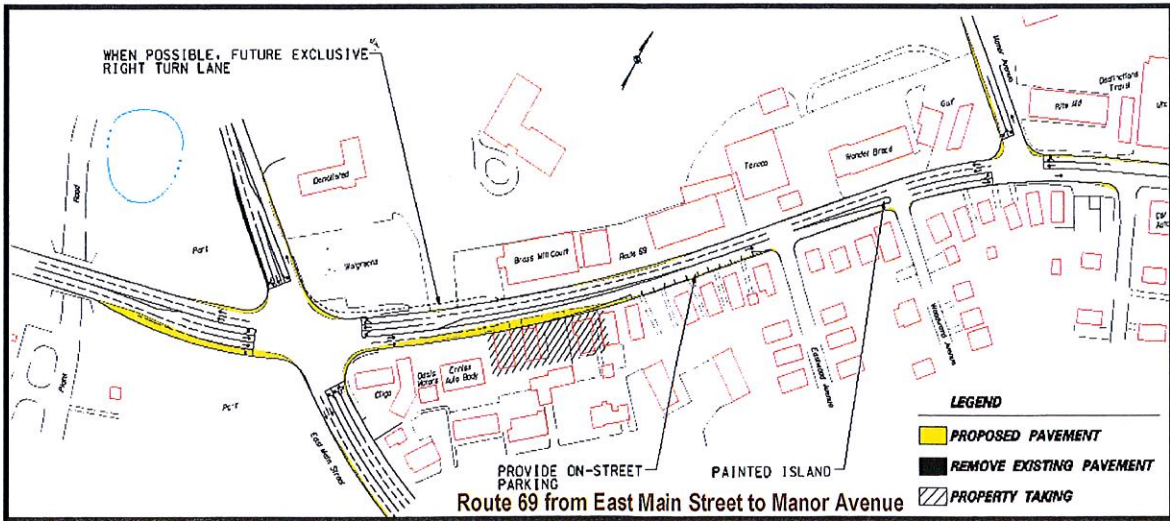
Wolcott Street @ Sharon Road — Provide two northbound through lanes

Wolcott St. @ Manor Ave. — Widen northbound approach to provide an additional lane

Wolcott St. @ Mattatuck Plaza — Widen Wolcott Street for one left turn lane in each direction on Wolcott Street



Rte. 69 North of Main St.



Other Recommendations

Access Management

- On a corridor - wide basis, limit the frequency of new curb cuts. In addition, consider the elimination, consolidation, and/or shared use of driveways at existing curb cut locations.
- Add access management language to municipal zoning and subdivision regulations.

Transit Operations

- Clearly identify bus stop locations by using signs.
- Provide bus passenger amenities — bus shelters at major bus stops.
- Provide bus pullout areas at selected locations.

Pedestrian Improvements

- Consider provision of sidewalks in business districts of Prospect and Wolcott
- Consider creation of “Village Center” areas with designated “centralized” parking lots and walkway linkages to nearby businesses.

Priority of Roadway Improvements

High Priority

- 1-East Main Street to Manor Avenue (Waterbury)
- 2-Wolcott Street and Stillson Road (Waterbury)
(From Long Hill Road to Lakewood Road and from Frost Road to Wolcott Street)
- 3-Route 69 at Southmayd Road (Waterbury)

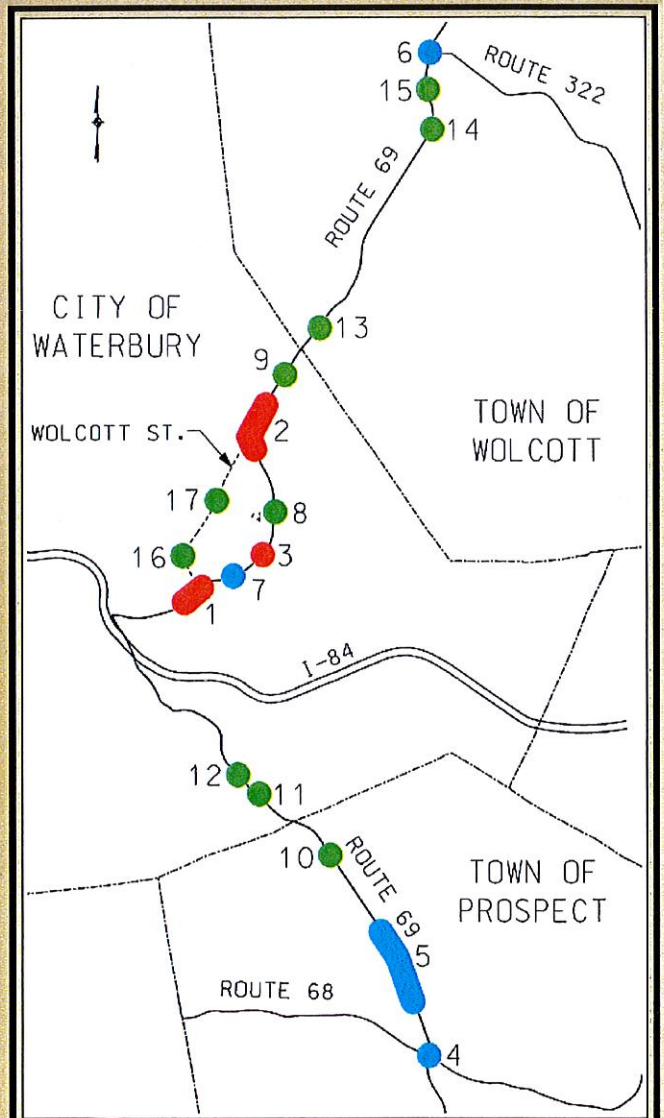
Moderate Priority

- 4-Route 69 at Route 68 (Prospect)
- 5-Route 69 in the Business District of Prospect
- 6-Route 69 at Route 322 (Wolcott)
- 7-Route 69 at Beecher-Store Avenues (Waterbury)

Lower Priority

- 8-Route 69 and Woodtick Road (Waterbury)
- 9-Route 69 and Sharon Road (Waterbury)
- 10-Route 69 and Maria Hotchkiss Road (Prospect)
- 11-Route 69 and Hamilton Ave.- near Terry Rd. (Waterbury)
- 12-Route 69 and Hamilton Ave.- near Piping Rock Drive (Waterbury)
- 13-Route 69 and Wakelee Road (Wolcott)
- 14-Route 69 at Hillside and MacCormack Drives (Wolcott)
- 15-Route 69 at Longmeadow Drive (Wolcott)
- 16-Wolcott Street at Manor Avenue (Waterbury)
- 17-Wolcott Street at Mattatuck Plaza including bus pullout areas (Waterbury)

Improvement Locations





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Appendix B



AECOM
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Road Safety Audit

Town: Prospect
RSA Location: Route 69
Meeting Location: Prospect Firehouse Conference Room
Address: 26 New Haven Road, Prospect, CT
Date: 4/21/2017
Time: 8:30AM

Participating Audit Team Members

Audit Team Member	Agency/Organization
Audit Team Member	Agency/Affiliation
Jeff Maxtutis	AECOM
Bridget Boucaud	VN Engineers
Angel Cordero	CTDOT
Anna Bergeron	CTDOT
Nelson Abarzua	Prospect Police Department
Cara Pengini Erickson	Prospect Town Council
Michael Gustauferi	Prospect Fire Department
Bob Chatfield	Town of Prospect
Jack Crumb	Town of Prospect
George Cottev	OCC



COMMUNITY
connectivity program

Appendix C



AECOM
Built to deliver a better world



Road Safety Audit – Prospect

Meeting Location: Prospect Firehouse Conference Room
Address: 26 New Haven Road, Prospect, CT
Date: 4/21/17
Time: 8:30 AM

Agenda

- Type of Meeting:** Road Safety Audit – Pedestrian Safety
- Attendees:** Invited Participants to Comprise a Multidisciplinary Team
- Please Bring:** Thoughts and Enthusiasm!!
- 8:30 AM** **Welcome and Introductions**
- Purpose and Goals
 - Agenda
- 8:45 AM** **Pre-Audit**
- Definition of Study Area
 - Review Site Specific Data:
 - Average Daily Traffic
 - Crash Data
 - Geometrics
 - Issues
 - Safety Procedures
- 10:00 AM** **Audit**
- Visit Site
 - As a group, identify areas for improvements
- 12:00 PM** **Post-Audit Discussion / Completion of RSA**
- Discussion observations and finalize findings
 - Discuss potential improvements and final recommendations
 - Next Steps
- 2:30 PM** **Adjourn for the Day – but the RSA has not ended**

Instruction for Participants:

- Before attending the RSA, participants are encouraged to observe the intersection and complete/consider elements on the RSA Prompt List with a focus on safety.
- All participants will be actively involved in the process throughout. Participants are encouraged to come with thoughts and ideas, but are reminded that the synergy that develops and respect for others' opinions are key elements to the success of the overall RSA process.
- After the RSA meeting, participants will be asked to comment and respond to the document materials to assure it is reflective of the RSA completed by the multidisciplinary team.



Audit Checklist

Pedestrians and Bicycles	Comment
<p>Pedestrian Crossings</p> <ul style="list-style-type: none">• Sufficient time to cross (signal)• Signage• Pavement Markings• Detectable warning devices (signal)• Adequate sight distance• Wheelchair accessible ramps<ul style="list-style-type: none">○ Grades○ Orientation○ Tactile Warning Strips• Pedestrian refuge at islands• Other	
<p>Pedestrian Facilities</p> <ul style="list-style-type: none">• Sidewalk<ul style="list-style-type: none">○ Width○ Grade○ Materials/Condition○ Drainage○ Buffer• Pedestrian lighting• Pedestrian amenities (benches, trash receptacles)• Other	



Bicycles <ul style="list-style-type: none">• Bicycle facilities/design• Separation from traffic• Conflicts with on-street parking• Pedestrian Conflicts• Bicycle signal detection• Visibility• Roadway speed limit• Bicycle signage/markings• Shared Lane Width• Shoulder condition/width• Traffic volume• Heavy vehicles• Pavement condition• Other	
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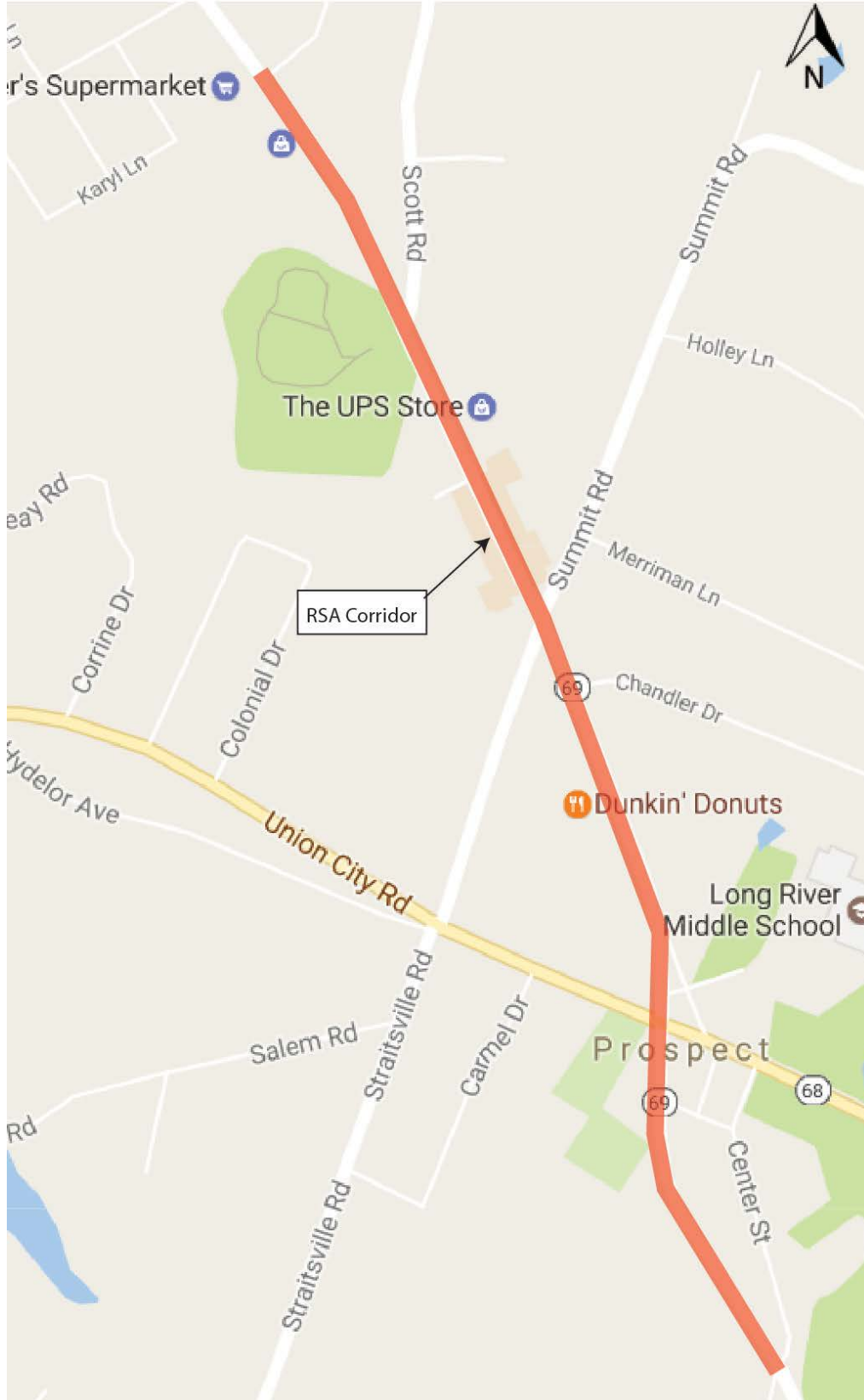
Roadway & Vehicles	
<ul style="list-style-type: none">• Speed-related issues<ul style="list-style-type: none">○ Alignment;○ Driver compliance with speed limits○ Sight distance adequacy○ Safe passing opportunities	
<ul style="list-style-type: none">• Geometry<ul style="list-style-type: none">○ Road width (lanes, shoulders, medians);○ Access points;○ Drainage○ Tapers and lane shifts○ Roadside clear zone /slopes○ Guide rails / protection systems	

<ul style="list-style-type: none">• Intersections<ul style="list-style-type: none">○ Geometrics○ Sight Distance○ Traffic control devices○ Safe storage for turning vehicles○ Capacity Issues	
--	--

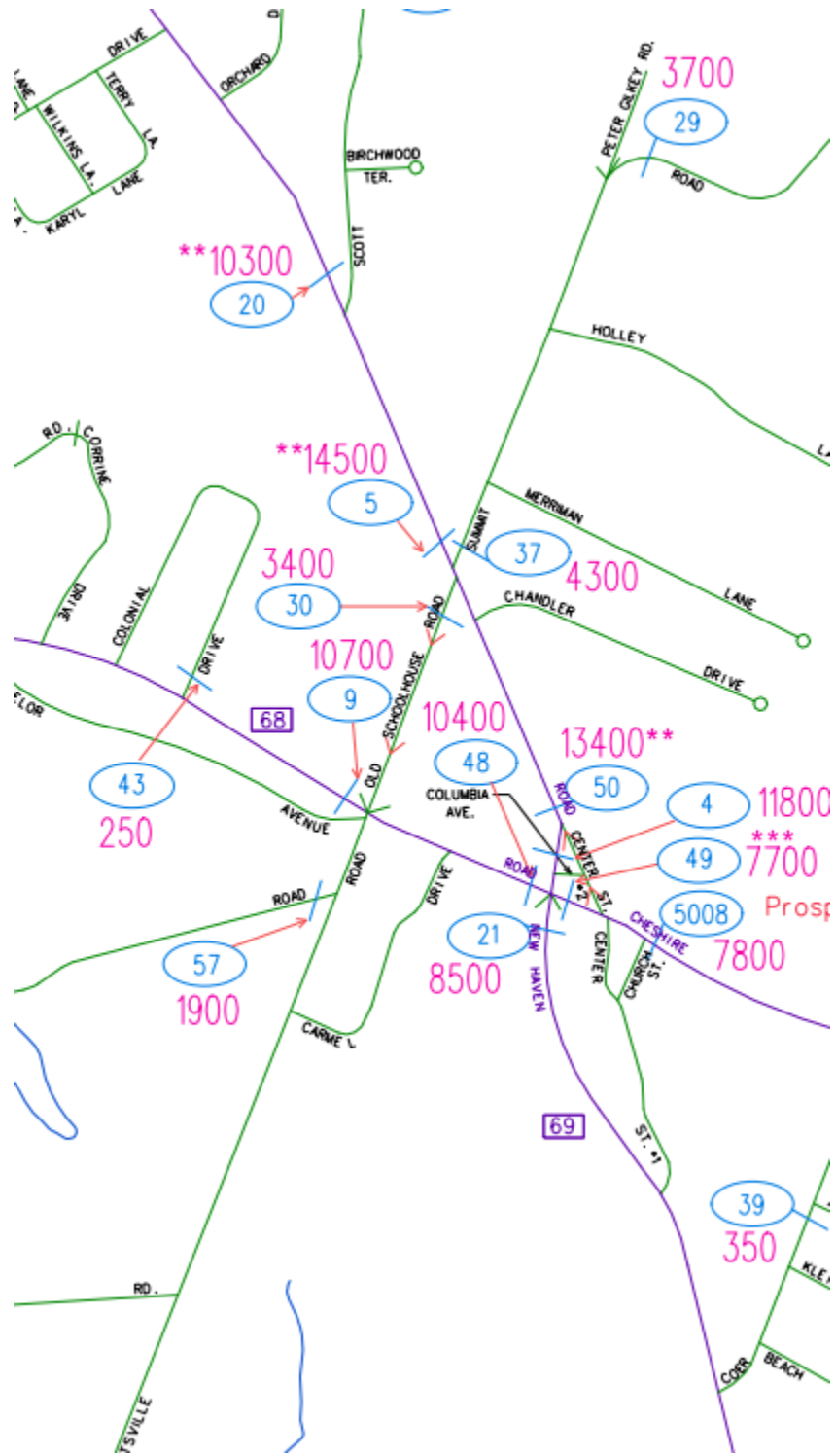


<ul style="list-style-type: none">• Pavement<ul style="list-style-type: none">○ Pavement Condition (excessive roughness or rutting, potholes, loose material)○ Edge drop-offs○ Drainage issues• Lighting Adequacy	
<ul style="list-style-type: none">• Signing<ul style="list-style-type: none">• Correct use of signing• Clear Message• Good placement for visibility• Adequate retroreflectivity• Proper support	
<ul style="list-style-type: none">• Signals<ul style="list-style-type: none">○ Proper visibility○ Proper operation○ Efficient operation○ Safe placement of equipment○ Proper sight distance○ Adequate capacity	
<ul style="list-style-type: none">• Pavement Markings<ul style="list-style-type: none">○ Correct and consistent with MUTCD○ Adequate visibility○ Condition○ Edgelines provided	
<ul style="list-style-type: none">• Miscellaneous<ul style="list-style-type: none">○ Weather conditions impact on design features.○ Snow storage	

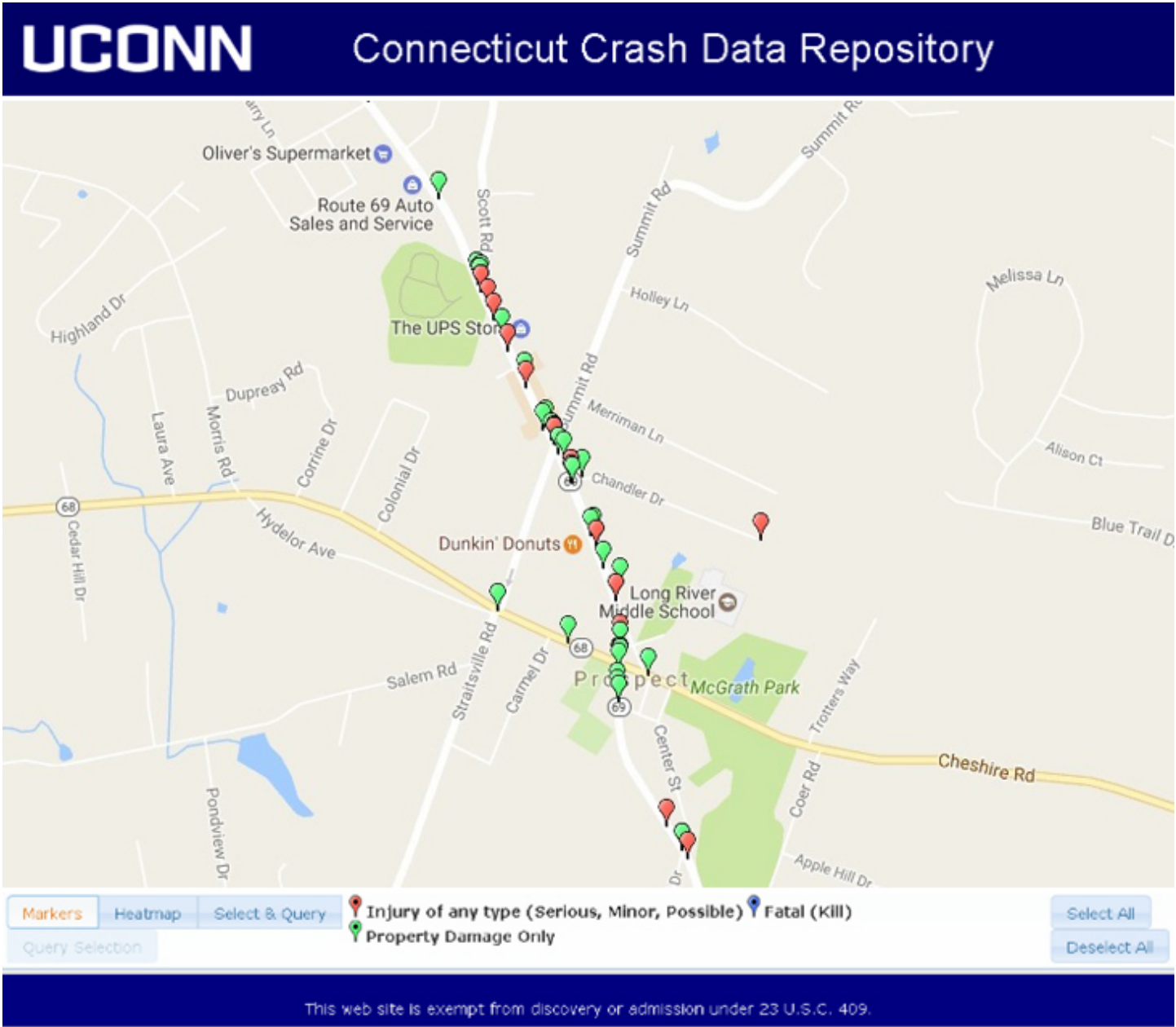
Location Map



ADT MAP



2015 Crashes





Road Safety Audit – Prospect

Crash Summary

Data: 3 years (2012-2014)

There were no crashes that involved pedestrians.

There were no crashes involving bicyclists.

Severity Type	Number of Crashes	
Property Damage Only	93	77%
Injury (No fatality)	28	23%
Fatality	0	0%
Total	121	

Manner of Crash / Collision Impact	Number of Crashes	
Unknown	0	0%
Sideswipe-Same Direction	2	2%
Rear-end	73	60%
Turning-Intersecting Paths	20	17%
Turning-Opposite Direction	4	3%
Fixed Object	9	7%
Backing	1	1%
Angle	1	1%
Turning-Same Direction	4	3%
Moving Object	1	1%
Parking	0	0%
Pedestrian	0	0%
Overturn	0	0%
Head-on	0	0%
Sideswipe-Opposite Direction	6	5%
Miscellaneous- Non Collision	0	0%
Total	121	



Weather Condition	Number of Crashes	
Snow	5	4%
Rain	13	11%
No Adverse Condition	97	80%
Unknown	0	0%
Blowing Sand, Soil, Dirt or Snow	1	1%
Severe Crosswinds	0	0%
Sleet, Hail	0	0%
Other	5	4%
Total	121	

Light Condition	Number of Crashes	
Dark-Not Lighted	4	3%
Dark-Lighted	12	10%
Daylight	104	86%
Dusk	1	1%
Unknown	0	0%
Dawn	0	0%
Total	121	

Road Surface Condition	Number of Crashes	
Snow/Slush	7	6%
Wet	21	17%
Dry	92	76%
Unknown	0	0%
Ice	1	1%
Other	0	0%
Total	121	



Time		Number of Crashes	
0:00	0:59	0	0%
1:00	1:59	0	0%
2:00	2:59	0	0%
3:00	3:59	1	1%
4:00	4:59	0	0%
5:00	5:59	1	1%
6:00	6:59	1	1%
7:00	7:59	6	5%
8:00	8:59	13	11%
9:00	9:59	11	9%
10:00	10:59	5	4%
11:00	11:59	7	6%
12:00	12:59	11	9%
13:00	13:59	5	4%
14:00	14:59	9	7%
15:00	15:59	13	11%
16:00	16:59	12	10%
17:00	17:59	11	9%
18:00	18:59	6	5%
19:00	19:59	2	2%
20:00	20:59	3	2%
21:00	21:59	1	1%
22:00	22:59	2	2%
23:00	23:59	1	1%
Total		121	

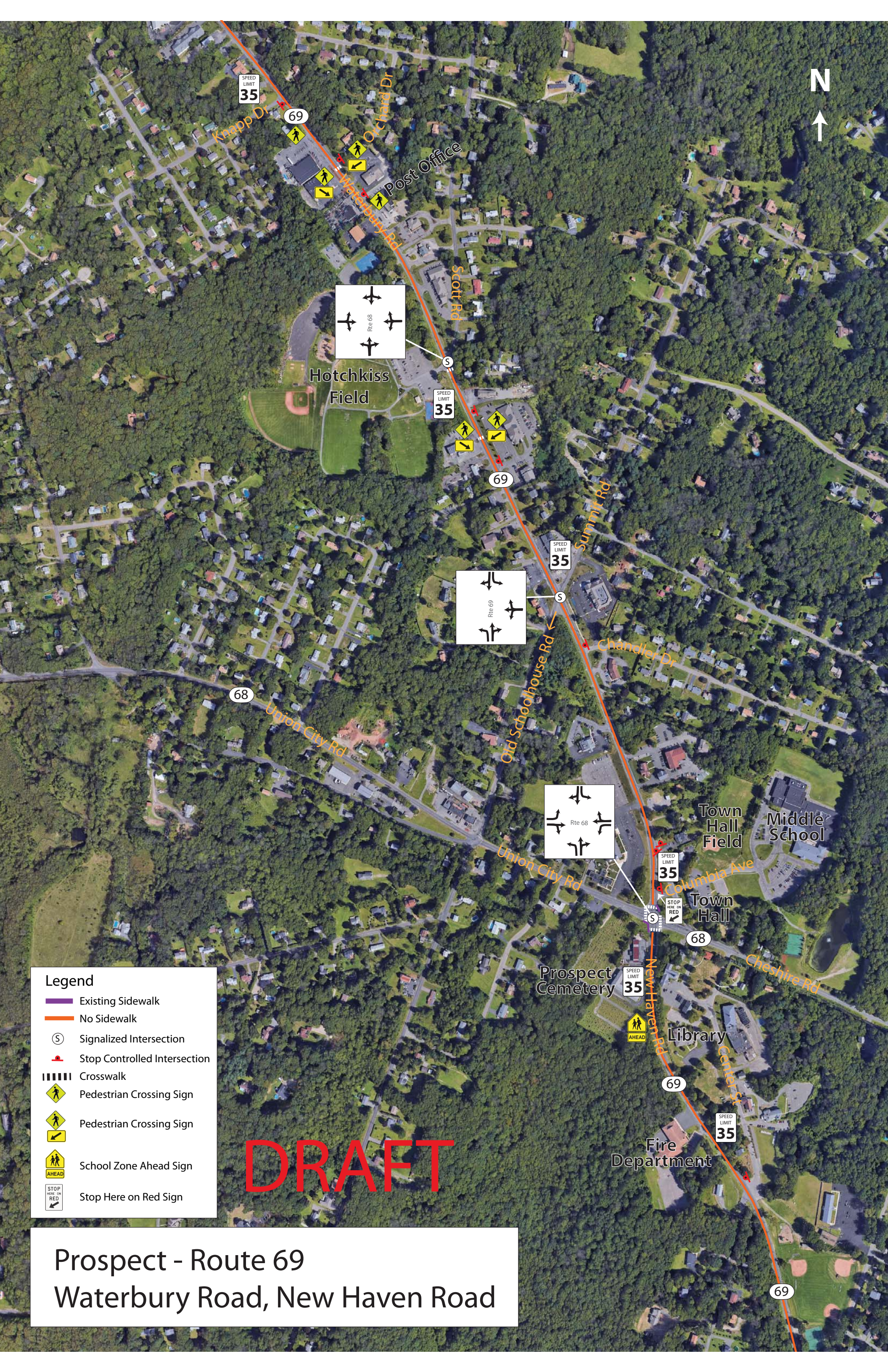


Legend

- Existing Sidewalk
- No Sidewalk
- Signalized Intersection
- Stop Controlled Intersection
- Crosswalk
- Pedestrian Crossing Sign
- Pedestrian Crossing Sign
- School Zone Ahead Sign
- Stop Here on Red Sign

DRAFT

**Prospect - Route 69
Waterbury Road, New Haven Road**





Post-Audit Discussion Guide

Safety Issues

- Confirmation of safety issues identified during walking audit

Potential Countermeasures

- Short Term recommendations

- Medium Term recommendations

- Long Term recommendations

Next Steps

- Discussion regarding responsibilities for implementing the countermeasures (including funding)



Road Safety Audit – Prospect

Fact Sheet

Functional Classification:

- Route 69 is classified as a Principal Arterial - other

ADT

- ADT on Route 69 is 8,500-14,500

Population and Employment Data (2014):

- Population: 9,516
- Employment: 2,023

Urbanized Area

- Prospect is in the Waterbury Urbanized Area

Demographics

- The statewide average percentage below the poverty line is 10.31%. There are no areas in Prospect exceeding the state average.
- The statewide average percentage minority population is 30.53%. There are no areas in Prospect exceeding the state average.

Air Quality

- Prospect's CIPP number 520
- Prospect is within the NY/NJ/CT Marginal Ozone Area and PM_{2.5} Attainment/Maintenance Area
- Prospect is within a CO Maintenance Area

