

# **New Milford**

Route 7 (Danbury Road) – Road Safety Audit July 27, 2016





Acknowledgements:

OFFICE OF INTERMODAL PLANNING BUREAU OF POLICY AND PLANNING CONNECTICUT DEPARTMENT OF TRANSPORTATION

With assistance from AECOM Transportation Planning Group

# Contents

1	Introd	uction to the New Milford (Danbury Road) RSA	5
	1.1	Location	5
2	Pre-Au	udit Assessment	7
	2.1	Pre-Audit Information	7
	2.2	Prior Successful Efforts	. 13
	2.3	Pre-Audit Meeting	. 13
3	RSA A	ssessment	. 15
	3.1	Field Audit Observations	. 15
	3.2	Post-Audit Workshop - Key Issues	. 16
4	Recon	nmendations	. 18
	4.1	Short Term	. 18
	4.2	Medium Term	. 21
	4.3	Long Term	. 23
	4.4	Summary	. 25

# Figures

Figure 1. Danbury Road (Route 7), New Milford	6
Figure 2. Danbury Road (Route 7) - Regional Context	7
Figure 3. Crashes that Occurred in 2015 (Connecticut Crash Data Repository)	9
Figure 4. Danbury Road (Route 7) Road Geometrics	11
Figure 5. Ramp and detectable warning strips	13
Figure 6. Pedestrian pushbutton at Dodd Road	13
Figure 7. Crosswalk at Kohl's plaza	13
Figure 8. Ramp at Dodd Rd. is not connected to a sidewalk	15
Figure 9. Pedestrians running across Route 7 near Taco Bell	15
Figure 10. Section of wider shoulders on Route 7	15
Figure 11. Elderly man crossing traffic on Route 7 at Willow Springs complex	16
Figure 12. Intersections do not have painted crosswalks	16
Figure 13. Willow Springs complex entrance and exit	16
Figure 14. Missing sidewalks	17
Figure 15. Walmart and Stop & Shop plaza driveway	19
Figure 16. Cedar Knolls Drive	19
Figure 17. Short Term Recommendations	20

21

# Tables

Table 1. Crash Severity 2012-2014	8
Table 2. Crash Type 2012-2014	8
Table 3. Street Inventory	12



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 FHWA. For details on this program, please refer to <u>www.ctconnectivity.com</u>. 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.



MASSACHUSETTS

# 1 Introduction to the New Milford (Danbury Road) RSA

The Town of New Milford submitted an application to complete an RSA along Danbury Road (Route 7) between Still River Drive and Dodd Road to improve safety for pedestrians and bicyclists traveling along the corridor. Route 7 is a high-volume, principal arterial roadway, serving both regional and local traffic. The corridor is a primary route to the New Milford town center and has commercial and retail uses that are served by a HARTransit bus route. These commercial and retail attractions generate pedestrian activity, and the location and regional accessibility of Route 7 attracts bicyclists to the corridor. The high volume and high speeds of traffic along Route 7, combined with limited pedestrian and bicyclist facilities, currently create a difficult environment for pedestrians and cyclists to navigate.

The Town of New Milford's application contained information on traffic volumes, crash data, and mapping of the intersection. The application and supporting documentation are included in Appendix A.

### 1.1 Location

The RSA study area is the corridor of Danbury Road (Route 7) and is bounded by Still River Drive on the south and Dodd Road on the north, in the Town of New Milford (Figure 1). Danbury Road is classified as a Principal Arterial and provides a primary north-south connection through New Milford and to the surrounding communities. Because of its location relative to the regional network, shown in Figure 2, Route 7 serves a high-volume of both local and through traffic in the area. The Average Daily Traffic (ADT) on Route 7 ranges between 29,600 vehicles per day (vpd) and 37,900 vpd in the RSA study area. This section of roadway also contains a significant number of driveways, adding complexity to walking and bicycling maneuvers through the area.



Figure 1. Danbury Road (Route 7), New Milford



Figure 2. Danbury Road (Route 7) - Regional Context

# 2 Pre-Audit Assessment

### 2.1 Pre-Audit Information

As previously described, traffic volumes are significant along the RSA corridor because Route 7 is a Principal Arterial and provides access to several commercial and retail uses. Between 2012 and 2014 there were 166 crashes in the RSA area. Table 1 provides additional information on the types of collisions as well as the crash severity. The majority of crashes (72%) resulted in property damage only, while 28% of crashes resulted in injuries, one of which resulted in a fatality. There were two crashes involving pedestrians during this time period, both resulting in injuries, and there were no recorded crashes involving bicyclists.

The data on crash types (Table 2) shows that a majority of crashes in the area were rear-end collisions (47%), followed by turning-intersecting paths crashes (28%), and sideswipe-same direction crashes (10%). The crash types recorded are consistent with a pattern of sudden, unexpected stops along Route 7, as caused by turning vehicles, and sudden lane changes to avoid stopped vehicles. Speeding and distracted driving may also be contributing factors to these crash types.

Figure 3 displays the locations of crashes that occurred in this area during 2015. Most crashes are evenly distributed throughout the corridor; however, there are noticeable clusters of crashes at the Route 7 and Still River Drive intersection, as well as at the Willow Springs complex. As shown in Figure 3, most of the crashes at Still River Drive resulted in property damage only, while injuries were more frequent at the Willow Springs complex and at Unicron Drive .

Severity Type	Number of Crashes			
Property Damage Only	119	72%		
Injury (No fatality)	46	28%		
Fatality	1	1%		
Total	166			
Table 1 Creek Severity 2012 2014				

Table 1. Crash Severity 2012-2014

Source: UConn Connecticut Crash Data Repository

Manner of Crash / Collision Impact	Number of C	rashes
Unknown	0	0%
Sideswipe-Same Direction	16	10%
Rear-end	78	47%
Turning-Intersecting Paths	38	23%
Turning-Opposite Direction	7	4%
Fixed Object	6	4%
Backing	3	2%
Angle	3	2%
Turning-Same Direction	4	2%
Moving Object	0	0%
Parking	0	0%
Pedestrian	2	1%
Overturn	2	1%
Head-on	2	1%
Sideswipe-Opposite Direction	5	3%
Miscellaneous-Non Collision	0	0%
Total	166	

Table 2. Crash Type 2012-2014

Source: UConn Connecticut Crash Data Repository



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

Danbury Road (Route 7) has a posted speed limit of 40 mph, with two travel lanes in each direction that are generally 11 feet wide. Dedicated left turn lanes are provided at signalized intersections and at unsignalized driveways serving the shopping plazas north of Cedar Knolls Drive. South of Cedar Knolls Road, there are no turn lanes for driveway access. Shoulders are provided on both sides and are generally four feet wide throughout the corridor; however, shoulders vary from one to seven feet wide between Cedar Knolls Drive and Dodd Road. Sidewalks are not provided for most of the RSA corridor. Four-foot wide sidewalks are provided on the east side of Danbury Road between Cedar Knolls Drive and Dodd Road except that sidewalk is missing in front of the Taco Bell property. There are no striped pedestrian crossings of Route 7 within the RSA corridor. Several retail and commercial facilities and Willow Spring residential condominium complex are located along Danbury Road and generate pedestrian activity.

The intersection of Danbury Road and Dodd Road is a signalized T-intersection. Pedestrian crossings are not provided at the intersection. A pedestrian pushbutton is provided to call the green phase for vehicles on Dodd Road and assists pedestrians crossing Route 7 south of Dodd Road; however, there is no marked crosswalk or pedestrian signal for the crossing. The Danbury Road southbound approach has two through lanes and one dedicated left-turn lane.

The Danbury Road northbound approach has two lanes with no dedicated turn lanes. Sidewalks are provided on east side of Danbury Road and on both sides of Dodd Road.

Then intersection of Danbury Road and the Kohl's/Walmart driveways is a four-way signalized intersection. A pedestrian crossing is provided on the Walmart plaza driveway. Sidewalks are provided on the east side of Danbury Road, north of Kohl's driveway, and on the south side of Walmart and Stop and Shop plaza driveway. Dedicated left and right-turn lanes are provided on all approaches except for the Danbury Road northbound approach, which does not have a separate right-turn lane.

The intersection of Danbury Road, Still River Drive and Northeast Carpet driveway is a fourway signalized intersection. There are no pedestrian crossings or sidewalks at this intersection. Dedicated left-turn lanes are provided on northbound and southbound Danbury Road and on Still River Drive westbound. Right-turn lanes are provided on northbound Danbury Road and westbound Still River Drive.

Roadway geometrics for study area roadways and intersections are shown in Figure 4. An inventory of existing conditions of the intersection can be found in Table 3.



Figure 4. Danbury Road (Route 7) Road Geometrics

### New Milford – Danbury Road Street Inventory

			Ave.		Side	ewalk					R	amps
Street	Direction	Lanes	Lane Width	Side	Туре	Width	Condition*	Curb	Parking	Shoulder	Exist	Compliant
Danbury Road (Still River Drive to Cedar Knolls Drive)	NB	2	11'	East	No	N/A	N/A	Asphalt	No	4'	No	N/A
	SB	2	11′	West	No	N/A	N/A	Asphalt	No	4'	No	N/A
Danbury Road (Cedar Knolls Drive to Dodd Road)	NB	2	11'	East	Concrete	4'	Good	Asphalt	No	1'- 7'	Yes	No
	SB	2	11'	West	No	N/A	N/A	Asphalt	No	4'- 7'	No	N/A

\*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.

Table 3. Street Inventory

# 2.2 Prior Successful Efforts

A number of best practices have already been applied to this area of New Milford. At some intersections, upgrades have been implemented, including ramps, detectable warning strips and pushbuttons. The Kohl's plaza driveway includes a painted crosswalk, ramps, and detectable warning strips. (Figure 5 through Figure 7).



Figure 5. Ramp and Detectable Warning Strips



Figure 6. Pedestrian Pushbutton at Dodd Road



Figure 7. Crosswalk at Kohl's Plaza

### 2.3 Pre-Audit Meeting

The RSA was conducted on July 27, 2016. The Pre-Audit meeting was held at 8:30 AM in the Town Hall located at 10 Main Street in New Milford.

The RSA Team was comprised of staff from CTDOT and AECOM, and representatives from several New Milford departments and organizations including the Mayor's Office, Public Works Department, Police Department, Traffic Authority, Land Use Department. 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 New Milford presented relevant information for the audit, including:

- New Milford would prefer cyclists to use local roads with less vehicular traffic than Route 7.
- There are no painted crosswalks crossing Route 7 in the RSA area.
- There have been crashes on Route 7 involving pedestrians struck by vehicles.
- Local bike groups have been educating cyclists to take routes other than Route 7.
- New Milford expressed concerns with vehicles travelling faster than the posted speed limit.
- Where possible, the Town would like to see appropriate traffic calming measures on Route 7.
- Sidewalks are fragmented on Route 7.
- New Milford has sidewalk ordinances that prohibit cyclists from biking on the sidewalks. When on the sidewalks, cyclists need to abide by pedestrian rules and must walk their bikes.
- There are topography issues along Route 7 that may make it difficult to build sidewalks or a buffer.
- When the Kohl's plaza was constructed, New Milford encouraged a crosswalk to be added at the intersection. Ramps and pedestrian pushbuttons were installed.
- New Milford indicated that Route 7 receives a significant amount of truck traffic.
- When vehicles are turning left, motorists will pass on the right. New Milford is concerned about cyclists in the shoulder area and the potential for crashes.
- New Milford believes that without a major redesign of Route 7, it would be better to direct cyclists to routes on local roads. Still River Drive and Dodd Road could provide a good connection to and from Route 7.
- New Milford has requested a traffic signal at the Willow Spring condominium complex. The signal has been approved by CTDOT on the condition that the Town would be responsible for funding.
- The Average Daily Traffic (ADT) on Route 7 is higher than the Town's population. New Milford indicated that much of the traffic is probably from commuters or drivers using Route 7 to reach surrounding communities.
- New Milford indicated there may be more crashes on Route 7 than what is recorded in the UConn Crash Data Repository. Some minor crashes may not be reported.

#### 3 **RSA Assessment**

#### 3.1 Field Audit Observations

- The crosswalk at Dodd Road has pedestrian pushbuttons and tactile warning strips; however, crosswalks are not painted, and there are no pedestrian signals.
- On the southwestern side of this intersection, the crosswalk ramp is not connected to any sidewalks (Figure 8).
- Near the Walmart and Stop & Shop plaza intersection, the crosswalk ramps and detectable warning strips are situated at a 45° angle directing pedestrians diagonally into the intersection.
- Pedestrians were observed running across Route 7 mid-block (Figure 9).
- There is no sidewalk in front of the Taco Bell on Route 7.
- The shoulder areas on Route 7 vary in width throughout the corridor. Some areas are as wide as 7 feet (Figure 10), while others are as narrow as 1 foot.
- The sidewalk in front of the Kohl's plaza is in good condition. At the plaza's egress, there are ramps, detectable warning strips and a painted crosswalk. The sidewalk continues south to the intersection at Cedar Knolls Drive. After this point there are no sidewalks to the south.
- Cedar Knolls Drive was closed around 2005. The property on the southeast corner of this intersection is vacant after a planned shopping center development was not constructed. Further east on this road, a gate was installed to prevent vehicles from using it.



Figure 8. Ramp at Dodd Rd. is not Connected to a Sidewalk.



Figure 9. Pedestrians Running Across Route 7 near Taco Bell



Figure 10. Section of Wider Shoulders on Route 7

- The Willow Spring complex on Route 7 has many residential units. The driveway for this complex is controlled by a stop sign. Several vehicles turning left onto Route 7 were observed queuing in the development waiting for a gap in traffic to safely make their turn.
- Pedestrians were observed crossing Route 7 midblock at the Willow Spring complex (Figure 11).
- The traffic light at the Still River Drive intersection is located on the crest of the hill, which creates sightline limitations.
- At the Still River Drive intersection there are pedestrian pushbuttons on the southeast and southwest corners but no ramps, crosswalk signals, or painted crosswalks.

#### 3.2 Post-Audit Workshop - Key Issues

- Many of the concerns and challenges identified are consistent along all of Route 7 through the Town, and are not isolated to the RSA corridor between Still River Drive and Dodd Road. Any improvements proposed in the RSA area should also be considered north of the RSA area, between Dodd Road and Bridge Street.
- 2. Many intersections are not ADA compliant. There have been some upgrades, but these facilities are not consistent through the corridor.
- There are no painted crosswalks crossing Route 7 (Figure 12). As a result, this may encourage pedestrians to cross mid-block as was observed during the field audit.



Figure 11. Elderly Man Crossing Traffic on Route 7 at Willow Springs Complex



Figure 12. Intersections do not have Painted Crosswalks



Figure 13. Willow Springs Complex Entrance and Exit

- New Milford is concerned about the lighting on Route 7 at night. With the large plazas and big box stores, there are pockets of lighted areas along the corridor followed by stretches of poorly lit areas.
- Housatonic Area Regional Transit (HARTransit) drops riders off throughout the corridor. There is a concentration of stops near the major retail plazas. New Milford would like to work with HARTransit to identify and improve bus stops.
- The Town is concerned with vehicles having difficulty turning left onto and off Route 7, particularly at the Willow Springs complex (Figure 13).
- Sidewalks are fragmented along Route 7 (Figure 14). There are topography challenges that make it difficult to create a network of continuous sidewalks.
- 8. Some areas of Route 7 have wide shoulders that could accommodate cyclists. However, other areas such as the bridge just south of the Windmill Diner are constrained and it would be difficult to widen the existing narrow shoulders.
- 9. Due to the high volume and speed of traffic on Route 7, it may be best to provide an alternative bike route on adjacent local roads with lower traffic volumes. Pickett District Road, east of Route 7, could be used by cyclists. If needed, Route 7 could be accessed by Still River Drive and Dodd Road.



Figure 14. Missing Sidewalks

## 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 more costly and require establishment of a funding source, or they may need some additional study or design in order to be accomplished. Nonetheless, they are relatively quick turn-around items, and should not require significant lengths of time before they can be implemented. 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 when funding is available.

### 4.1 Short Term

- 1. The Local Traffic Authority (LTA) should submit a letter of request to CTDOT to paint crosswalks at the following intersections:
  - a. Dodd Road.
  - b. Walmart and Stop & Shop plaza (Figure 15).
  - c. Still River Drive.
- 2) Coordinate with CTDOT Maintenance District to find out when Route 7 is being repaved.
  - a. When Route 7 is repaved, request that lanes are narrowed to 11 feet.
- 3) LTA should request pedestrian counts to be conducted on Route 7.
- 4) Investigate feasibility of opening up Cedar Knolls Drive for recreational use (bikes and pedestrians) (Figure 16).
- 5) Review and update town plans, such as the Plan of Conservation and Development and Access Management Plan.
- 6) Map existing sidewalks on Route 7 to identify areas to expand and/or connect existing sidewalks.

Figure 17 depicts these recommendations.



Figure 15. Walmart and Stop & Shop Plaza Driveway



Figure 16. Cedar Knolls Drive



Figure 17. Short Term Recommendations

# 4.2 Medium Term

- 1. LTA should request upgrades to intersections to include:
  - a. ADA compliant ramps with detectable warning strips.
  - b. ADA compliant pedestrian crosswalk signals.
  - c. ADA compliant pushbuttons (Figure 18).
- 2. Develop a sidewalk plan to expand the network of sidewalks on Route 7 (Figure 19).



Figure 18. Pedestrian Countdown Signal and Pushbutton

Figure 20 depicts these recommendations.



Figure 19. Develop Sidewalk Plan



Figure 20. Medium Term Recommendations

# 4.3 Long Term

- 1. Evaluate access to Willow Spring condominium complex:
  - a. Investigate feasibility of installing traffic signal at the Route 7 intersection.
  - b. Evaluate feasibility of providing an alternative access to the development.
- 2. Where possible, construct sidewalks to complete gaps along Route 7 (Figure 21).
- 3. Install lighting along Route 7 to improve visibility at night.

Figure 22 depicts these recommendations.



Figure 21. Construct Sidewalks



Figure 22. 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 New Milford RSA and provides New Milford with an outlined strategy to improve the transportation network along Route 7, between Dodd Road and Still River Drive, for all road users, particularly focusing on pedestrians and cyclists. Moving forward, New Milford 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 in this area.



# Appendix A





# 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	
Title	
	Γ
Email Address	
lelephone	
Number	

2. Location information

Address	
Description	
City / Town	

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
Νο
If Yes please describe (please specify)

(Piedse select all ti	that apply)
Public, Parochial, Pr	rivate Schools (more than 1 school within a ½ mile)
University / Commu	unity Colleges
N/A (not applicable)	)
Other (please specify	ify)
9. Transit facilities (Please select all th	hat apply)
Bus	
Rail	
Ferry	
Ferry	
Ferry Airport Park and Ride Lot	
Ferry Airport Park and Ride Lot N/A (not applicable)	)

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.

### 12. Environmental Concerns:

If Yes please describe and list.

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

**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?

# 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)



# Appendix B









# **Road Safety Audit**

Town:	New Milford
RSA Location:	204 Danbury Road
Meeting Location:	New Milford Town Hall (E. Paul Martin Room)
Address:	10 Main St, New Milford, CT 06776
Date:	7/27/2016
Time:	8:30AM

# **Participating Audit Team Members**

Audit Team Member	Agency/Organization
Michael Wulforst	AECOM
Kristin Hadjstylianos	AECOM
Daniel Stanton	Town of New Milford
James Dzamko	Town of New Milford - Police
Kevin Tedesco	CT DOT
Tom O'Brien	NM River Trail Assn.
Chris Eaton	NM Traffic Authority
Mike Zarba	NM DPW
Laura Regan	NM Zoning + Planning
David Gronbach	Town NM Mayor



# Appendix C









# **Road Safety Audit – New Milford**

Meeting Location:	New Milford Town Hall (E. Paul Martin Room)
Address:	10 Main Street
Date:	7/27/2016
Time:	8:30 AM

# <u>Agenda</u>

Type of Meeting:	Road Safety Audit – Pedestrian Safety	
Attendees:	Invited Participants to Comprise a Multidisciplinary Team	
Please Bring:	Thoughts and Enthusiasm!!	
8:30 AM	<ul> <li>Welcome and Introductions</li> <li>Purpose and Goals</li> <li>Agenda</li> </ul>	
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	<ul> <li>Audit</li> <li>Visit Site</li> <li>As a group, identify areas for improvements</li> </ul>	
12:00 PM	<ul> <li>Post-Audit Discussion / Completion of RSA</li> <li>Discussion observations and finalize findings</li> <li>Discuss potential improvements and final recommendations</li> <li>Next Steps</li> </ul>	
2:30 PM	Adiourn 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
<ul> <li>Pedestrian Crossings</li> <li>Sufficient time to cross (signal)</li> <li>Signage</li> <li>Pavement Markings</li> <li>Detectable warning devices (signal)</li> </ul>	
<ul> <li>Adequate sight distance</li> <li>Wheelchair accessible ramps         <ul> <li>Grades</li> <li>Orientation</li> <li>Tactile Warning Strips</li> </ul> </li> <li>Pedestrian refuge at islands</li> <li>Other</li> </ul>	
<ul> <li>Pedestrian Facilities</li> <li>Sidewalk <ul> <li>Width</li> <li>Grade</li> <li>Materials/Condition</li> <li>Drainage</li> <li>Buffer</li> </ul> </li> <li>Pedestrian lighting</li> <li>Pedestrian amenities (benches, trash receptacles)</li> <li>Other</li> </ul>	





#### **Bicycles**

- 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

Roadway & Vehicles	
<ul> <li>Speed-related issues         <ul> <li>Alignment;</li> <li>Driver compliance with speed limits</li> <li>Sight distance adequacy</li> <li>Safe passing opportunities</li> </ul> </li> </ul>	
<ul> <li>Geometry         <ul> <li>Road width (lanes, shoulders, medians);</li> <li>Access points;</li> <li>Drainage</li> <li>Tapers and lane shifts</li> <li>Roadside clear zone /slopes</li> <li>Guide rails / protection systems</li> </ul> </li> </ul>	

#### • Intersections

- o Geometrics
- o Sight Distance
- Traffic control devices
- o Safe storage for turning vehicles
- Capacity Issues





<ul> <li>Pavement         <ul> <li>Pavement Condition (excessive roughness or rutting, potholes, loose material)</li> <li>Edge drop-offs</li> <li>Drainage issues</li> </ul> </li> <li>Lighting Adequacy</li> </ul>	
<ul> <li>Signing</li> <li>Correct use of signing</li> <li>Clear Message</li> <li>Good placement for visibility</li> <li>Adequate retroreflectivity</li> <li>Proper support</li> </ul>	
<ul> <li>Signals         <ul> <li>Proper visibility</li> <li>Proper operation</li> <li>Efficient operation</li> <li>Safe placement of equipment</li> <li>Proper sight distance</li> <li>Adequate capacity</li> </ul> </li> </ul>	
<ul> <li>Pavement Markings         <ul> <li>Correct and consistent with MUTCD</li> <li>Adequate visibility</li> <li>Condition</li> <li>Edgelines provided</li> </ul> </li> </ul>	
<ul> <li>Miscellaneous         <ul> <li>Weather conditions impact on design features.</li> <li>Snow storage</li> </ul> </li> </ul>	



# Average Daily Traffic (ADT)



# 2015 Crashes

# UCONN Connecticut Crash Data Repository







# Road Safety Audit – New Milford

# Crash Summary

Data: 3 years (2012-2014)

There were 2 crashes that involved pedestrians resulting in injuries (no fatality).

There were no crashes involving bicyclists.

Severity Type	Number	of Crashes
Property Damage Only	119	72%
Injury (No fatality)	46	28%
Fatality	1	1%
Total	166	

Manner of Crash / Collision Impact	Number of C	rashes
Unknown	0	0%
Sideswipe-Same Direction	16	10%
Rear-end	78	47%
Turning-Intersecting Paths	38	23%
Turning-Opposite Direction	7	4%
Fixed Object	6	4%
Backing	3	2%
Angle	3	2%
Turning-Same Direction	4	2%
Moving Object	0	0%
Parking	0	0%
Pedestrian	2	1%
Overturn	2	1%
Head-on	2	1%
Sideswipe-Opposite Direction	5	3%
Miscellaneous- Non Collision	0	0%
Total	166	





Weather Condition	Number of C	rashes
Snow	7	4%
Rain	24	14%
No Adverse Condition	133	80%
Unknown	0	0%
Blowing Sand, Soil, Dirt or		
Snow	0	0%
Other	2	1%
Severe Crosswinds	0	0%
Sleet, Hail	0	0%
Total	166	

Light Condition	Number of Crashes	
Dark-Not Lighted	20	12%
Dark-Lighted	20	12%
Daylight	123	74%
Dusk	2	1%
Unknown	0	0%
Dawn	1	1%
Total	166	

Road Surface Condition	Number of Crashes	
Snow/Slush	5	3%
Wet	30	18%
Dry	131	79%
Unknown	0	0%
lce	0	0%
Other	0	0.0%
Total	166	





Time Number of		Number of C	rashes
0:00	0:59	1	1%
1:00	1:59	0	0%
2:00	2:59	3	2%
3:00	3:59	0	0%
4:00	4:59	0	0%
5:00	5:59	1	1%
6:00	6:59	3	2%
7:00	7:59	7	4%
8:00	8:59	5	3%
9:00	9:59	2	1%
10:00	10:59	7	4%
11:00	11:59	10	6%
12:00	12:59	11	7%
13:00	13:59	18	11%
14:00	14:59	18	11%
15:00	15:59	12	7%
16:00	16:59	16	10%
17:00	17:59	16	10%
18:00	18:59	14	8%
19:00	19:59	2	1%
20:00	20:59	4	2%
21:00	21:59	5	3%
22:00	22:59	7	4%
23:00	23:59	4	2%
Total		166	







# **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 – New Milford

# Fact Sheet

#### **Functional Classification:**

- Danbury Road (Route 202) is classified as a Principal Arterial (Other)
- Pickett District Road is classified as a Local road

#### ADT

• ADT on Danbury Road is 29,600 – 37,900

#### Population and Employment Data (2014):

- Population: 27,821
- Employment: 8,334

#### **Urbanized Area**

• Danbury Road in New Milford is in the Danbury Urbanized Area

#### Demographics

- The statewide average percentage below the poverty line is 10.31%. There are no areas in New Milford that are below the poverty line.
- The statewide average percentage minority population is 30.53%. There are no areas in New Milford exceeding the state's average.

#### Air Quality

- New Milford's CIPP number 313
- New Milford is within the Greater CT Marginal Ozone Area
- New Milford is within a CO Maintenance Area