



# Town of New Milford Transportation Management Plan

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*Innovative Planning –  
Better Communities*



# Town of New Milford Transportation Management Plan

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*Final Report*

*Prepared by Fitzgerald & Halliday, Inc.*

*With assistance from Herbert S. Levinson*

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## Introduction

New Milford's downtown is uniquely situated along the banks of the Housatonic River, tucked between the ridges formed by the Berkshire Mountain foothills. As the "gateway" to Litchfield County, New Milford's downtown is also a transition point, serving travelers between the increasingly urban and suburban centers of Fairfield County to the south, and the small towns and pastoral settings of Litchfield County to the north. Hence, the historic Downtown is bounded by state arterial highways to the east, south, and west; and bisected by the Danbury Branch of the Metro North Railroad, which currently only serves freight traffic. This plan considers the unique characteristics of Downtown New Milford and advances a set of transportation system improvements that balance the need to maximize operational efficiency with the preservation and enhancement of community character, history, economic growth, quality of life, and environmental resources.

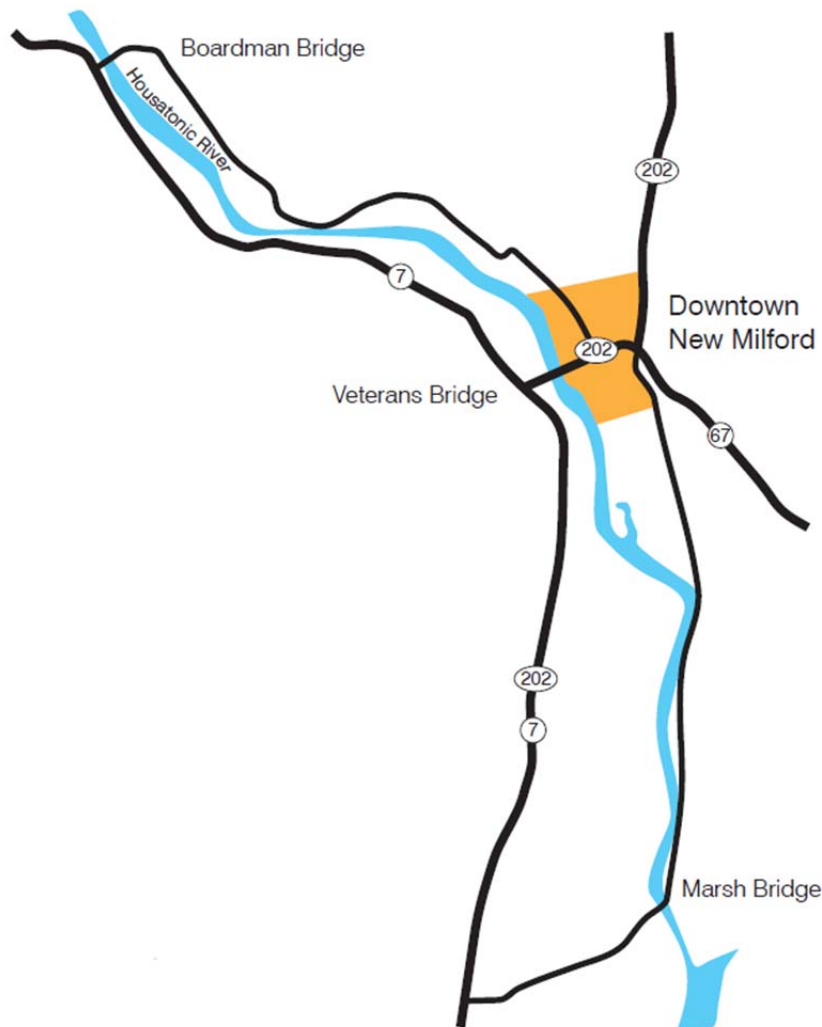


Figure 1 - Location map

The project study area in totality extends from New Milford’s downtown to Still River Drive at Route 7. Within this study area are two crossings of the Housatonic River, the Veterans Bridge at Bridge Street and the Marsh Bridge at Still River Drive. A third crossing north, although outside of the study area, is the Boardman Bridge at Boardman Road. Route 7 is a regional transportation corridor, providing a direct connection to Danbury and I-84 to the south. This roadway is located on the western side of the Housatonic River and extends northward to the town of Kent. The Route 7 corridor shares state highway designation with Route 202 from Brookfield to the south until it reaches Bridge Street. At Bridge Street, Route 202 diverges from Route 7 and passes just south of New Milford’s downtown and continues northbound along Poplar Street. A third state highway, Route 67, feeds the downtown area from points to the southeast. Bridge Street, with the only river crossing for a mile in either direction, is therefore a major linkage between these three regional highways. Confluence in traffic flow from these highways is compounded by local traffic serving New Milford’s downtown, resulting in heavy vehicular demand for Bridge Street.



Figure 2 - Traffic confluence along Bridge Street

In 2010, the Grove Street approach to New Milford’s downtown was reconfigured, and a higher capacity signalized intersection constructed to address traffic congestion at the southeast corner of the downtown. This intersection construction project took decades to come to fruition, and has effectively created another viable access route to the downtown for travellers choosing to bypass Route 7 and Bridge Street (Route 202).

In addition to the Grove Street/Bridge Street intersection, the Veterans Bridge is the other major gateway to New Milford’s downtown. The current two-lane bridge was opened to traffic in 1954 and the roadway cross-section of the bridge is limited to two lanes. In 1995 this span was due for major maintenance, and construction of a new bridge was proposed by the Connecticut Department of Transportation (CTDOT) as an alternative to rehabilitation. Local reaction was strongly



Figure 3 - Veterans Bridge

in favor of rehabilitating of the existing bridge. While the traffic benefits of adding more thru lanes on a new bridge was recognized by citizens, it was felt that the presence of a wider cross section on Veterans Bridge could lead to pressure to widen the adjacent section of Bridge Street to the east. This in turn would have risked compromising the historic character of Bridge Street and the adjacent Downtown. There was also considerable attachment to the informal landmark status of the 1954 Veterans Bridge design, with its steel framework, entryway function and familiarity to drivers from outside of New Milford.

Pages 4 through 31 of this report document the steps taken to analyze existing conditions in New Milford, conduct a series of public and stakeholder engagement events, and develop a set of planning and design drivers to guide the selection of transportation solutions that are detailed in the second half of this document. The steps taken to complete this



Figure 4 – Study process flow diagram



## Conditions Assessment

The Town of New Milford, incorporated in 1712, is located about 15 miles north of Danbury and centered at the confluence of US 7, US 202, and CT 67. The Town occupies 64 square miles, and has a population of nearly 30,000 residents. An assessment of current transportation conditions was performed to establish a baseline of performance from which future improvements can be evaluated against.

## Land Use

Land use within the study area varies from residential to commercial and industrial. Commercial land uses are located in the downtown where retail store fronts, restaurants, and professional offices can be found. Also within the downtown are institutional land uses such as civic buildings and churches. Surrounding the downtown is mix of residential, commercial and industrial development. Public works facilities include a DPW complex on Young's Field Road and the water treatment facility on West Street.

Although a detailed assessment of existing and future land use was not requested to be studied as part of this project, it is difficult to plan transportation improvements without some basic knowledge and assumptions regarding the expectations for future land development in the town. Through conversations with town officials, it has been noted that future residential development is targeted for the north and northeast of downtown, and continued commercial development is expected to intensify along Grove Street to the southeast of the downtown. The future expansion of Downtown itself is most likely to occur north of Boardman Terrace and west of the railroad in property currently occupied by town facilities and other industrial uses. Expansion of Downtown to the riverfront is viewed as an attractive proposal and one that should not be precluded by the development of transportation infrastructure that further isolates this valuable resource.



Figure 5 - Commercial uses along Bank Street

The conclusion that can be drawn from this cursory evaluation of future land development potential, is that Downtown New Milford's transportation infrastructure (especially Bridge Street) will continue to struggle with traffic pressure created by the demand for travel between the southwest and northeast corners of the town and those communities beyond the town limits. The ability of roads such as Bridge Street and East Street to carry this traffic may ultimately constrain this development from achieving the economic growth expectations envisioned by town leaders.

## Pedestrian Facilities

Sidewalks and crosswalks are extensively provided throughout the downtown, most notably along Main Street. The sidewalk network is relatively continuous although streets such as Boardman Terrace, Middle Street, and Nicholas Square lack sidewalks. Figure 7 illustrates the existing pedestrian network in Downtown New Milford.

Both Main Street and Railroad Street have several crosswalks, most of which are mid-block. These numerous crossing opportunities are successful in facilitating pedestrian movement through the downtown. South of Bridge Street the sidewalk network contains several gaps, which if completed would constitute a contiguous pedestrian network between the downtown and the residential neighborhoods to the south of downtown.

HVCEO has previously studied the 'Central New Milford Pedestrian Loop', which identified the need for the completion of a connected pedestrian network from New Milford's downtown to Route 7 and extending south along the Housatonic River to Still River Road. Once completed, the loop would connect Downtown to points south such as Lover's Leap State Park.

The degree of walkability of New Milford's downtown is based on more than the simple existence of sidewalks and crosswalks. The walkability of a place is related to other attributes as well. Walkscore.com is a web-based resource that assesses how walkable a community is, and considers the following characteristics that are reflective of walkable places:



Figure 6 - Pedestrian accommodation at Elm Street



Figure 7 - Downtown pedestrian network

- **A center:** Walkable neighborhoods have a center, whether it’s a main street or a public space.
- **People:** Enough people for businesses to flourish and for public transit to run frequently.
- **Mixed income, mixed use:** Affordable housing located near businesses.
- **Parks and public space:** Plenty of public places to gather and play.
- **Pedestrian design:** Buildings are close to the street, parking lots are relegated to the back.
- **Schools and workplaces:** Close enough that most residents can walk from their homes.
- **Complete streets:** Streets designed for bicyclists, pedestrians, and transit.

Walk Score rates Downtown New Milford as a 91 (on a scale of 0 to 100), which they consider a ‘Walkers Paradise’. Figure 8 from Walk Score shows the amenities within a 10-minute walk from Town Hall.

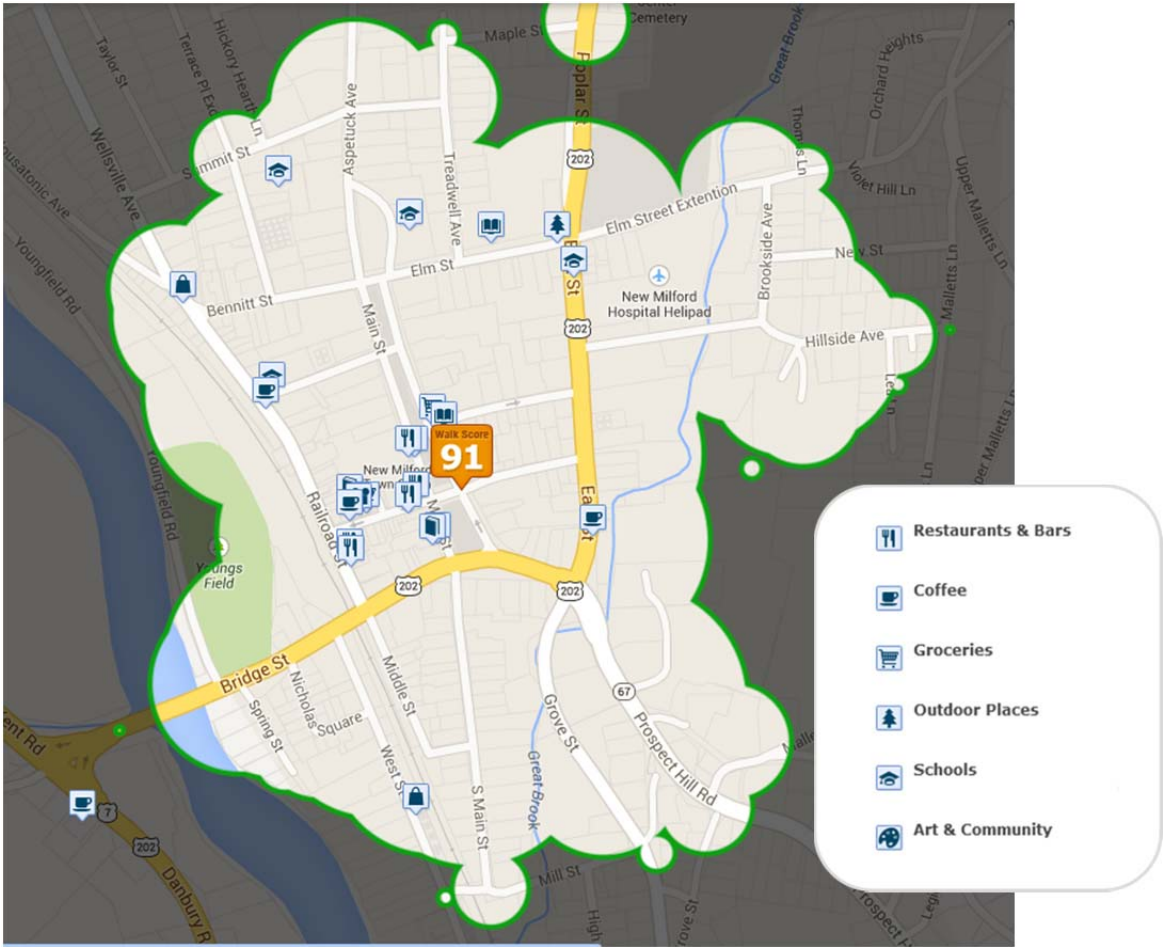


Figure 8 - Amenities within a 10-minute walk of Town Hall (Source: Walk Score)

### Bicycle Facilities

The planning and development of bicycle facilities in New Milford has resulted in significant progress in recent years. The town has recently installed ‘Share the Road’ signage and ‘Sharrows’ pavement markings on Boardman Road, Housatonic Avenue, and Grove Street. Additionally, there is a 5-mile stretch of the New Milford River Trail that extends from Gaylordsville to the Boardman Bridge.





Figure 9 - Examples of 'sharrow' pavement markings and bicycle signage

Feasibility planning is currently underway to continue the Trail south from the bridge to Helen Marx Park, where it is expected to connect to a proposed path that would replace the existing Young's Field Road. The feasibility of this final segment that would bring the trail to Bridge Street is dependent on whether or not Young's Field Road can be relocated away from the river.

While much progress has been made, bicycle facilities such as bike lanes and "Share the Road" signage are noticeably absent from the Downtown road network despite Bridge Street being located along a popular route for recreational long-distance riders. Most streets within the downtown are relatively friendly to bicyclists; however, the major highways leading to the downtown (Routes 7 and 202), are generally only travelled by the most experienced cyclists. The factors that affect the quality and safety of the bicycling environment include:

- Traffic volume
- Traffic speed
- Roadway width
- Shoulder width
- Curb cuts
- Topography
- Intersection size and design
- Presence of bicycle lanes or sharrows

Except for Route 7, East Street and Bridge Street, traffic volumes in the study area are relatively low, providing a relatively comfortable bicycling environment for capable riders. Roadway features in the study area are generally suitable for bicycling; with the most notable exception being Bridge Street, which has several intersections, frequent curb cuts and narrow shoulders. As such, improvements to Bridge Street that enhance accessibility and safety for bicyclists would be greatly beneficial.



A ten-minute bicycling radius was generated by Walk Score and shown in Figure 11. Multiple amenities are accessible within a ten minute bicycle ride from Bridge Street, both within the downtown area as well as along Route 7. The ability to safely and comfortably bike to these locations can potentially reduce the number of short-distance vehicular trips over time.



Figure 10 - Bicyclists along Bridge Street

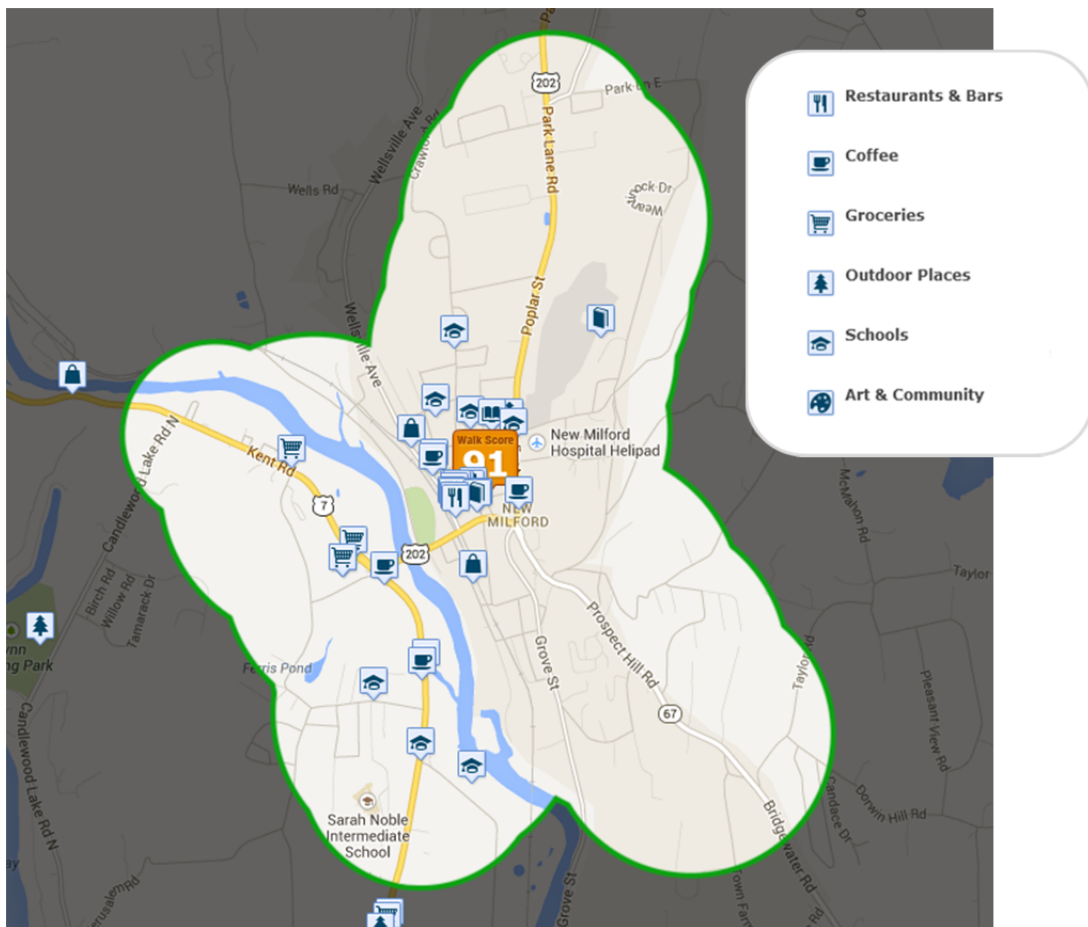


Figure 11 - Amenities within a 10-minute bicycle ride from Town Hall (source: Walk Score)

## Transit

Transit in the study area is limited to the Housatonic Area Regional Transit (HART) Route 7 Bus that connects New Milford to Danbury. The bus route originates in Downtown Danbury and travels along Route 7 with stops in Brookfield before arriving in New Milford. The route crosses the Housatonic River on Bridge Street and continues north through the downtown on Main Street with a terminus at the New Milford Medical Center.

Buses operate on an hourly basis from 6 am to 6 pm during the week with buses departing every half hour during morning and afternoon rush hour periods. Saturday service is available on an hourly basis between 8 am and 5 pm. Buses stop at the New Milford Green with service by request to the Butter Brook area. Notably absent from bus stops at the Green are shelters or other amenities for transit riders.

Although New Milford is also connected to the Danbury Branch Line of the Metro-North Railroad, commuter rail operations were suspended several years ago due to low demand for passenger service. This train line travels north/south on the eastern side of the Housatonic River, between Railroad Street and West Street, passing by the once active rail station just north of Bridge Street.

Train service on the Danbury Branch Line has been studied by the Connecticut DOT, and a site has been selected for a potential train station if

service is restored to New Milford in the future. The potential site is located north of the historic station on Railroad Street at Boardman Terrace. Commuter train service and a station adjacent to Downtown would be a tremendous asset to the community, and potentially generate new development opportunities. As New Milford's transportation network is severely constrained, rail service could be a key to unlocking the town's future growth and prosperity.



Figure 12 - New Milford's transit network

## Traffic Volume Trends

Traffic volumes in the study area have fluctuated over the past decade, with average daily traffic volumes (ADT) within the study area steadily rising from 2005 to 2011. An index of ADT volumes was created from seven locations within the study area where data was available between 1996 and 2011 (these locations are listed in the table and plotted in the figure below). Between 1996 and 2011, combined volumes increased from 104,000 to 110,200; about a 6% change.

Table 1 - Historical traffic volume trends

Count Location	1996	1999	2002	2005	2008	2011
Route 7 north of Bridge Street	15000	16400	16900	16700	12600	13200
Bridge St west of Young's Field Rd	24100	25100	25500	21600	25300	26600
Bridge St east of West Main St	17100	17600	16100	15500	17000	17100
Bridge St east of East Main St	14600	15400	13800	13700	15500	16100
East St north of Bridge St	14100	14800	13000	13800	14000	16600
Poplar St north of Elm St	16200	17100	15700	16900	18100	17100
Elm St Ext east of East St	2900	3000	3500	3400	3500	3500
<b>Combined Total</b>	<b>104000</b>	<b>109400</b>	<b>104500</b>	<b>101600</b>	<b>106000</b>	<b>110200</b>

Red = interpolated values

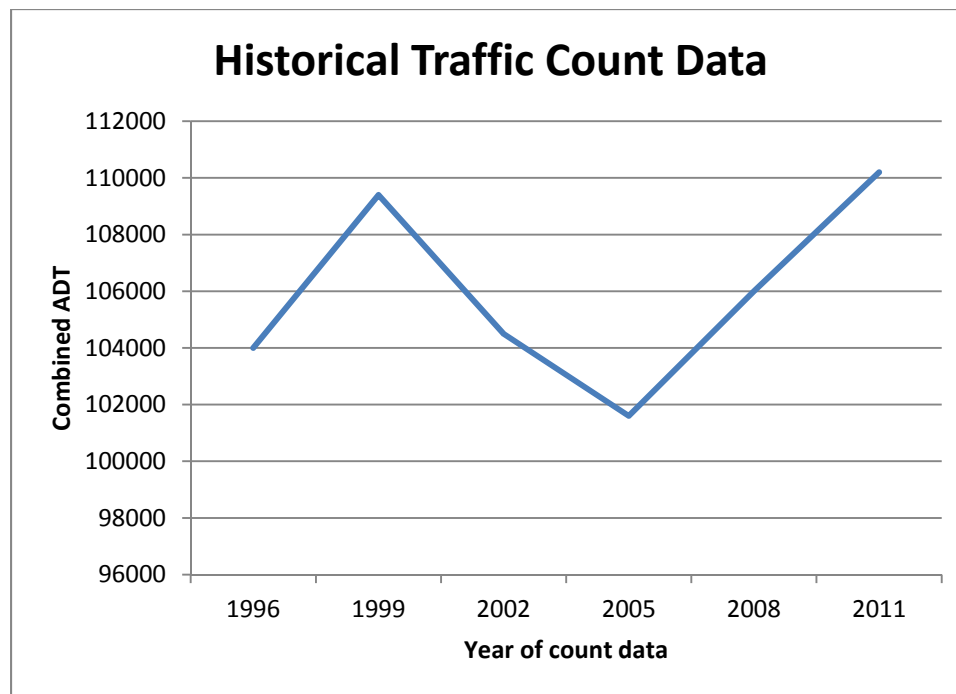


Figure 13 – Historical traffic volume levels

Traffic throughout the study area street network varies from street to street with the highest traffic volumes found on Route 7, Bridge Street, and East Street. Figure 14 shows ADT counts for various locations within the study area. Traffic generally declined between 1999 and 2005, but has been steadily rebounding since then, and 2011 appears to be an historic peak.

One notable decrease in traffic volume has occurred on Prospect Hill Road (Route 67) which is due to the diversion of traffic onto the new Grove Street connection. Also, along Route 7 north of Pickett District Road, traffic decreased from 2008 to 2011. This reduction in traffic occurs despite an increase in Route 7 traffic south of Still River Drive and north of Bridge Street. A corresponding increase in traffic along Still River Drive suggests that following the reconstruction of the Grove Street intersection, traffic has indeed diverted in significant numbers to the Still River Drive/Grove Street corridor.

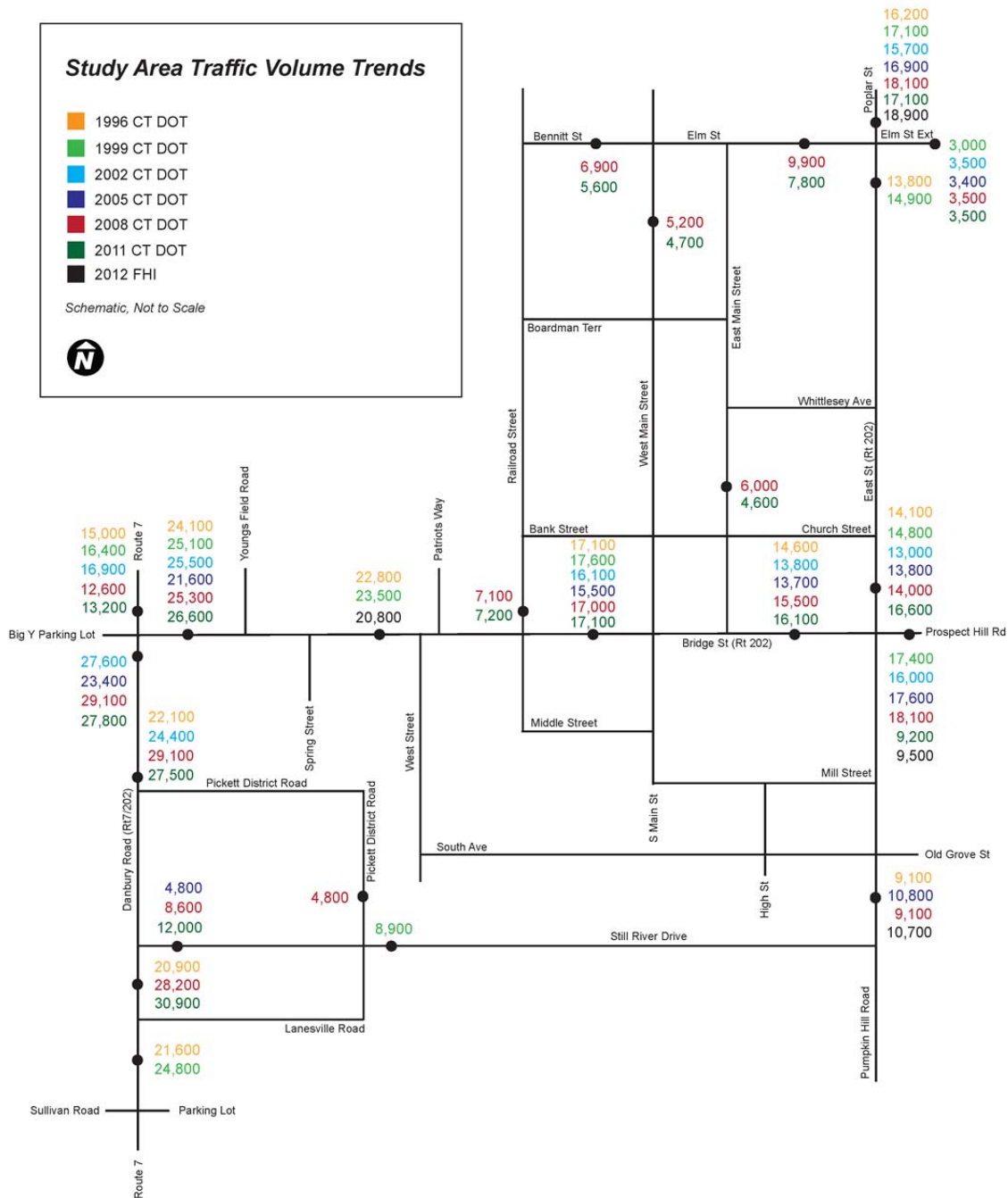


Figure 14 - Daily traffic counts along the road network



The highest volumes measured on Bridge Street were found west of Young’s Field Road (just east of the Veterans Bridge). These volumes ranged from approximately 21,600 and 26,600 vehicles per day whereas traffic volumes east of Main Street ranged from 13,700 and 16,100 vehicles per day. Even as evidence suggests that more traffic is bypassing Bridge Street with the realignment of Grove Street and the expansion of the intersection, traffic on Bridge Street has been relatively unchanged over the years. This is partly because the Veterans Bridge operates ‘at capacity’ in the peak hours of the day (traffic counts have been historically stable at approximately 2,100 vehicles in the PM peak hour) when the demand for Bridge Street is the highest. There appears to be latent demand for travel over the Veterans Bridge, meaning that any improvement that adds additional capacity to the Bridge or to other roads in the network will result in more traffic backfilling the reductions achieved by those improvements. In other words, the Veterans Bridge acts like a control valve in a water pipe – metering the flow of traffic along Bridge Street. Even if the valve could be opened to allow more flow, or new pipes installed to redistribute flow, there is more demand than the system can handle during peak times and the bridge always operates at its capacity. A wider bridge would most likely move the points of congestion to other places in the transportation network, like further east along Bridge Street, East Street and possibly local roads throughout the Downtown.

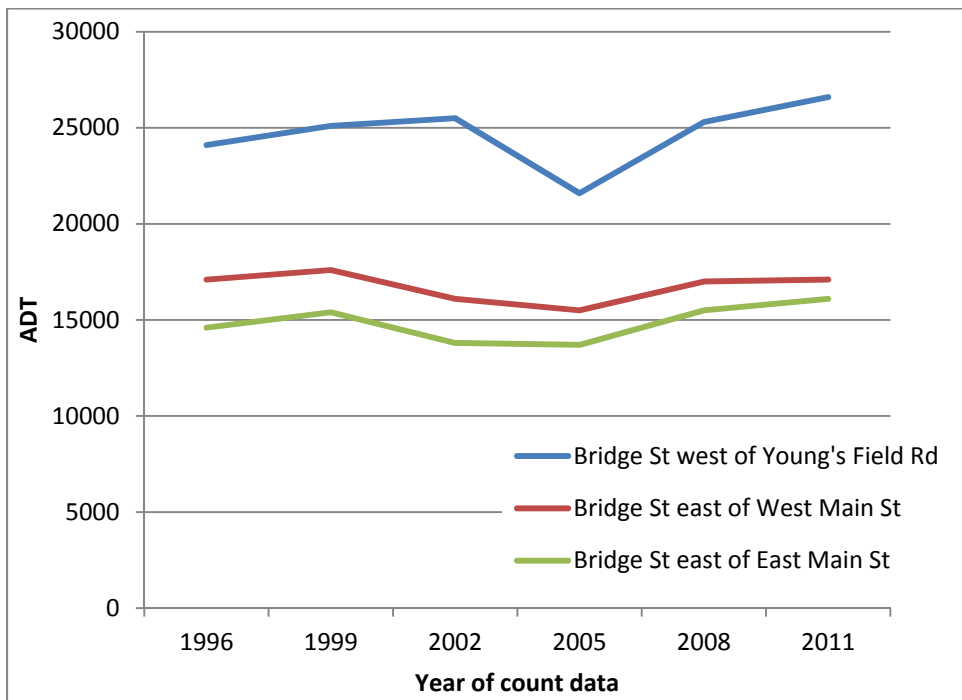


Figure 15 - Daily traffic trends along Bridge Street

### Peak Hour Traffic Conditions

When it comes to traffic flow in the morning and afternoon peak hours of the day, the directionality of the flow fluctuates. During the AM peak hour, traffic generally enters the downtown areas from the north and exits to the south. In the PM, this trend is reversed. Figure 16 and Figure 17 illustrate the inflow and outflow of traffic on the roads leading in and out of the downtown area. Schematic diagrams

of all AM and PM peak hour turn movement counts performed for this study are provided in the Technical Appendix.

To gain a basic understanding of how much traffic either starts or ends a trip in the downtown itself, the approximate number of vehicles parked in the area was estimated. To obtain this estimate, the approximate area of surface parking was calculating using Google mapping. Based on an area of about 406,500 square feet, and assuming each parking space requires 300 square feet to develop (inclusive of driveways, lanes and landscaping), the total number of parking spaces in the downtown is calculated to be roughly 1,500 spaces. Assuming those spaces are utilized at a 70% rate during the peak hour, the total number of trips that begin or end in the downtown is 1,050. This simple estimate does not include individual spaces for residential properties, duration of stay, and possibly understates the total trips within the downtown, but it provides a general impression of the amount of traffic that actually starts and stops in the downtown versus the amount of traffic that flows through the area without stopping. In both the morning and afternoon peak hours of the day, the majority of traffic on New Milford’s road network travels through the downtown area, destined for locations north and south of the center.

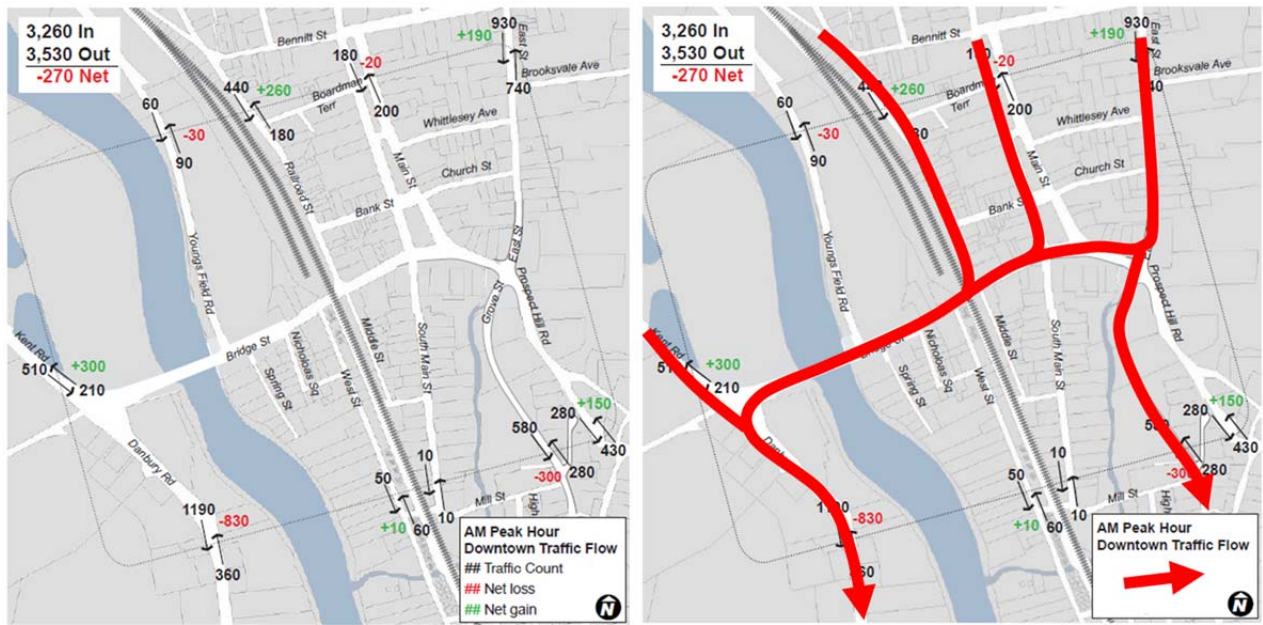


Figure 16 - AM peak hour traffic flows along downtown cordon

As noted on the preceding figure, about 3,300 and 3,500 trips enter and leave the downtown area in the AM peak hour respectively. Since the downtown can only park about 1,500 cars, and about a third (and sometimes more) of those spaces are empty during any given time of the day, it appears that much of the traffic – primarily along Route 7, Route 202, Route 67, and Grove Street are using parts of the downtown roadway system but are not stopping within the downtown itself.

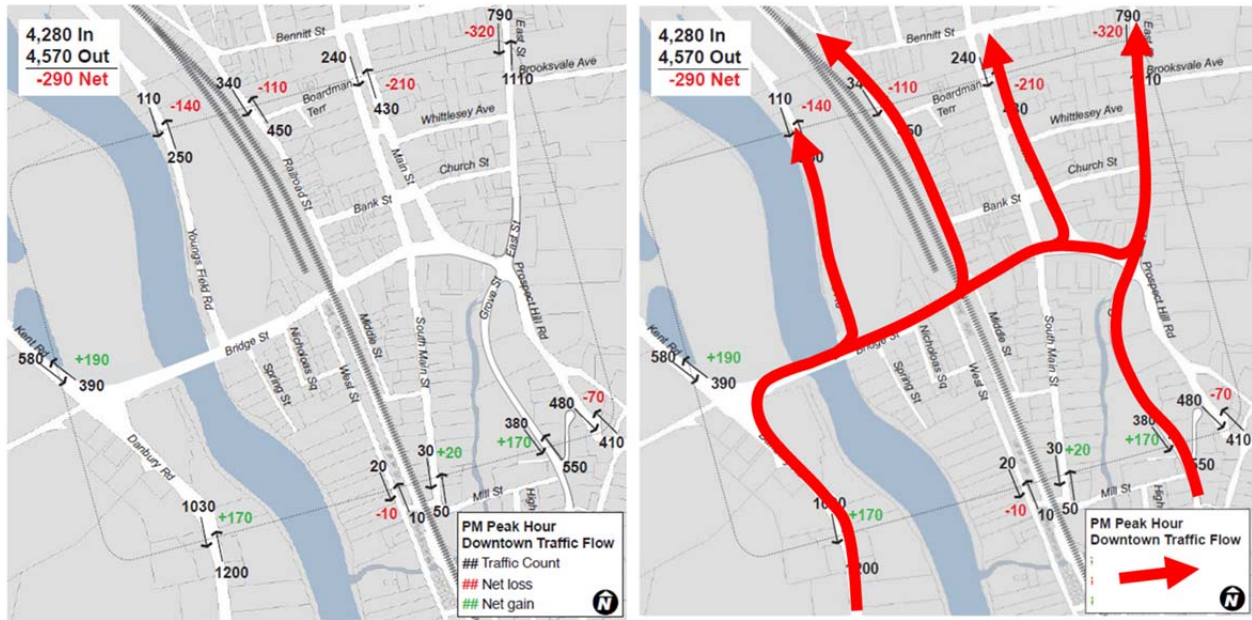


Figure 17 - PM peak hour traffic flows along downtown cordon

As noted on the preceding figure, about 4,300 and 4,600 trips enter and leave the downtown area in the PM peak hour respectively. Since the downtown can only park about 1,500 cars, and about a third (and sometimes more) of those spaces are empty during any given time of the day, it appears that much of the traffic – primarily along Route 7, Route 202, Route 67, and Grove Street are using parts of the downtown roadway system but are not stopping within the downtown itself.

### Grove Street Bypass

Traffic access to (and through) the Downtown is primarily served by Route 7 and Bridge Street; however, since the Grove Street/Bridge Street intersection has been improved, the Still River Drive/Grove Street corridor has become another viable option for motorists. The degree to which the Grove Street corridor is used is largely influenced by the land use pattern along Route 7. During the AM Peak hour, before most retail businesses are open, the traffic is more heavily comprised of work-related trips originating from Downtown New Milford and points north of the Downtown, and destined for places such as Danbury and Fairfield County. Traffic count data suggests that motorists who use East Street for part of their journey tend to favor the Grove Street corridor to bypass Bridge Street and Route 7. Figure 18 shows this preferred movement in which about 31% of the southbound traffic turns right onto Bridge Street, 55% use the Grove Street corridor, and the remaining 14% take a left onto Prospect Hill Road. Southbound traffic along West Main Street and Railroad Street seems to favor the Route 7 corridor, rather than making the left-turn onto Bridge Street and continuing south along the Grove Street corridor.

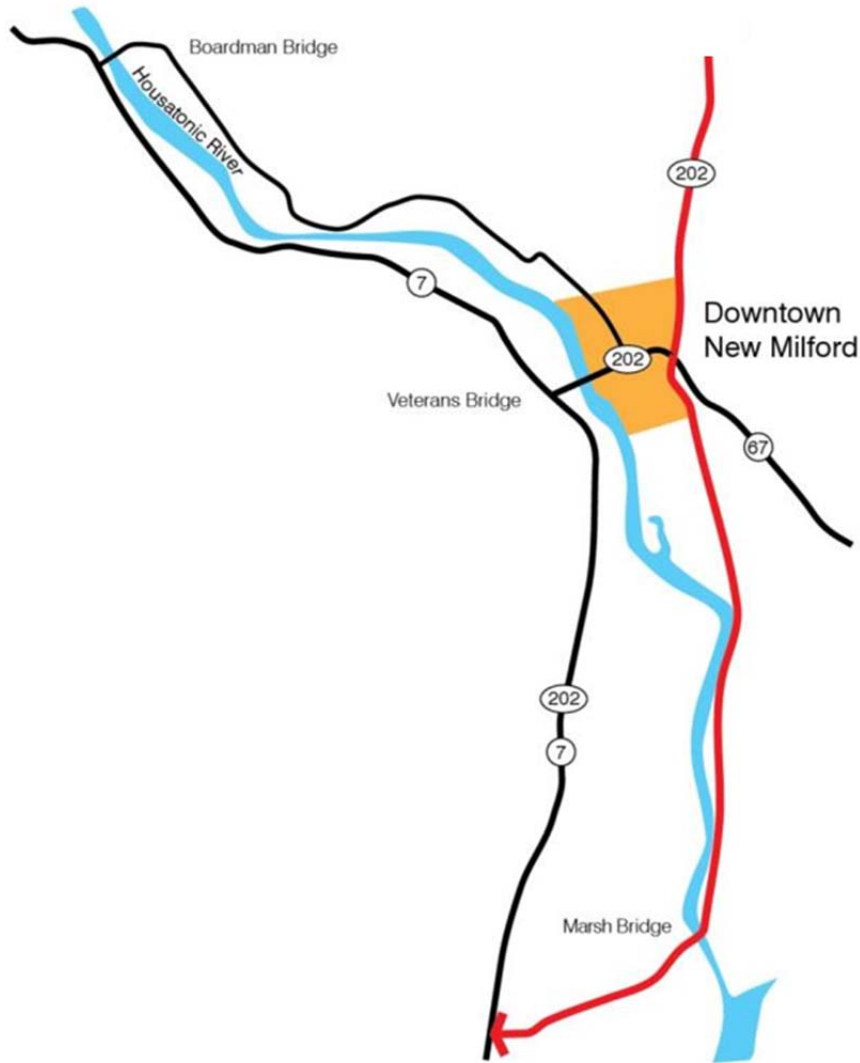


Figure 18 – Predominant AM peak hour flow

In the PM peak hour, approximately the same amount of traffic (as in the AM peak) uses the Grove Street corridor, although the direction of flow is primarily northbound. Since the PM peak hour has higher overall traffic levels, it might be assumed that the Grove Street corridor would be even more heavily utilized than it is. It is believed that the reason that Route 7 and Bridge Street receive the majority of traffic during the PM peak hour has to do with the influence of the shopping and dining establishments along Route 7. In addition to a general overlay of shopping and dining related traffic on the afternoon work-related traffic, some commuter traffic is now likely taking the Route 7 corridor to make a stop before continuing on to their final destination (see Figure 19). This is referred to as ‘trip chaining’ and is the reason why retail and food businesses locate along roads with heavy traffic volume. It is common for people to make a stop on their way home from work to pick up dinner or other items that happen to be sold along the way. For this reason, it is believed that the Grove Street corridor will not be effective in diverting more traffic away from Bridge Street, even with improved signage or a re-designation of Route 202 east of the river.



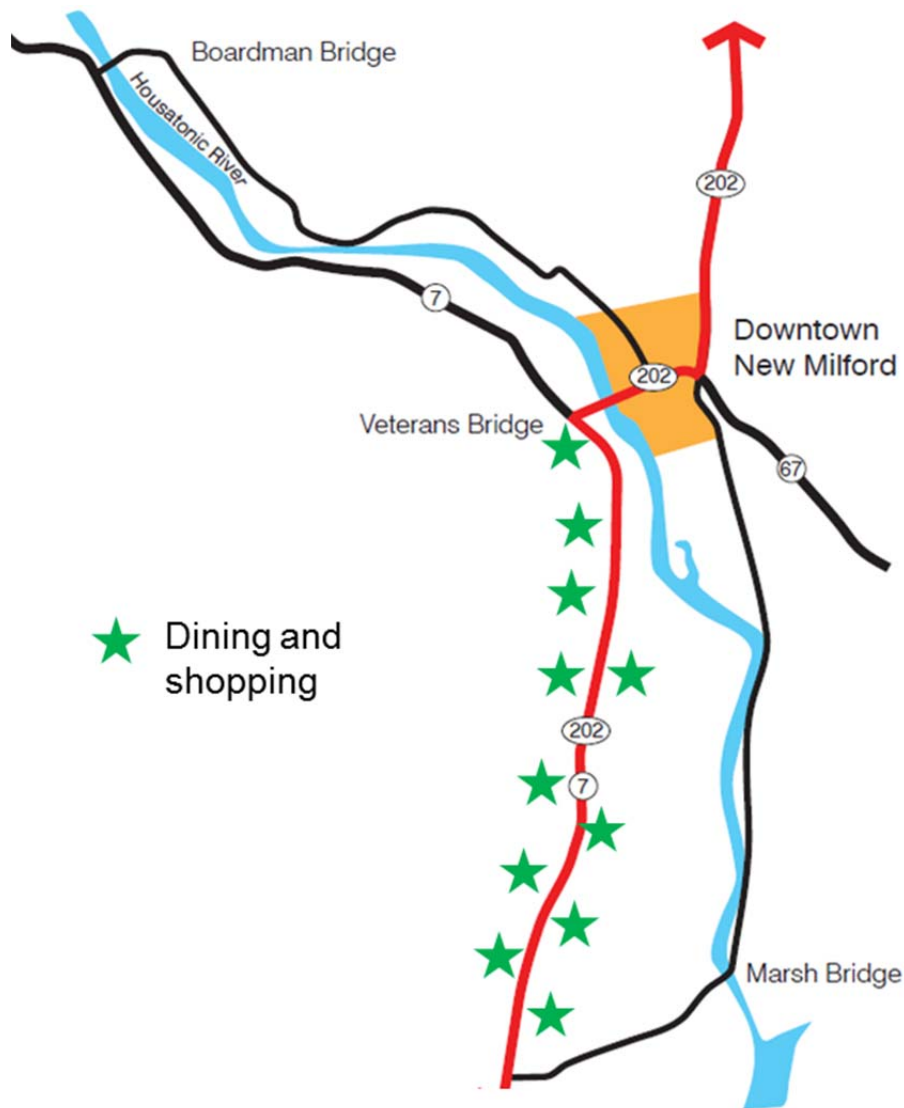


Figure 19 – Predominant PM peak hour flow

## Intersection Operations

The key measures of effectiveness for the peak hour traffic analysis are level of service (LOS) and intersection delay at the study area intersections. LOS is a qualitative measure of intersection operations and takes into account a number of operational conditions in the travel stream and the perception of those conditions by motorists. Six levels of service are defined with letter designations from A to F, with LOS A representing the best operating conditions and LOS F representing the worst. Conventional practices point to LOS C, describing a condition of stable traffic flow, as the minimum desirable level for peak traffic flow in rural and suburban areas. LOS D (and sometimes LOS E), with greater vehicle queues and delay, are often considered acceptable for urban areas because of the accessibility benefits and higher pedestrian interactions that result from increased density. Table 2 summarizes the LOS criteria, as specified by the Highway Capacity Manual.

Table 2 – Level Of Service criteria

Level of Service (LOS)	Signalized Intersection Control Delay (sec/veh)	Unsignalized Intersection Control Delay (sec/veh)
A	0-10	0-10
B	>10-20	> 10-15
C	>20-35	>15-25
D	>35-55	>25-35
E	>55-80	>35-50
F	>80	>50

Source: 2000 Highway Capacity Manual (Special Report 209)

Level of service designation is reported differently for signalized and unsignalized intersections. Thus, the delay ranges differ slightly between unsignalized and signalized intersections due to driver expectations and behavior for each LOS. For signalized intersections, LOS is defined in terms of delay, which is a measure of driver discomfort and frustration, and lost travel time. For unsignalized intersections, the LOS analysis assumes that the traffic on the mainline is not affected by traffic on the side street. The LOS for each movement is calculated by determining the number of gaps that are available in the conflicting traffic stream. Based on the number of gaps, the capacity of the movement can be calculated. For unsignalized intersections, the highest delayed movement is reported in addition to an overall delay. LOS for intersections analyzed in this study is presented in Table 3.

Table 3 - Study intersection Level Of Service

Intersection <sup>1</sup>	Control type	2012 AM Peak		2012 PM Peak	
		Intersection LOS (Delay in Sec.)	Stop Control Worst Movement	Intersection LOS (Delay in Sec.)	Stop Control Worst Movement
Route 7/Bridge Street	Signal	E (60)	-	E (75)	-
Bridge Street/West Street/Railroad Street	Signal	C (30)	-	D (50)	-
Bridge Street/West Main Street	Signal	C (25)	-	C (25)	-
Bridge Street/Grove Street/East Street	Signal	C (30)	-	C (30)	-
East Street/Elm Street	Signal	C (30)	-	F (>80)	-
Route 7/Sullivan Street	Signal	B (15)	-	C (20)	-
Bridge Street/Young’s Field Road	Stop	Not Counted		A (10)	C (25)
Bridge Street/Spring Street	Stop	Not Counted		A (10)	F (>50)
Bridge Street/West Street	Stop	A (5)	F (>50)	E (45)	F (>50)
Bennitt Street/Railroad Street	Stop	D (35)	F (>50)	F (>50)	F (>50)
Middle Street/South Main Street	Stop	Not Counted		A (5)	A (10)
Mill Street/High Street	Stop	Not Counted		A (5)	A (10)
South Avenue/Grove Street	Stop	Not Counted		A (5)	C (20)
Still River Drive/Pickett District Road	Stop	E (50)	F (>50)	F (>50)	F (>50)

<sup>1</sup> Intersections without stop controls and intersections with configurations not allowed in HCM analysis have been omitted from this table.

## Safety

Accident data for the study area was obtained from the New Milford Police Department for the three year period between 2010 and 2012. The data revealed a total of 431 crashes within the study area, with an average of 144 crashes per year. Crashes in the study area represent 22% of the approximately 660 total crashes per year (CTDOT data) in New Milford. Crashes were found to be most prevalent on Bridge Street which had 113 crashes over the three year period, and represents 26% of the crashes in the study area.

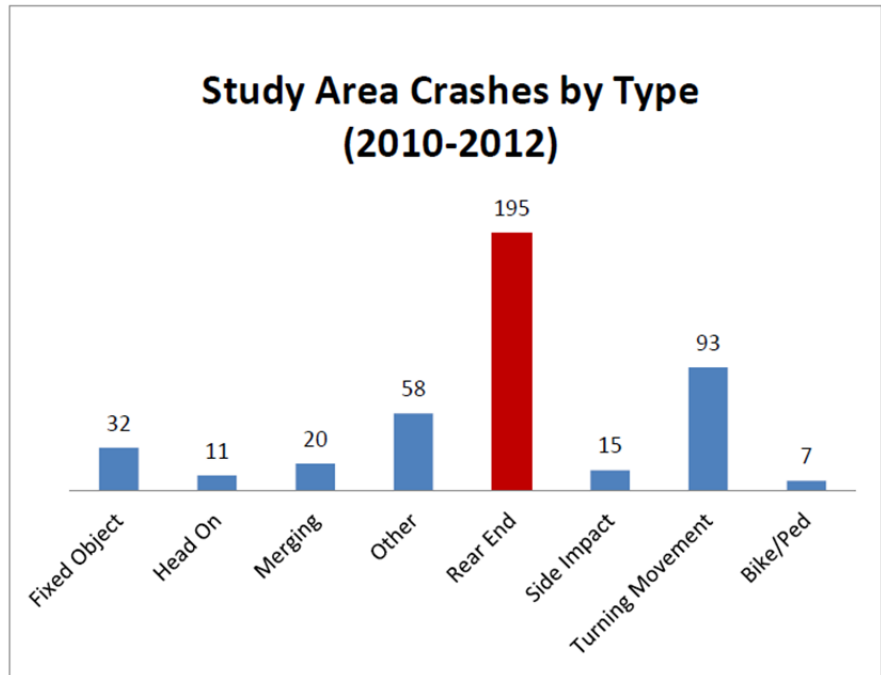


Figure 20 - Crash data within the project limits

Of the intersections on Bridge Street, the West Street, Railroad Street, and Grove Street intersections exhibit the highest frequency of crashes. A majority of these crashes are rear-end or turning movement crashes, which are the most common crash type within the study area.

Of the 431 crashes in the study area, 195 (45%) of these are rear end type crashes with 93 (22%) turning movement type crashes. Seven bicycle or pedestrian crashes occurred during the three year period. Pedestrian and bicycle crashes were spread throughout the study area with four crashes occurring in the downtown area and three occurring in the southern section of the study area (Bostwick Place, Grove Street, and Still River Drive).

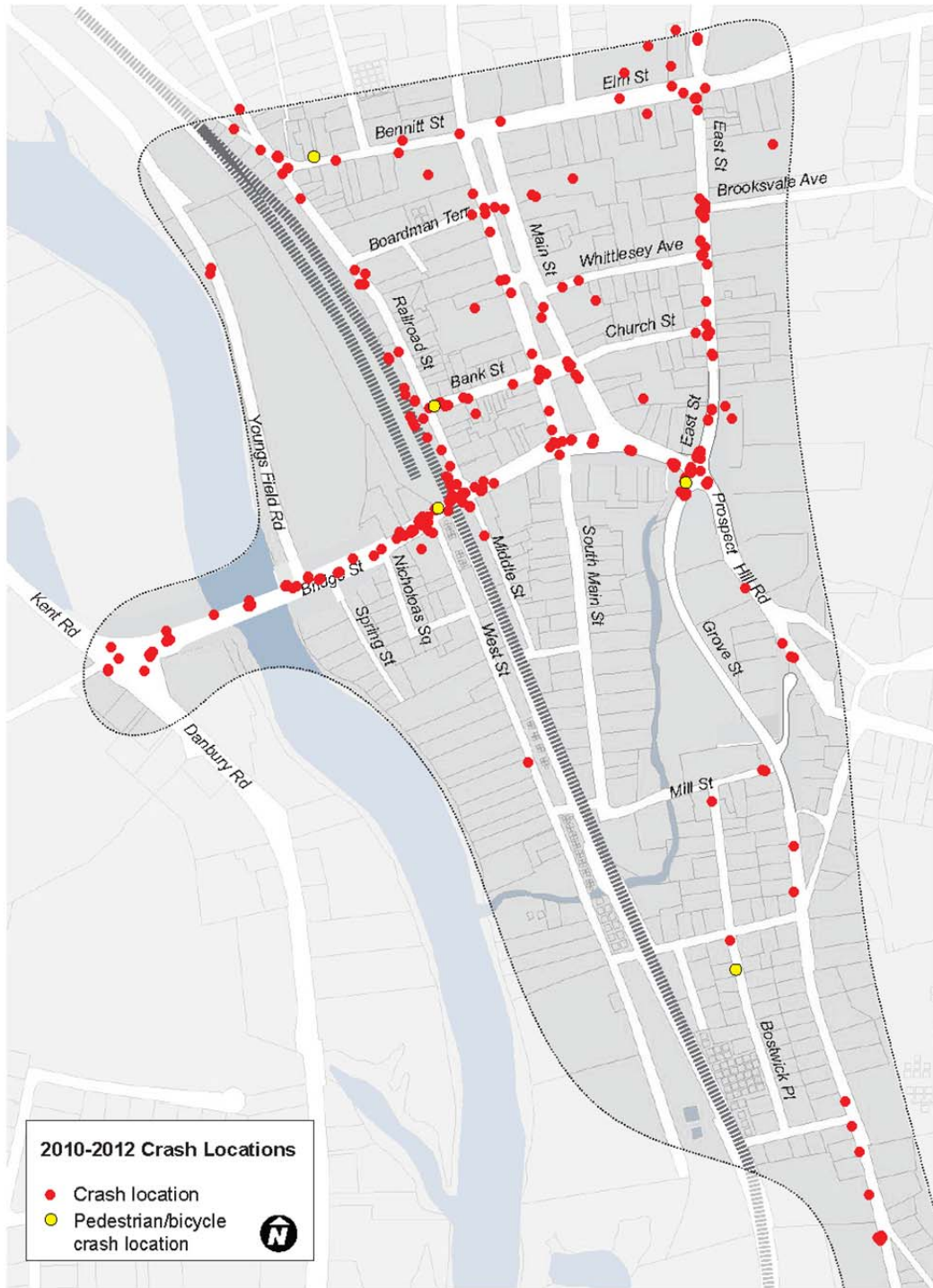


Figure 21 - Accident locations within the study area

In addition to reviewing the frequency of crashes in Downtown New Milford, crash rates were calculated which account for segment length, average daily traffic (ADT), timeframe, **and** crash frequency. For this reason, rates are better suited to reflect safety deficient locations than number of crashes by road segment alone. The relevant analysis factors identified were:



- Number of crashes
- Crash identification by segment
- Segment length
- Average daily Traffic (ADT) per segment
- Number of years of data

The individual crash rates by segment are outlined in Table 4. Crashes rates were found to be highest on Bridge Street, on the Route 7 northbound right-turn lane, and along Elm Street. The top locations do not necessarily exhibit the highest frequency of crashes, but reflect high concentrations of accidents due to the relatively short segment lengths. For this reason, crash rates are a more effective tool for use in prioritizing locations for improvement.

**Table 4 - Crash rates (2010-2012)**

Location	Segment (From/To)	Accident Total	Segment Length (ft)	2011 ADT	Length (mi)	Crash Rate <sup>1</sup>
Bridge Street	South Main Street to Route 67/East/Grove Intersection	26	579	16,100	0.11	13.44
Route 7	Northbound right turn lane leading to Bridge Street	17	393	18,000*	0.07	11.60
Bridge Street	Railroad St to South Main St	15	460	17,100	0.09	9.21
Elm Street	West Main to Railroad Street	8	761	5,600	0.14	9.05
East Street	Route 67/Bridge/Grove to Elm Street/2nd Hill	56	1,861	16,600	0.35	8.74
Railroad Street	Wellsville/Housatonic Avenue to Bridge Street	18	1,657	7,200	0.31	7.28
Bridge Street	Route 7 to Railroad Street Intersection	58	1,597	26,600	0.30	6.59
Still River Drive	Route 7 to Pickett District Road	18	1,772	12,000	0.34	4.08
Elm Street	Poplar Street to East Main	5	985	7,800	0.19	3.14
Still River Drive	Pickett District Road to Lovers Leap Bridge	22	3,185	11,600	0.60	2.87
Grove Street	Route 67/East/Bridge Street to Lovers Leap Bridge	45	11,881	9,400	2.25	1.94

<sup>1</sup>Crash Rate = Crash Count x Million Miles Traveled / Exposure

Where Exposure = Average Daily Traffic x 365 x 3 x length of segment

\*Calculated ADT based on peak hour volume.

The causes of crashes in Downtown New Milford result from a combination of many factors including driver behavior, traffic density, weather and light conditions, and roadway geometry. A majority of the crashes identified were rear end or turning movement crashes. Safety deficiencies are frequently used to justify the need for road improvements. The crash rates identified in this analysis were calculated using industry standard methodologies; therefore, they may be compared to corridor and statewide averages in pursuit of Highway Safety Funds.

## Key Observations and Implications

The Conditions Assessment performed for this study, and detailed in the preceding chapter, resulted in the formulation of the following key observations, which set the stage for a more in-depth discussion of issues and opportunities with the public.

- Access to Downtown New Milford is inhibited by topography – mainly hills and the River – as well as constrained by traffic confluence along Bridge Street created by Route 7, Route 202, Route 67 and Grove Street traffic demand combined with locally generated traffic in the downtown area.
- Central New Milford is eccentrically located in relation to where people live and work. Most people live north and east of the downtown, and work south and west of the downtown. The orientation of Bridge Street relative to this flow of traffic serves as a conduit for traffic merely passing through town.
- The Veterans Bridge meters the flow of traffic into the downtown area and has a direct impact on the amount of traffic congestion that occurs at intersections along Bridge Street. There appears to be latent demand for travel along Bridge Street; that is, widening the Veterans Bridge would likely draw more traffic to this corridor and move the problems of congestion and delay to other point in the network.
- Accident rates along Bridge Street and East Street indicate the need for improvements that maximize safety for motorists, bicyclists and pedestrians.
- Population and employment in New Milford are currently too low to allow for extensive public transportation expansion to help relieve vehicular traffic demand.
- The railroad line – which is lightly used for freight service – currently, provides more of a barrier than a benefit to transportation mobility. It currently limits east-west access through the downtown.
- The Downtown area could benefit from one of more crossing over the railroad tracks, which would offer greater network connectivity and help relieve Bridge Street from growing traffic pressure.
- Parking is in ample supply for Downtown businesses; however, wayfinding signage and improvements to the pedestrian experience are needed to achieve better overall utilization of spaces
- Bicycling in the area appears to be an increasing trend; however, no formal bicycle accommodations exist in the study area. Both on-street and off-street bicycle facilities are needed, as well as bicycle parking at all major destinations in the downtown area
- Future residential and commercial development aspirations could potentially be constrained by Downtown New Milford’s congested transportation network, unless major road projects are implemented.
- Traffic calming along West Main Street has been effective at controlling vehicular speeds and enhancing the pedestrian experience. Similar treatments along East Main Street would help to enforce safe driving practices around the historic green

## Public Input

Input from New Milford’s citizenry and other stakeholders were actively sought throughout this study process. Significant outreach activities included:

1. Distribution of an online survey
2. Meeting with the Connecticut Department of Transportation
3. ‘Walkshop’ of the study area with project stakeholders, including the CTDOT
4. Public workshop held on May 21<sup>st</sup>, 2013

A summary of these activities is included in the following text, and was used to develop a series of planning and design drivers that were used to define and evaluate a range of transportation improvement options for the study area.

## Online Survey

An online survey was developed to obtain feedback on issues and opportunities for Downtown New Milford’s transportation system. The survey ran during the months of May and June in 2013 and received over 370 responses. Of those responses:

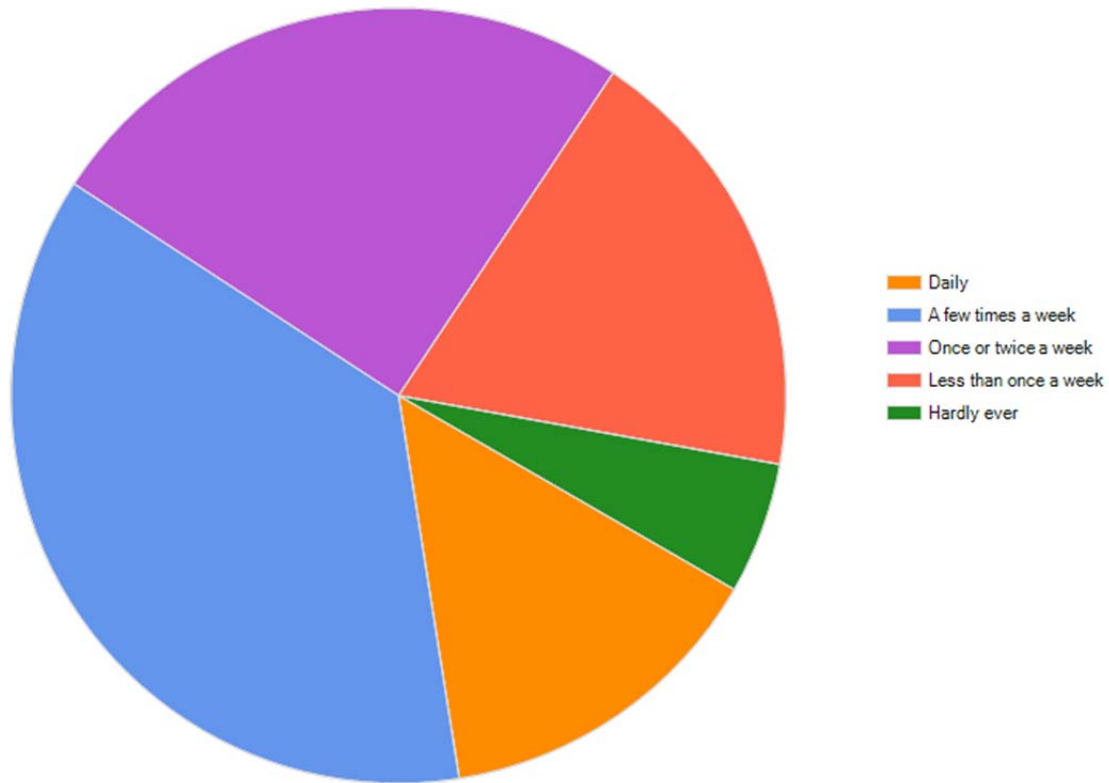
- Approximately 57% were women and 43% were men
- The age distribution was:
  - < 20 years old: 0.5%
  - 20 – 29 years: 3.0%
  - 30 – 39 years: 22.0%
  - 40 – 49 years: 30.4%
  - 50 – 59 years: 23.4%
  - 60 - 69 years: 15.1%
  - > 70 years old: 5.6%
- Approximately 94% of the respondents live in New Milford, 43% work in New Milford, and less than 3% responded ‘neither’
- Approximately 2% were town residents for less than 2 years, 24% for 2 to 10 years, and 74% for over 10 years
- About 50% of those surveyed travel to New Milford’s downtown more than twice a week to work or shop

The screenshot shows a survey interface with a dark header and a light blue background. The questions are as follows:

- 5. What is your biggest concern about the downtown?** (Text input field)
- 6. What do you like about visiting New Milford's downtown? (select all that apply)**
  - Walking in the downtown
  - Shopping
  - Going to restaurants
  - Running errands
  - Sense of community
  - Other (please specify) (Text input field)
- 7. What would you like to see more of downtown? (select all that apply)**
  - Other people
  - Shops
  - Restaurants
  - Better access to the river
  - More parking
  - Bicycle lanes or paths
  - Other (please specify) (Text input field)
- 8. What do you want to improve in downtown New Milford? (select all that apply)**
  - Quality of walking environment
  - Quality of bicycle environment

Figure 22 - Sample page from online survey

**How often do you shop or conduct business in New Milford's downtown?**

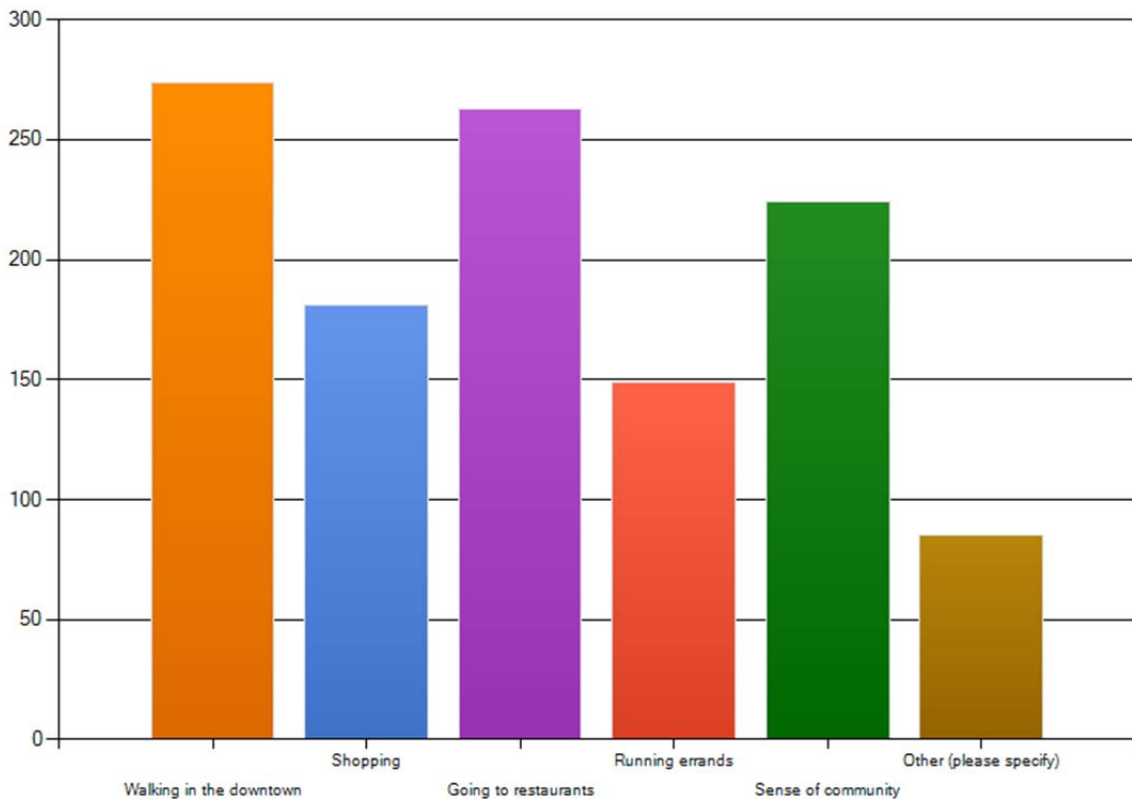


Survey participants cited many reasons to visit downtown. The most likely reasons were to visit the public spaces that exist there, namely the Green, the movie theater, the library, and the events held on the green, especially around the holidays. The variety of shops and the ambience of a New England town were also mentioned as reasons for visiting Downtown, along with the ability to comfortably walk there. In summary, the sense of community is one of the main reasons why people go Downtown New Milford.

Many respondents cited 'livability' as the primary attribute that they like about Downtown. Many people want to see safer crosswalks for better access to Downtown from south of Bridge Street as well as improved connections between Main St and the Housatonic River. People want more benches in the green, more plantings and gardens, more bicycle racks to promote biking, and more areas where kids can play safely. Responses also showed a desire for a pedestrian mall somewhere in downtown, even if it was only part time. Better bus routes, bike routes, and running routes were also prominent in the comments.



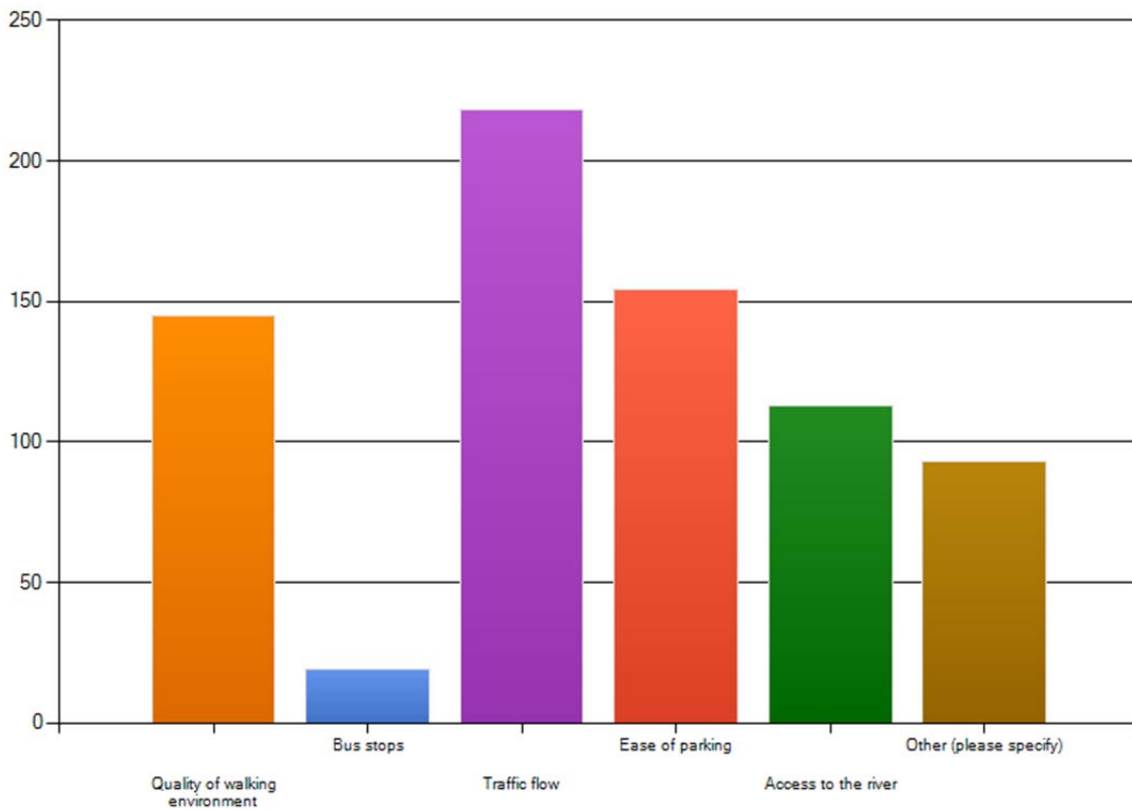
**What do you like about visiting New Milford's downtown? (select all that apply)**



There were many concerns over New Milford's downtown that were expressed by the survey respondents. The most common concern was the traffic congestion created by Route 7, Route 202, and Route 67. Other issues with traffic centered on downtown parking availability and the speed bumps that some people are opposed to. The heavy flow of traffic was also cited as the cause of a wide variety of safety issues, including: the intersection of Elm St and Main Street at the north end of the Green, where people say stop signs are not clearly marked and often disregarded; and the lack of safety that is provided for pedestrians. Desires for a crossing over Bridge St closer to Young's Field as well as over Rt. 7 both stood out.

In addition, a large portion of respondents were concerned about the well-being and preservation of the town. Worries about the economic health of downtown were expressed as people noted the amount of empty storefronts almost as often as they mentioned traffic issues. Many people also voiced opinions about a lack of shelters for the homeless population. An issue of equal importance was the hope that historic preservation could continue in downtown. Safety concerns stemming from the lack of police presence in public spaces were also noted in relation to the town's perceived livability.

**What do you want to improve in downtown New Milford? (select all that apply)**



In terms of improvements to the Downtown, pedestrian/bicyclist convenience and traffic safety were the primary responses. Bike and pedestrian paths from the river to downtown were a common theme as well as safer crossings across Rt. 7 at the intersection with Bridge St., and more crossings of Bridge St. near downtown. Many people stated that they want to see the speed tables on Main St removed, and the intersection on the north end of the Green better marked to improve safety. A concern about the safety at the bottom of Bank St. was also raised and a possible solution of making it a three way stop proposed. Improving traffic flow was a predominant theme throughout the comments.

When asked if people would favor of roadway modifications in the downtown if they improved the flow of traffic in the downtown, a majority of respondents said they would support roadway modifications to improve traffic flow, but there were many stipulations. The main concern was one of preserving the beauty of downtown, namely the green and the historic aspects. Respondents also voiced a concern about the economic impacts. Comments indicated that people didn't want the town paying for these improvements and should look for funding from other places. Support for low-cost improvements such as retiming traffic lights and better signage was reflected in a number of responses.

**Meeting with the Connecticut Department of Transportation in Newington**

On May 17<sup>th</sup>, 2013, a meeting was held with CTDOT to discuss preliminary ideas for improving traffic flow along Bridge Street. Representatives from the DOT Division of Traffic Engineering outlined plans to

upgrade signal systems at Main Street and at Railroad Street. The upgrades will essentially replace outdated signal equipment with modern technology that includes phases for emergency vehicle preemption. There will also be some minor modification to the Railroad Street intersection which will involve removing the signal heads at West Street and restriping the pavement markings. Neither of these intersection designs is expected to significantly improve traffic operations along Bridge Street. The Railroad Street intersection is in the preliminary design stage and is expected to go to construction in 2015.

The discussion also covered the potential for implementation of adaptive signal control (ASC) technology on Bridge Street. Adaptive signal control is an advanced form of traffic control that can assess the actual demand for various movements at an intersection's approach in real time and make appropriate adjustments to the signal system's timing parameters to optimize operations. Given the fluctuations in traffic demand along the corridor, the high numbers of accidents, the influence of the railroad tracks and freight train schedules, and other physical constraints that preclude widening the road; adaptive signal control can potentially be a viable option. The DOT stated that they are receptive to this idea, but it would need to be explored in more detail and might potentially require the Town to take over the responsibility of maintenance and operation of the signal systems from the State.

The DOT also noted that CMAQ (Congestion Mitigation and Air Quality Improvement Program) funding is coming up, and the Town should submit an application for money to study ASC in greater engineering detail. CMAQ is a program jointly administered by FHWA and the Federal Transit Administration (FTA) to help communities develop and fund projects that will assist in reducing transportation-related emissions. Bridge Street, due to its traffic and accident related congestion, would be an appropriate project for this type of funding.

Finally, the DOT looked at 2012 traffic counts performed by FHI at the Bridge Street/Grove Street intersections and recognized that both the magnitude and distribution of traffic at the intersection is significantly different than the traffic forecasts used for the design of the signal system. The DOT agreed that a retiming of this intersection would be an appropriate recommendation for this study, and something that could potentially be an early action item.

## Walkshop

On the afternoon of May 21<sup>st</sup>, just before the public workshop, Town staff, DOT representatives, the consultant team, and other interested members of the public assembled to take a walking tour of the study area. This tour focused primarily on Bridge Street, but the Elm Street/East Street intersection was also visited.



Figure 23 - Bridge Street/Grove Street intersection

The Bridge Street tour started at the

intersection with Grove Street at approximately 11:30 AM. Traffic was relatively light and the intersection was easily handling the demand. It was noted that heavy southbound right-turning traffic flow during the PM peak hour results in queuing along East Street. It was suggested that this intersection be evaluated based on current traffic counts to determine if improvements can be made.



Figure 24 – East Main Street intersection (looking west along Bridge St.)

Moving to the Main Street intersection, it was confirmed that new signal equipment is scheduled to be installed by 2014. There appears to be a need for a pedestrian crosswalk at East Main Street, which should be evaluated from a safety standpoint. It was noted that police are needed to help control the intersection when the funeral home is in operation.

Continuing to the Railroad Street intersection, a number of issues were identified. Due to the restriction of left hand turn from Young's Field Road, motorists' use Patriot's Way to make left exists onto Bridge Street. The preliminary design plans from the CTDOT indicate that the signal at West Street is to be eliminated, potentially creating an issue for drivers attempting to make a left hand turn onto Bridge Street from West Street.



Figure 26 – Railroad Street intersection (looking west along Bridge St.)

The idea for relocating Young's Field Road along Patriot's Way was discussed; however, the engineers from the DOT expressed concern that the two closely spaced intersections divided by the railroad would not likely function well.

The tour of Bridge Street concluded with a look at the Young's Field Road



Figure 25 – Young's Field Road look west along Bridge St.



intersection. The close spacing of the intersection to the bridge approach was noted and it was confirmed that there is not enough space to widen the road to allow an eastbound left-turn lane on Bridge Street in the eastbound direction. Options to realign Young's Field Road through the tennis courts were discussed; however, it was suggested that any impact to the courts, the memorial and the park itself would likely be unacceptable to the community.

The final intersection that was visited was the Elm Street/East Street intersection. It was observed that it only takes one left turning vehicle from East Street to Elm Street to trigger lengthy vehicle queues along East Street. At times, the queues can extend all the way to the Grove Street intersection. The narrow 2-lane cross section of East Street combined with high peak hour volumes result in heavy delays to drivers along this section of road. It



Figure 27 – East Street/Elm Street intersections (looking north)

was noted that the utility pole on the southeast corner of the intersection prevents vehicles (mainly trucks) from bypassing a left turning vehicle. Widening the northbound approach to the intersection and/or relocating the utility pole were suggested measures to mitigate congestion at this intersection. The DOT also committed to looking into vehicular crashes along this segment of road to see if improvements could be paid for with safety funding.

## Public Workshop

A public workshop was held at the Town Hall on the evening of May 21<sup>st</sup>. Twenty-six members of the public attended. The meeting included a brief presentation from the Town's planning consultant (FHI) followed by an interactive working exercise that required participants to illustrate on mapping where they observe issues and their ideas for improving conditions. At the end of the evening, various ideas were summarized and each person was asked to place three sticky dots next to the ideas that they felt deserved highest priority. The result of that exercise is listed in Table 5.



Figure 28 - Workshop participants looking for solutions

Table 5 - Prioritized list of improvements from the public workshop

Public Comment	votes
Fix the Rt. 7 right turn at Bridge Street. Vehicles don't yield to through traffic	8
Include a modern roundabout at Pickett District Rd and Still River Dr.	8
Provide a bike trail along Young's Field Rd/Riverfront	6
Realign Young's Field Rd to exit at Patriots Way	6
Route school buses away from Bridge Street when they are not carrying children	4
Synchronize traffic lights on Bridge Street	4
Reconnect Old Grove St to Prospect Hill Rd	3
Allow vehicles to turn right onto Bridges St from Railroad St when signal is red	2
Make it easier for turns onto Bridge St from all side streets	2
Provide a bike lane on Route 202	2
Provide a left turn lane on Bridge St into Young's Field Rd	1
Provide a northbound left turn lane on East St to access Elm St	1
Provide a traffic signal on Pickett District and Still River Dr.	1
Calm traffic on East Main Street - similar to what was done on West Main St	1
Provide a connection from Bennitt St to Patriots Way (over RR tracks)	1
Install bike racks throughout the downtown	1
Restore commuter rail service to the Downtown	1
Fix the southbound right turn from East St to Bridge St, which often backs up	0
Reconstruct the Veterans Bridge to include 3 lanes	0
Right turning trucks from Young's Field Rd encroach onto the EB lane of Bridge St	0
Add more parking to Patriots Way and restripe spaces	0
Fix pedestrian crossings at East St and Church St	0
Provide more enforcement and education services	0
Re-time the Grove St/Bridge St intersection	0
relocate Boardman Rd to avoid the narrow underpass beneath the RR tracks	0
Fix timing of light at Railroad St intersection	0
Fix the pedestrian crossing button \at Railroad St intersection	0
Provide a crosswalk at Wellsville/RR/Bennitt intersection	0
Provide wayfinding signage for parking lots	0

Source: Prioritization exercise at May 21<sup>st</sup> public workshop

## Planning Objectives/Design Drivers

A synthesis of the comments and feedback received during the public outreach process produced a set of planning objectives and design drivers that were used to guide the development and evaluation of the transportation improvement opportunities. This step is important because it ensures that the community's collective voice is reflected in the outcomes of the plan, and that improvements respond to the needs, values and preferences of those who will be affected the most from the implementation of this plan. The following planning objectives and design drivers were developed:

- Preserve the walkability and pedestrian orientation of the town center
- Maintain, anchor and strengthen the town center
- Reduce traffic congestion on the roadway system
- Improve safety for motorists, bicyclists and pedestrians
- Balance transportation options both to and from downtown
- Facilitate access to existing and future land development
- Preserve the historic character of New Milford
- Enhance access to the river
- Invest in cost effective improvements

## Performance Measurement

Making good planning decisions often relies on the use of performance metrics to attempt to objectively measure the benefits of one improvement over another. This is generally good practice, and ideally, should minimize the effects of politics on transportation investment. New Milford has a long history of transportation planning studies, and to date has some success in getting projects implemented, but long-term relief from growing traffic pressure is far from assured. Based on the literature review performed as part of this study, it is apparent that most of the planning has focused on ways to improve the motorists' experience travelling through New Milford. This report takes a closer look at current methods for measuring the 'success' of a project, and to looks for innovative and equitable ways to consider transportation investments in the future.

Level of Service (LOS) is a long-standing performance measurement 'standard' in the traffic engineering community. Basically, LOS gives a letter grade, A through F with A being the best and F the worst, for the amount of delay a vehicle experiences on a road or intersection. It is a basic measure of congestion which only considers impacts to car and truck traffic. Conventional LOS determinations are based on subjective criteria; namely, what level of frustration (delay) is the average driver willing to tolerate.

The disadvantage of basing project decisions on LOS is that it can be biased against walking and bicycling, and can unintentionally promote sprawl by pointing to the need to add car capacity to roads to 'improve' conditions. In denser towns such as New Milford, relying on LOS to plan and design the street network can have a negative effect on walkability. This is because car capacity is sometimes provided at the expense of sidewalk, bicycle and transit infrastructure. Once car capacity is provided, it is inevitably used up, the peak period congestion returns, and the demand for more capacity increases. This scenario has been

Furthermore, auto-dependent communities require more and more parking to store vehicles when they are not occupying road space. Parking is costly and uses up valuable land that could be developed into more community-friendly places. Factor in the impacts that car and truck noise and emissions create, and it becomes clear why a transportation improvement plan that favors LOS as the only performance metric could lead to potentially harmful result for New Milford.

Downtown New Milford is a multimodal community, and as such, needs performance measures that strike a balance between personal mobility and other community goals such as economic development, quality of life, environmental sustainability, and social equity. Performance metrics for this plan should place a greater emphasis on ‘livability’ goals; something that conventional LOS alone cannot do. In locations where multiple travel options are available, it can be argued that automobile delay is less important than the probability of delay. That is, if a person knows that congestion is likely to be encountered at a particular time for some predictable duration, that person can choose an alternate mode, change his or her trip time, or find another route. It may ultimately be decided that a ‘best fit’ approach for a community is a slight increase in car delay, for the benefit of improved bicycle and pedestrian facilities for example. Performance measures selected for New Milford’s Transportation Management Plan will allow decision makers to find the right balance in providing safe and efficient travel options based on a much wider array of community goals.

Accordingly, the following Performance Metrics were selected based on the Planning Objectives and Design Drivers that were established through the public outreach process.

- Congestion on the road network is reduced
- Accidents, especially those involving injuries, decrease for all modes
- The number of trips by walking, cycling, and transit increases
- Prevailing speeds of vehicles on local streets decrease
- Vacancy of downtown storefronts decrease
- Resident satisfaction increases

Not all of these performance measures are easily quantifiable. Some of these measures will only be realized over time, after the improvements are implemented and their effects documented; however, best practices in transportation planning for vibrant and livable communities such as New Milford can guide the selection of improvements that provide the optimum level of benefit for measures that are aimed at economic health and quality of life.



## Project Identification and Screening

Improvements to Downtown New Milford’s transportation system must keep pace with increasing congestion and shifting needs resulting from population growth, land use patterns, and desired livability goals. This plan focused on the underlying questions of what improvements will maximize the effectiveness of the existing transportation system and what should the Town of New Milford be thinking about to address future needs.

This Transportation Management Plan provides recommendations to guide transportation decisions over short and long term horizons. The plan provides guidance on how transportation investments should be focused as well as provides a tool for public transportation partners, so they may effectively work together to make decisions. To help streamline this process, the Plan provides the foundation for a balanced evaluation of criteria developed to address the goals established by the Town and members of the public who participated in the study. An evaluation strategy was developed to identify, select, and implement projects in New Milford, and is summarized in the following text.



## Project Identification

This analysis takes a holistic, multi-modal approach to determine the feasibility of transportation projects and reflects the planning and design drivers established during the public outreach process.

FHI has been coordinating directly with the Town of New Milford to identify locations of concern which threaten mobility, safety and livability goals of the Town. The following locations have been identified through a combination of solicited input via public outreach initiatives and an analysis of existing traffic and safety conditions:

1. Route 7/Bridge Street
2. Bridge Street/Young’s Field Road
3. Bridge Street/West Street/Railroad Street
4. Bridge Street/Grove Street
5. East Street/Elm Street
6. Elm Street/Main Street
7. East Main Street
8. Still River Road/Pickett District Road
9. Still River Road/Pumpkin Hill Road

These nine (9) locations represent a starting point for further evaluation. The figure on the following page illustrates the approximate locations of these improvement areas.

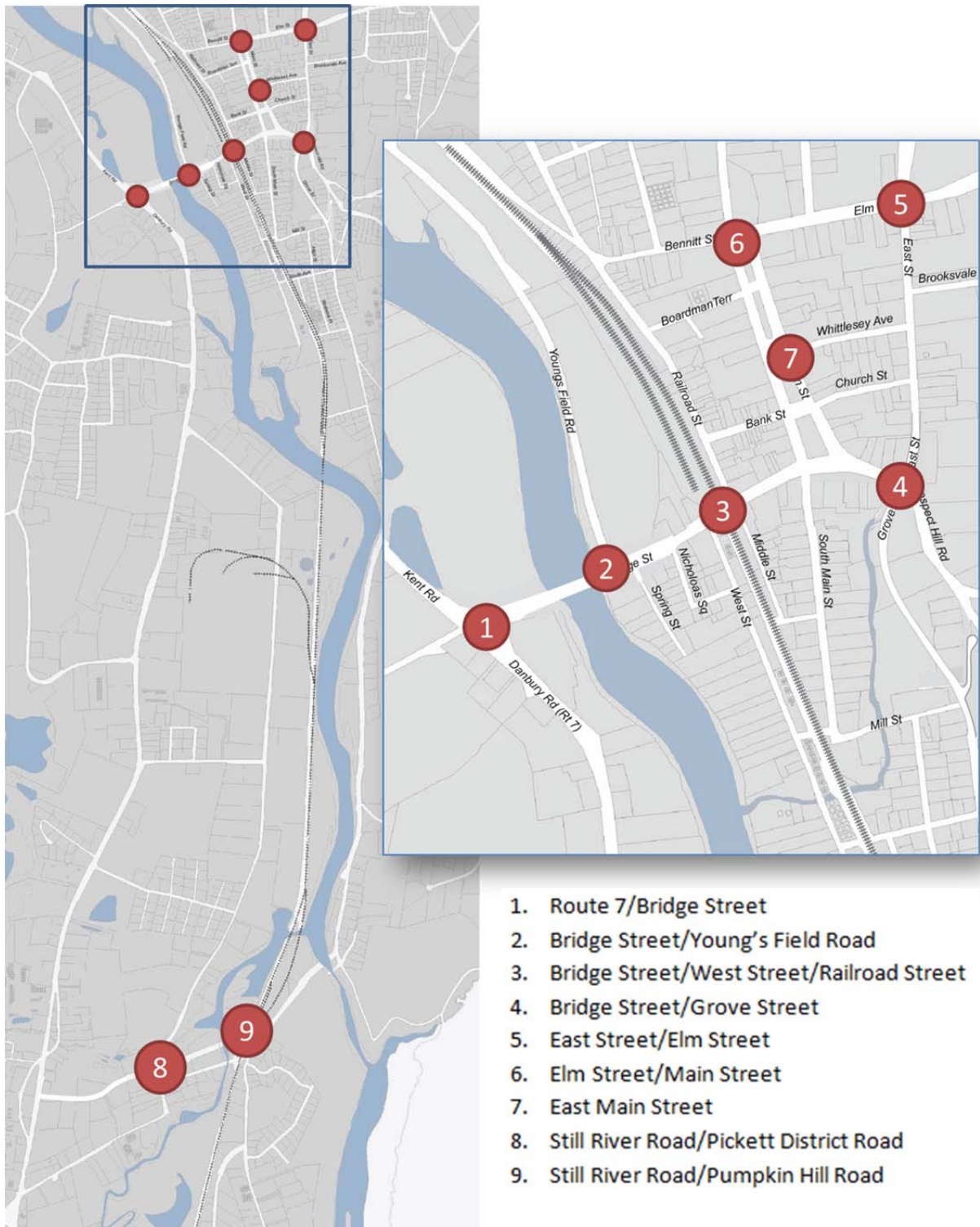


Figure 29 – Locations identified for potential improvement

## 1. Route 7/Bridge Street

High congestion levels occur at the intersection of Route 7/Bridge Street during peak hours of the day resulting in delay to motorists. Existing conditions analysis and public opinion identified several areas of concern. During the PM peak hour, northbound traffic turning right onto Bridge Street does not yield to through traffic, resulting in queuing through the intersection from the southbound left turn. Furthermore, the northbound right volume is so heavy and consistent that it limits the ability of drivers accessing Bridge Street from local roads further east along Bridge Street. For example, a driver attempting to make a left out from Spring Street will have difficulty finding sufficient space in traffic. A traffic engineering analysis confirmed cross street drivers were delayed more than 60 seconds before finding enough space in traffic to safely cross.

As part of the analysis, safety data was also reviewed. The safety data indicated a cluster of accidents along the right turn lane near the yield sign and its intersection with Bridge Street. This may be due to drivers not yielding to through traffic which is leading to collisions at the intersection with Bridge Street. When drivers do obey the yield sign, vehicles following are unexpectedly forced to stop, resulting in rear-end accidents. This location also exhibits the second highest crash rate in the study area.

A traffic engineering analysis of this intersection revealed that removal of the channelized northbound right turn and replacing it with dual right turn lanes controlled by the existing signal would help address these issues. The addition of the dual turn lanes would improve intersection operations by reducing delay during peak hours and control the existing uninterrupted flow; thereby, providing vehicle “gaps” for drivers turning onto Bridge Street from side streets east of this intersection. A controlled traffic flow is also expected to reduce the occurrence and severity of certain types of collisions identified.

The detailed signal timing and phasing parameters are provided in the Technical Appendix. In essence, the intersection would work like this: the dual right turns would get a green indication whenever the westbound left turns move, and whenever the north-south through traffic moves. The dual right turns would get a red indication when the southbound left turn and the eastbound through traffic gets the green signal indication. A conceptual illustration is provided in Figure 30.

## 2. Young’s Field Road to Patriot’s Way

Significant eastbound queuing occurs along Bridge Street at the unsignalized intersection of Young’s Field Road and Bridge Street. Field investigations have indicated that drivers turning left onto Young’s Field Road interrupt the traffic flow along Bridge Street resulting in queuing that extends over the Veterans Bridge. Further investigation and analysis established the need for a dedicated eastbound left turn lane. A dedicated lane would allow eastbound vehicles to safely pass to the right of left-turning drivers waiting for a safe gap in traffic, reducing the delay for through traffic on Bridge Street; however, due to the closeness of Young’s Field Road to the bridge abutment, a turn lane could not be accommodated. Therefore, relocation of Young’s Field Road becomes essential. The Town has also indicated that they desire to repurpose or relocate Young’s Field Road in an effort to reclaim the riverfront property for use as a walking trail and an extension of Young’s Field Park.





Figure 30 – Route 7/Bridge Street improvement concept

Several options for Young’s Field Road (illustrated in Figure 31) have been identified for this relocation, taking into account traffic operations and the Town’s vision for the potential future development opportunities along the riverfront:

- Option 1: Realign Young’s Field Road approximately 100’ to the east (through the tennis courts) to provide sufficient length for an eastbound left-turn lane. **Option:** Signalize intersection with Bridge Street.
- Option 2: Realign Young’s Field Road around eastern edge of the park and connect to Bridge Street in the vicinity of Nicholas Square. Provide an eastbound left-turn lane and a new traffic signal at the new intersection. This option may need to make Nicholas Square one-way southbound and provide a new railroad crossing to connect to Middle Street.
- Option 3A: Realign Young’s Field Road to connect with Patriots Way and connect to Bridge Street across from West Street. Provide an eastbound left-turn lane and a new traffic signal at the new intersection. This option may need to make West Street one-way southbound and connect Middle Street to West Street via a new railroad crossing south of Bridge Street.
- Option 3B: Similar to Option 3A, but align southern end of Patriots Way with Nicholas Square.

- **Option 4:** Realign Young's Field Road along Patriots Way but allow northbound access from Railroad Street only. The Patriots Way intersection at Bridge Street would be limited to a right out only from Patriots Way. Middle Street would need to either be closed or converted to 1-way southbound only and the signal system redesigned to handle more traffic at the existing Railroad Street intersection. This option may need to connect Middle Street to West Street via a new railroad crossing south of Bridge Street.

Options 1, 2 and 3 would be further enhanced by a new at-grade railroad crossing at Bennitt Street/Railroad Street, which would connect to Young's Field Road. A rail crossing at Bennitt Street would effectively offer another opportunity for travelers to access or bypass the downtown without the need to use Railroad Street, East Main Street, or East Street. Option 4 provides a new vehicular at-grade crossing of the railroad at the current location of the pedestrian crossing at Bank Street. Options 2, 3 and 4 would benefit from a new at-grade rail crossing between West Street and Middle Street. These rail crossings are explained in more detail in subsequent pages of this report.

**Option 1** would realign Young's Field Road approximately 100 feet to the east to provide sufficient length for an eastbound left-turn lane. The new alignment would cut through the tennis courts and as indicated by the Town, a memorial which would need to be relocated. Option 1 remains close to the bridge abutment; therefore, the turn lane will be no more than 100 feet and may exceed storage capacity if more drivers elect to use Young's Field Road. A signal is an option, but queuing back to Bridge Street will remain a challenge as a result of a short turn lane.

**Option 2** would realign Young's Field Road around the eastern edge of the park and connect to Bridge Street in the vicinity of Nicholas Square and signalize. This option has high long-term potential as it provides more storage capacity in a longer eastbound left-turn lane. In addition, more space will be available for the Town's use along the riverfront. The new alignment would involve significant impacts to the park (requiring a redesign) and would also require right-of-way acquisition for the frontage property on Bridge Street. A signal at this new intersection has been assumed.

A couple variations for **Option 3** resulted during discussion with the Town. **Option 3A** would realign Young's Field Road to connect with Patriots Way and connect to Bridge Street across from West Street at a signalized intersection. This configuration draws concern from a safety perspective. The existing rail line would fall between two signalized intersections, with limited distance for queuing between. This would result in essentially one expansive intersection to hold vehicles from stopping on the tracks; therefore, increasing delay for drivers. Furthermore, West Street may need to become one-way southbound. This would likely require a new railroad crossing south of Bridge Street to connect West Street to Middle Street to accommodate the re-routed northbound traffic.

**Option 3B:** A variation of option 3 involves realigning the southern end of Patriot's Way to form a 4-way intersection at Bridge Street with Nicholas Square. Although property impacts result, this option has very high long-term potential for improved traffic flow and advancing the Town's develop goals.

**Option 4** would realign Young's Field Road to connect with Patriots Way as an unsignalized intersection but with restricted access from Bridge Street. Most traffic that currently uses Young's Field Road would



be diverted to Bridge Street/Railroad Street with only right-out traffic permitted at Patriot’s Way. A new rail crossing would be required to connect Patriot’s Way to Bank Street at the approximate location of the existing pedestrian crossing. A traffic engineering analysis at Railroad Street/Bridge Street indicated the intersection will accommodate the re-routed traffic provided that Middle Street is converted to 1-way southbound only. This option would be enhanced by a new railroad crossing south of Bridge Street to connect West Street to Middle Street; however, re-routed northbound traffic may also access Bridge Street via South Main Street.

The four options for this location are schematically illustrated in Figure 31. Each option was evaluated against existing conditions in terms of its ability to reduce congestion, enhance connectivity, improve safety, and to support economic development goals. The following matrix compares each option.

- High – Significantly Improves Condition
- Medium – Moderately Improves Condition
- Low – Minimally Improves Condition

**Table 6 – Young’s Field Road Options**

Location	Young’s Field Road Option Evaluation			
	Congestion Relief	Network Connectivity	Safety Improvement	Access to Land Development
Option 1	Low	High*	Medium	Medium
Option 2	High	High*	High	High
Option 3A	Medium/Low	High*	Medium	High
Option 3B	High	High*	High	High
Option 4	Medium	Medium/High	Medium/High	Medium

\* assumes that a RR crossing at Bennitt is included, otherwise rating is Medium.

Based on this evaluation, Options 2 and 3B best satisfy the goals of reduced congestion and improved safety, but both involve impacts to either Town or private property. Option 1 would likely produce temporary relief, but would have significant property impacts and does not support the town’s plan for a riverfront path. Option 3A may prove unworkable over time as it relocates the road too close to the railroad tracks and to the adjacent intersection with Railroad Street. Option 4 is likely the easiest to implement, but restricts access from Bridge Street and focuses more traffic through the railroad Street intersection. Options 1, 2 and 4 are illustrated in more detail in Figure 32, Figure 33 and Figure 35 respectively. The proposed at-grade crossing of the railroad at West Street and Middle Street is shown in Figure 36.

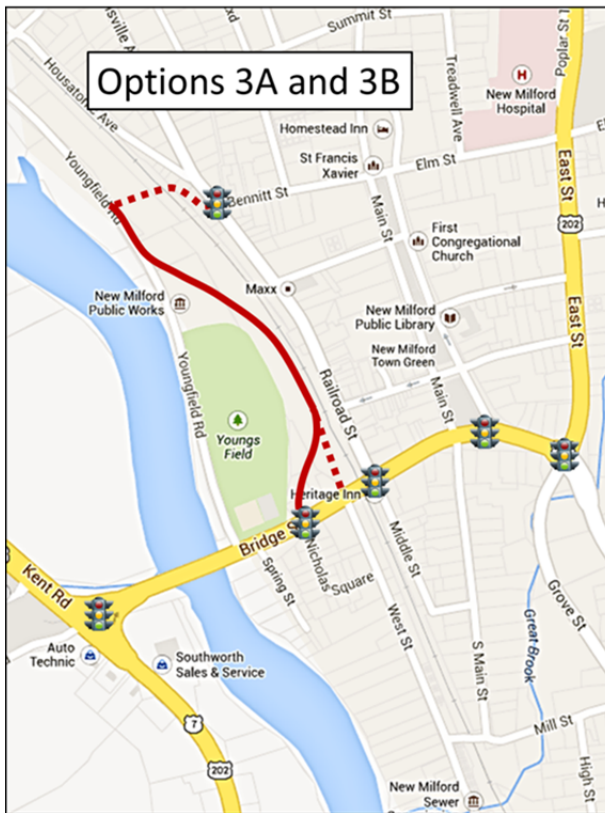
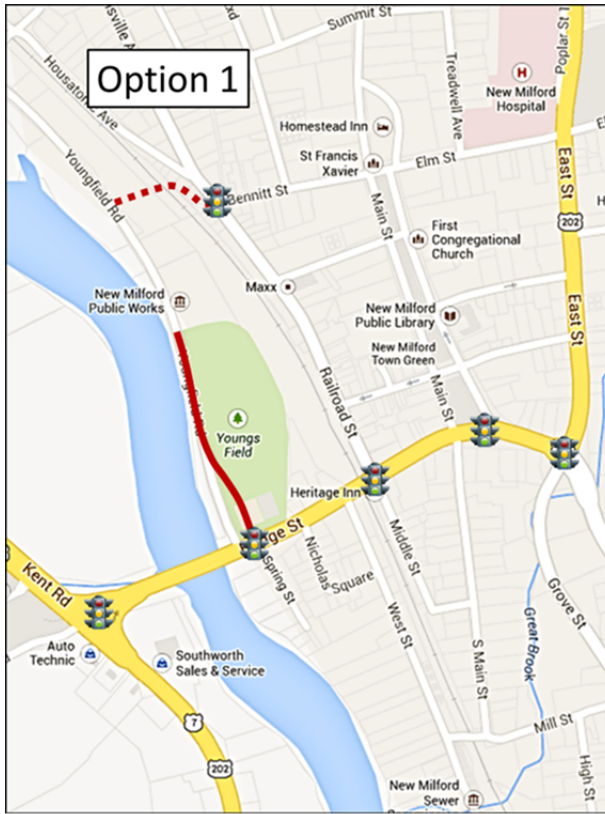


Figure 31 – Options for relocating Young’s Field Road (source of mapping: Google)





Figure 32 - Option 1 involves relocating Young's Field Road about 100 feet to the east



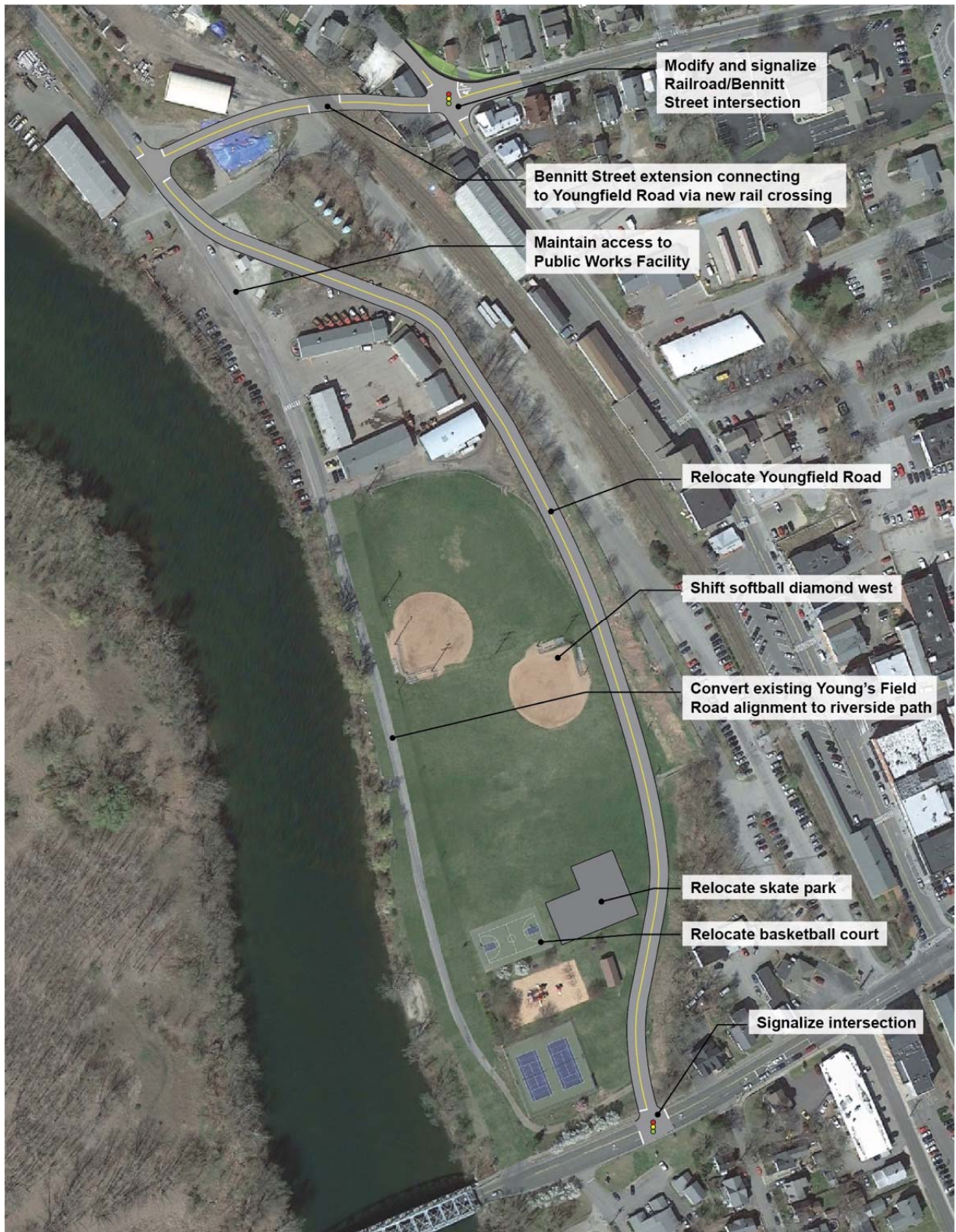


Figure 33 – Option 2 involves relocating Young’s Field Road to the east of the park and reclaiming riverfront land





Figure 34 - Option 3 involves relocating Young's Field Road along Patriots Way



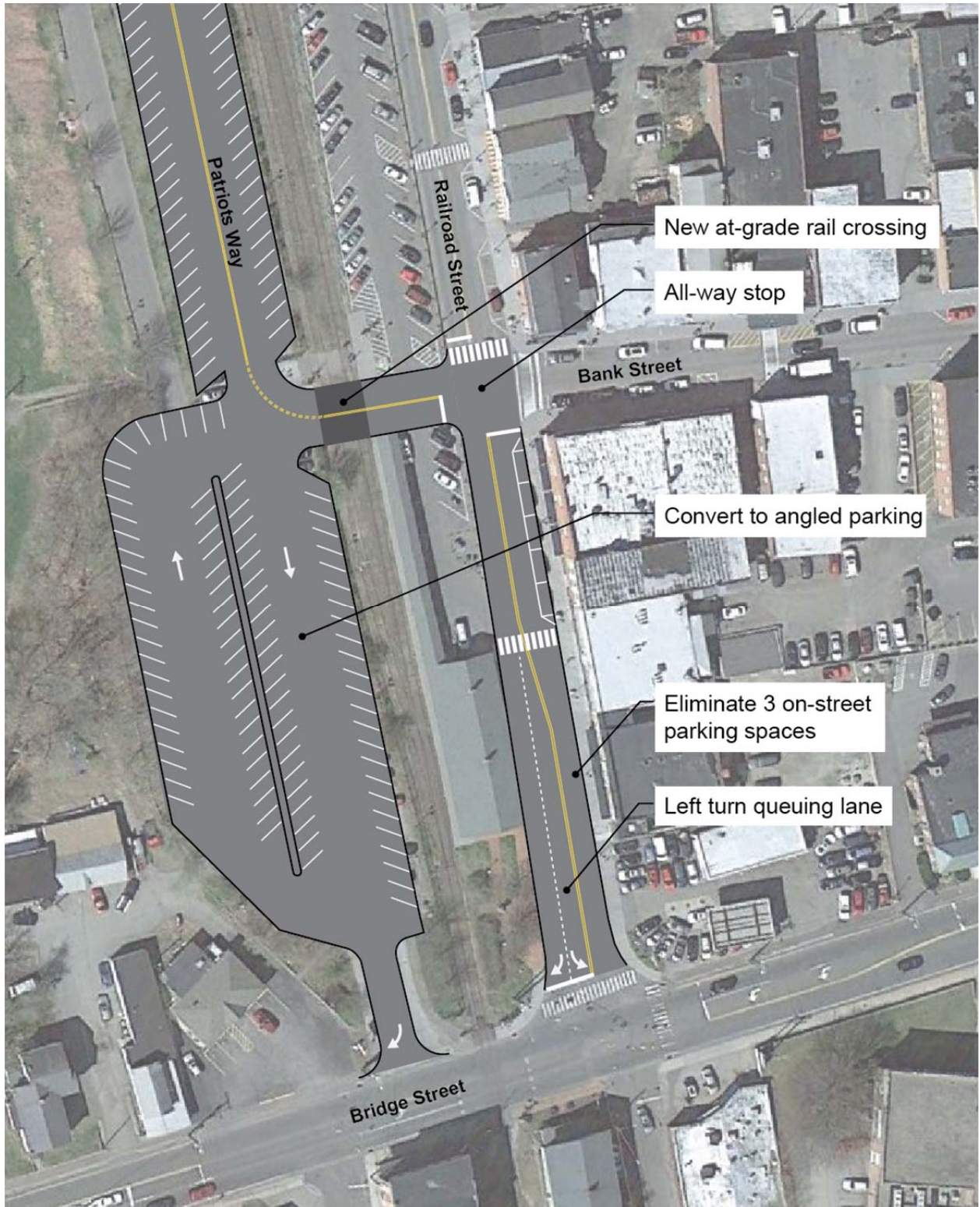


Figure 35 – Option 4 relocates Young’s Field Road to Patriot’s Way, but only allow northbound access via Railroad Street

### *New at-grade rail crossings*

The Town of New Milford's transportation system would be further enhanced by new at-grade railroad crossings at Bennett Street to Young's Field road and/or West Street to Middle Street. It is understood that the Federal Rail Administration (FRA) regulates at-grade crossings with an overall mission to reduce the numbers of these crossings for safety purposes. Granting new crossings is rare, and usually only approved if one or more existing crossings are simultaneously closed. The Town has indicated that they are considering closing two existing grade crossings. A discussion with CTDOT (and ultimately FRA) should take place to determine if the closure of these crossings can be considered 'relocations' and moved to the two aforementioned crossing locations.

A rail crossing at West/Middle would provide improved neighborhood connectivity, which would be even more important if changes to the direction of traffic flow are necessitated by the Young's Field Road realignment. This connection would likely require the acquisition of private property and a concept is provided in Figure 36.



**Figure 36 – Potential new railroad crossing between Nicholas Square/West Street and Middle Street**

A rail crossing at Bennett Street would effectively offer another opportunity for travelers to bypass the downtown without the need to use Railroad Street, East Main Street, or East Street. For the evaluation of this crossing, traffic was redistributed by reducing volume along Bridge Street and increasing volume along Young's Field Road and Elm Street based on an assumption that a new rail crossing would attract



more trips looking to bypass Bridge Street to reach locations north of the Downtown. The concept is illustrated in Figure 37.

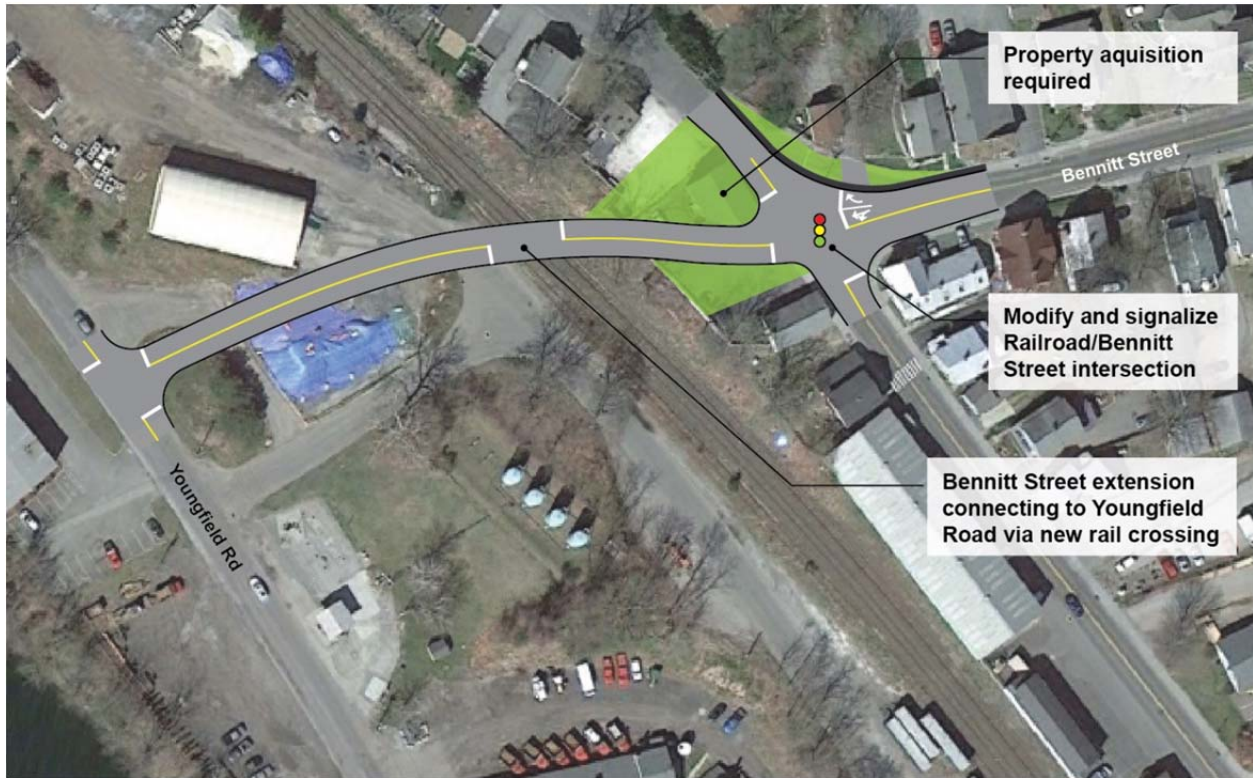


Figure 37- Concept for new rail crossing at Bennitt Street

Based on the engineering evaluation, Elm Street cannot, in its current configuration, handle the additional traffic that would likely use this new rail crossing. The conclusion of the analysis is that a new rail crossing at Bennitt Street would need to be accompanied by other improvements to Elm Street, as described in the next paragraph.

The intersection of Main Street/Elm Street is currently a stop controlled intersection, in which the peak hour signal warrants are met. By connecting Bennitt Street across the tracks, volumes at this location are expected to increase resulting in the need for a signal. Furthermore, the analysis revealed heavy eastbound queuing along Elm Street on the approach to East Street/Elm Street intersection as a result of the bypass. The addition of a left turn lane and retiming the signal would help reduce intersection delay and improve eastbound traffic flow. Right-of-way acquisition would likely be required to provide sufficient space to accommodate the turn lane. Collectively, these projects will help maximize the effectiveness of the bypass and should be constructed prior to opening Bennitt Street/Young's Field Road crossing.

A new at-grade crossing at Bennitt Street is not an easy improvement to implement and would likely require property acquisition and design exceptions; however, it is an important piece of the future transportation network. The Town has indicated that their desire to relocate Young's Field Road is an effort to reclaim the riverfront property for use as a walking trail and plan for the potential future

development opportunities along the riverfront. A new crossing at Bennitt Street provides a strategic access point that will alleviate traffic impacts along Bridge Street and help achieve the Town's redevelopment goals.

### **3. Bridge Street/West Street/Railroad Street**

Public outreach initiatives conducted by FHI indicated concerns over delay associated with the southbound right from Railroad Street onto Bridge Street. Right turn on red is restricted; therefore, drivers must wait for a green before proceeding, extending delays. The right turn restriction is likely in place due to poor visibility of westbound traffic on Bridge Street. One option to reduce delays but maintain the safety concerns associated with the turn restriction is to implement an overlap phase. An overlap phase effectively allows southbound right-turning traffic a green arrow when the eastbound left-turn traffic is turning left. Because there are no u-turns permitted at this intersection, the overlap phase can safely be implemented and will help reduce delays. A traffic engineering analysis indicated the overlap would have a minimal impact on total intersection delay but effectively reduce delay for the southbound right by more than 10 seconds.

### **4. Bridge Street/Grove Street/Prospect Hill Road**

Public outreach initiatives conducted by FHI indicated a desire to provide more direct access between Prospect Hill Road and Grove Street via a reconnection of Old Grove Street. The cul-de-sac west of Old Grove Street was also investigated as potentially providing an access location between these two roads. A traffic engineering analysis was conducted and results of this analysis determined that opening either location and removing the associated turning movements at Bridge Street/Grove Street, would have minimal impact on reducing delay for drivers; however, it was noted that some traffic might be using the cut-through at Fordyce Road further south along Grove Street. As this intersection was not studied as part of this plan, it is recommended that the Town conduct a separate study to determine how much cut-through traffic Fordyce is experience, and if re-opening Old Grove Street is warranted. Whether or not there is an immediate need to reopen the connection, if increased development should continue along Grove Street, this option should be revisited as a viable alternative to reduce congestion at the Bridge Street/Grove Street intersection in the future. Figure 38 illustrates this concept.

The engineering analysis also investigated retiming and altering the signal phasing at the Grove Street/Bridge Street intersection as a viable option to reduce delay and queuing. Retiming the intersection based on traffic counts collected in 2012 has been analyzed and improved operations are expected.

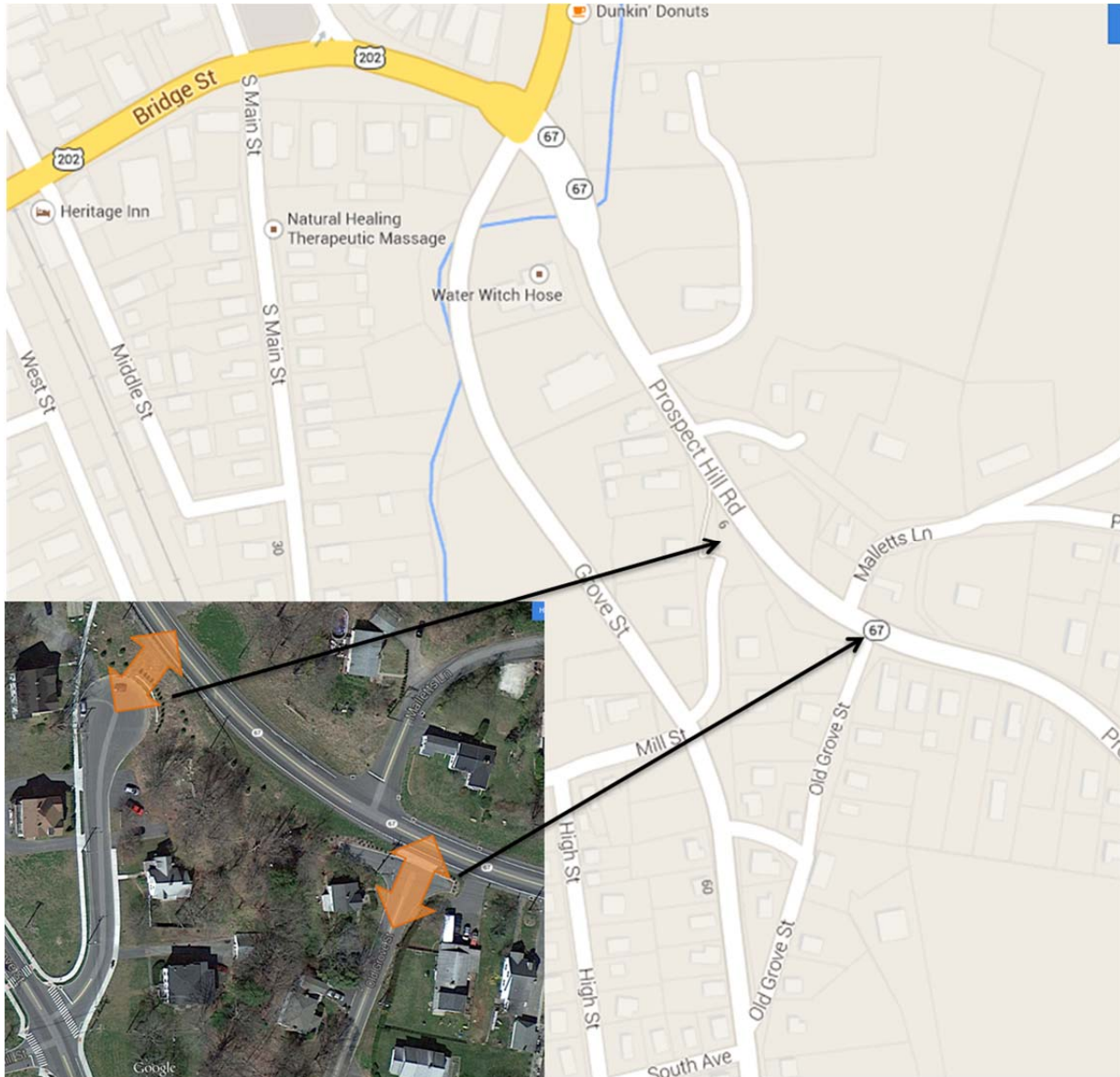


Figure 38 – Options for reconnecting Grove Street to Prospect Street

### 5. East Street/Elm Street

The intersection of East Street/Elm Street creates the highest delays for motorists within Downtown New Milford. Delays lead to northbound queuing during the PM peak hour that extends back to the intersection of Bridge Street/Grove Street. The high delays are a combination of two primary factors; a two-lane roadway that serves very high traffic demand and the lack of dedicated turn lanes at the intersection. Three options were analyzed to reduce delay: 1) adding a dedicated northbound left-turn lane, 2) relocating the utility pole in the southeast corner of the intersection and providing minimal widening to allow northbound through vehicles to bypass left turning vehicles, and 3) adding a dedicated northbound left-turn lane and eastbound left-turn lane.



In Option 1, the addition of a northbound left-turn lane and retiming the signal would reduce intersection delay by approximately 40 seconds per vehicle and improve northbound traffic flow. Right-of-way acquisition would likely be required at the southwest corner to provide sufficient space to accommodate the turn lane. This option will allow ample space for several vehicles to wait safely for a clearing in opposing southbound traffic before turning. Even with the turn lane, the intersection will continue to experience high delays to motorists due to heavy volumes and limited roadway capacity.

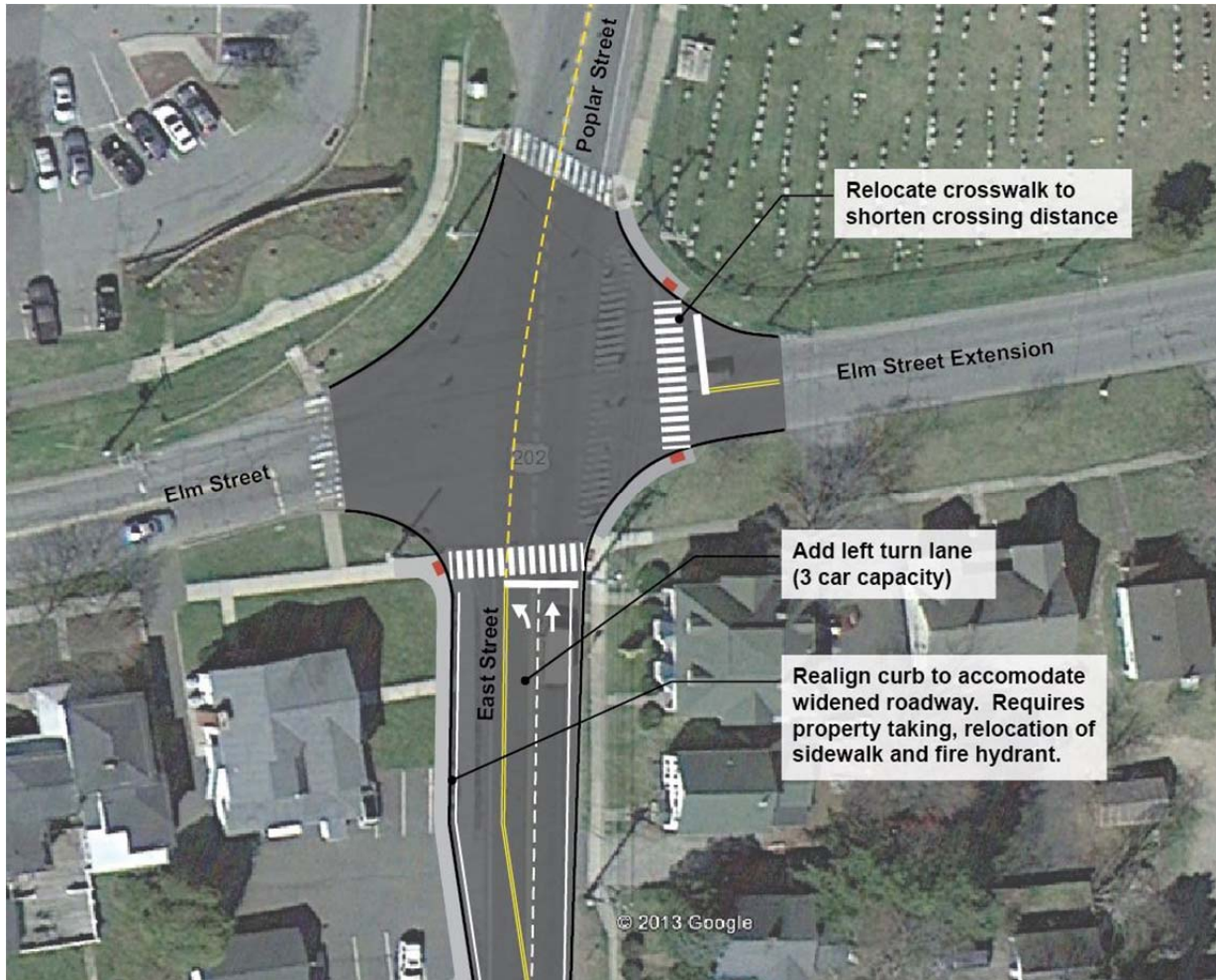


Figure 39 - East Street widening to add left turn lane

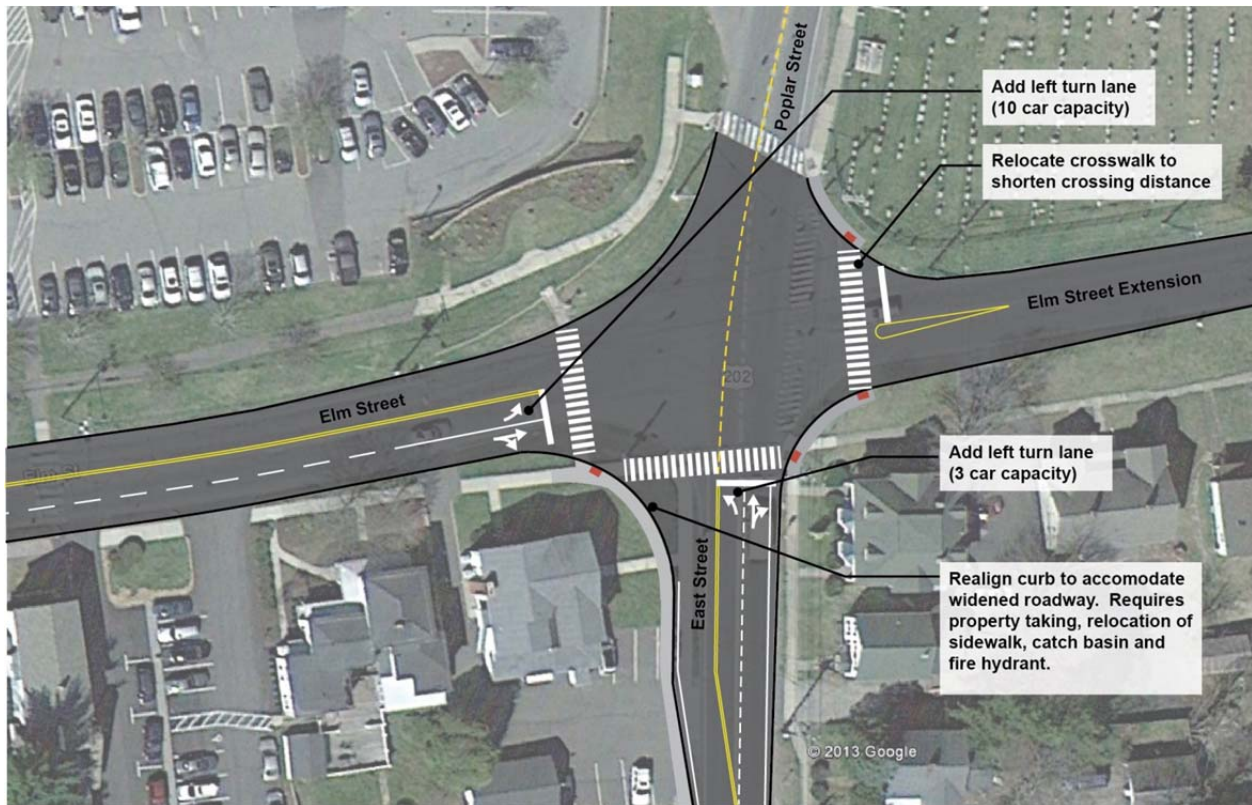
Option 2 is really a lower cost version of Option 1 that relocates the utility pole in the southeast corner of the intersection and slightly cuts into the existing curb. This option would likely carve out enough space to allow vehicles to safely pass on the right when a left turn vehicle is waiting, attempting to replicate results of the first option. This option will likely allow space for only one or two vehicles to wait for a clearing in opposing southbound traffic before turning. As with the first option, the intersection will continue to experience high delays due to heavy volumes and limited roadway capacity.



Figure 40 - Minor widening of East Street and utility pole relocation

Option 3 is similar to Option 1, but also includes the addition of an eastbound left-turn lane which would reduce intersection delay by approximately 60 seconds per vehicle and would help reduce delay for motorist on Elm Street. More right-of-way would be required at the southwest corner to provide sufficient space to accommodate the road widening needed for the two turn lanes. This option will allow over 200 feet of storage space for left turning vehicles to queue. Even with both turn lanes, the intersection will continue to experience overall delay to motorists due to heavy volumes and limited roadway capacity; however, operations would be significantly improved over current conditions.





**Figure 41 - East Street and Elm Street widening to add left turn lanes at approaches**

It should be noted that the New Milford Hospital is proposing a 12,153-square-foot addition to house a new emergency department. The proposed addition represents a 6.5% increase in total building size over the 189,020 square feet of existing space. Construction of the addition will require the removal of two existing residential structures that front on Treadwell Street as well as a gazebo. An existing brick building that presumably houses emergency generators will remain. Existing access to the site from Treadwell Street will be modified. One existing access drive (the northerly one) will be eliminated. The second (southerly) access drive will be relocated slightly south of its existing location. Existing access from Elm Street and Poplar Street will remain.

Although the hospital’s traffic consultant does not expect the expansion project to have a significant impact on traffic operations at the intersection, they recognize the challenges that the existing intersection presents for the town. Preliminary discussions have taken place between the hospital and the town, and there may be opportunities for both parties to come to an agreement on a potential solution. It has been reported that the property on the southwest corner of the intersection belongs to the hospital. New turn lanes needed to make this intersection function better might be accommodated by a road widening that could impact some of this property. Further discussions with the hospital should be pursued to explore ways to make this widening feasible.

## 6. Elm Street/Main Street

Elm Street/Main Street is a four-way stop controlled intersection that services downtown New Milford from the north. Public outreach initiatives have indicated concerns over the function and safety of this

intersection. The configuration is unconventional and the offset results in limited visibility of cross-street traffic. That said, a review of crash data at this location did not suggest a problem relative to safety.

FHI reviewed the intersection of Elm Street/Main Street to determine if peak hour signal warrants, as defined in the Manual of Uniform Traffic Control Devices (MUTCD), would be met under existing traffic conditions. The peak hour signal warrant examines peak hour conditions at the intersection to determine if the minor street traffic suffers undue delay when entering or crossing the major street for a minimum of one hour of an average day. Generally, the peak hour signal warrant would only consider the vehicle volume on the minor street approach of the intersection; however, at future intersections where a high volume of left-turn traffic is expected, the warrant may consider the major street left-turn volume. Based on the data available for this signal warrant evaluation, the warrant would be met due to the forecasted volume for the westbound left-turn.<sup>1</sup>

The signal warrant evaluation is intended to examine the general correlation between traffic conditions and the need to install new traffic signals. It compares available data against a sub-set of the standard traffic signal warrants recommended in the Federal Highway Administration *Manual on Uniform Traffic Control Devices*. This evaluation should NOT serve as the only basis for deciding whether and when to install a signal. To reach such a decision, the full set of warrants should be investigated based on field-measurements, as well as forecasted traffic data and a thorough study of traffic and roadway conditions. Furthermore, the decision to install a signal should not be based solely upon the warrants, since the installation of signals can lead to certain types of collisions. The Town of New Milford and CTDOT should make the final determination whether or not a signal is warranted and should undertake regular monitoring of traffic conditions and accident data, and timely re-evaluation of the full set of warrants, before prioritizing and programming intersections for signalization.

## 7. East Main Street

West Main Street recently undertook traffic calming measures to help manage vehicle speeds and enhance the pedestrian experience downtown. While these measures have been controversial, there is little dispute that they have been effective in dramatically slowing traffic along West Main Street. Public feedback collected during this study has called for the removal of the speed control devices; however, there has also been strong support for making New Milford’s downtown safe, walkable, and viable to businesses. Slow streets that prioritize pedestrians over vehicles have been proven to be

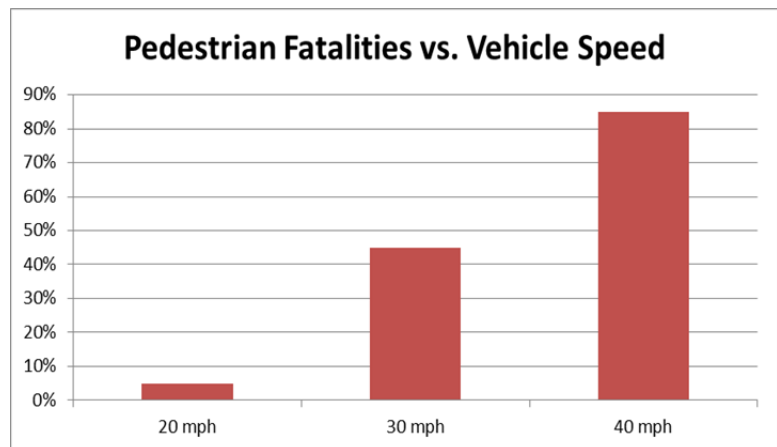


Figure 42 - Effects of speed and pedestrian deaths

<sup>1</sup> Warrant would be met if the minor street left-turn volume or the major street left-turn volume exceeds 150 vehicles during the peak hour.

safer and more conducive to economic development. In fact, pedestrian fatalities increase exponentially once vehicular speeds exceed 20 MPH<sup>2</sup> as illustrated in Figure 42.

Figure 43 shows the distance required to stop a vehicle at various travel speeds. In a downtown that includes angled on-street parking, public open space (the Green), wide sidewalks, and a vibrant pedestrian environment; there are simply too many opportunities for pedestrian/vehicular conflicts...and the faster the traffic the more disastrous those conflicts will be.

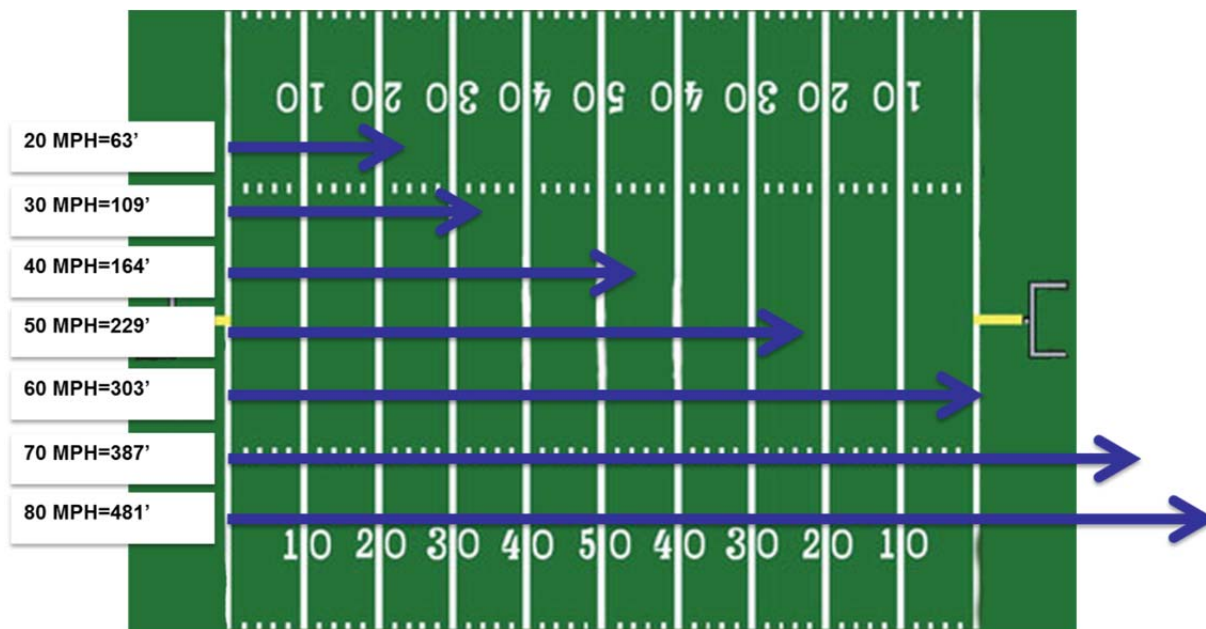


Figure 43 - Stopping distance at various speeds

Recent traffic counts indicate similar volumes on both East and West Main Street; therefore, traffic calming strategies applied on West Main Street may be replicated on East Main Street. Given the design drivers that indicate safety and preservation of the Downtown core, it is recommended that East Main Street be fitted with the same traffic calming measures as West Main Street.

### 8. Still River Drive/Pickett District Road

Still River Drive/Pickett District Road is an unsignalized four-way stop controlled intersection that serves heavy eastbound and westbound peak hour traffic. During the AM peak hour, westbound vehicle queues contribute to delays for drivers. The PM peak hour sees the reversal in peak direction and eastbound queuing. The following options were analyzed for implementation:

- 1) Two-way (side street) stop control
- 2) Signalized intersection
- 3) Modern roundabout

<sup>2</sup> Killing Speed and Saving Lives, UK Dept. of Transportation, London, England. See also Limpert, Rudolph. Motor Vehicle Accident Reconstruction and Cause Analysis. Fourth Edition. Charlottesville, VA. The Michie Company, 1994, p. 663.



Each option was evaluated against existing conditions in terms of its ability to reduce congestion, minimize impact to the environment, and improve safety. The following matrix compares each option.

- High – Significantly Improves Condition
- Medium – Moderately Improves Condition
- Low – No Improvement over Existing Condition

**Table 7 – Still River Drive/Pickett District Road Options**

Location	Still River Drive/Pickett District Road Option Evaluation			
	Congestion Relief	Environmental Impact <sup>1</sup>	Safety Improvement	Construction Cost
Option 1: Side Street Stop	Low	Low	Low	Low
Option 2: Signal	High	Medium	Medium	Medium <sup>2</sup>
Option 3: Roundabout	Medium	High	High	High

<sup>1</sup>Noise, exhaust, fuel consumption

<sup>2</sup> Signals will have longer-term maintenance and operations costs

Option 1 proposes a side street stop, which effectively removes the eastbound and westbound stop signs. A traffic engineering analysis indicated that the two-way stop control would operate poorly due to extensive side-street queuing, mainly southbound along Pickett District Road. Heavy peak hour volumes along Still River Drive reduces vehicle “gaps”; and therefore, limits the ability of side street traffic to safely enter the intersection. Speeds along Still River Drive would likely increase as well due to the removal of the eastbound and westbound stop signs which would allow a free flow movement from Route 7 to the intersection with Bridge Street.

Option 2 proposes full signalization at the intersection. Installing a signal will result in reduced delays for all movements; thereby, improving operations over existing conditions. There are certain collisions associated with a signal such as right angle impacts, which statistically result in higher injury rates. Furthermore, signalization could result in environmental impacts including increased noise levels due to stop and go characteristics, light emanation, and exhaust pollutants.

Option 3 proposes a modern roundabout at the intersection. The roundabout will reduce delays for all movements while also providing traffic calming along Still River Drive.<sup>3</sup> Roundabouts are also statistically safer than other forms of intersection stop control. Modern roundabouts in both the United States and other countries have achieved a 50 to 90 percent reduction in collisions compared with intersections using traffic signals. Studies have found a particularly significant reduction (up to 90%) in the number of crashes that result in death or disability, in good part because roundabouts eliminate the high-speed, severe angle crashes (such as T-bone and head-on crashes) which occur at traffic signals. Another unique characteristic of roundabouts is they replace static delays with moving delays, which tend to reduce pollution and are less frustrating to the driver. A traffic engineering analysis indicated a westbound right bypass lane would improve circulating capacity and extend the service life of the

<sup>3</sup> Methodology for conducting roundabout analysis was consistent with HCM 2010, NCHRP Report 672 - Roundabouts: An Informational Guide, Second Edition (TRB, 2010).

roundabout. Furthermore, while the initial construction cost of a roundabout is higher, it offers lower costs over time.

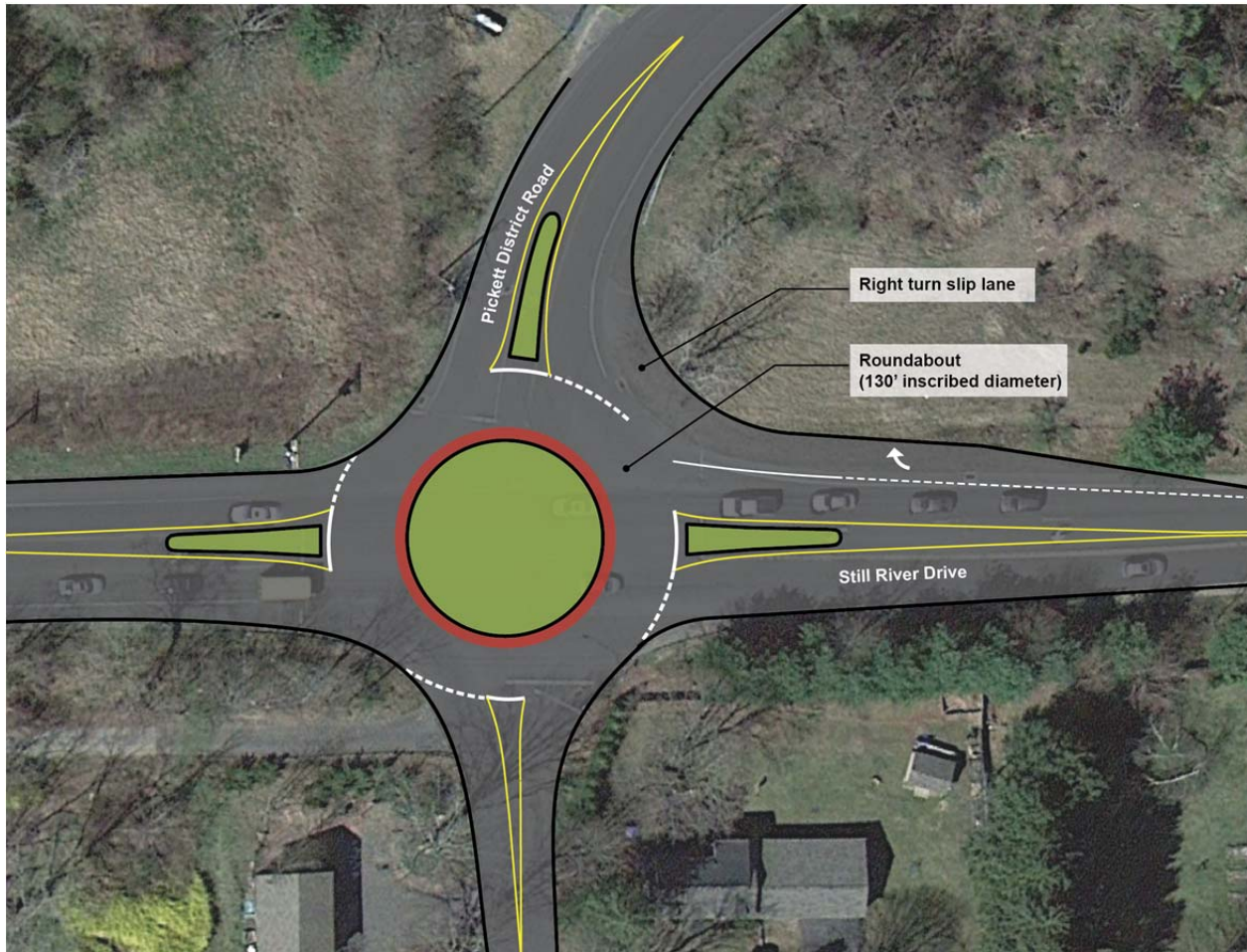


Figure 44 – Modern roundabout concept for Still River Drive/Pickett District Road intersection

### 9. Still River Drive/Pumpkin Hill

Pumpkin Hill intersects with Still River Drive and is side-street stop controlled. The safety data identified four (4) crashes near this intersection, and public input indicated the desire for a left turn lane off Still River Drive. High speeds southbound on Still River Drive combined with a blind curve north of the intersection further supports the construction of a left turn lane. Intersection counts were not conducted at this location and would be needed for further analysis. In the short term, the application of advanced warning signs indicating a cross street and blind curve would help increase driver awareness.

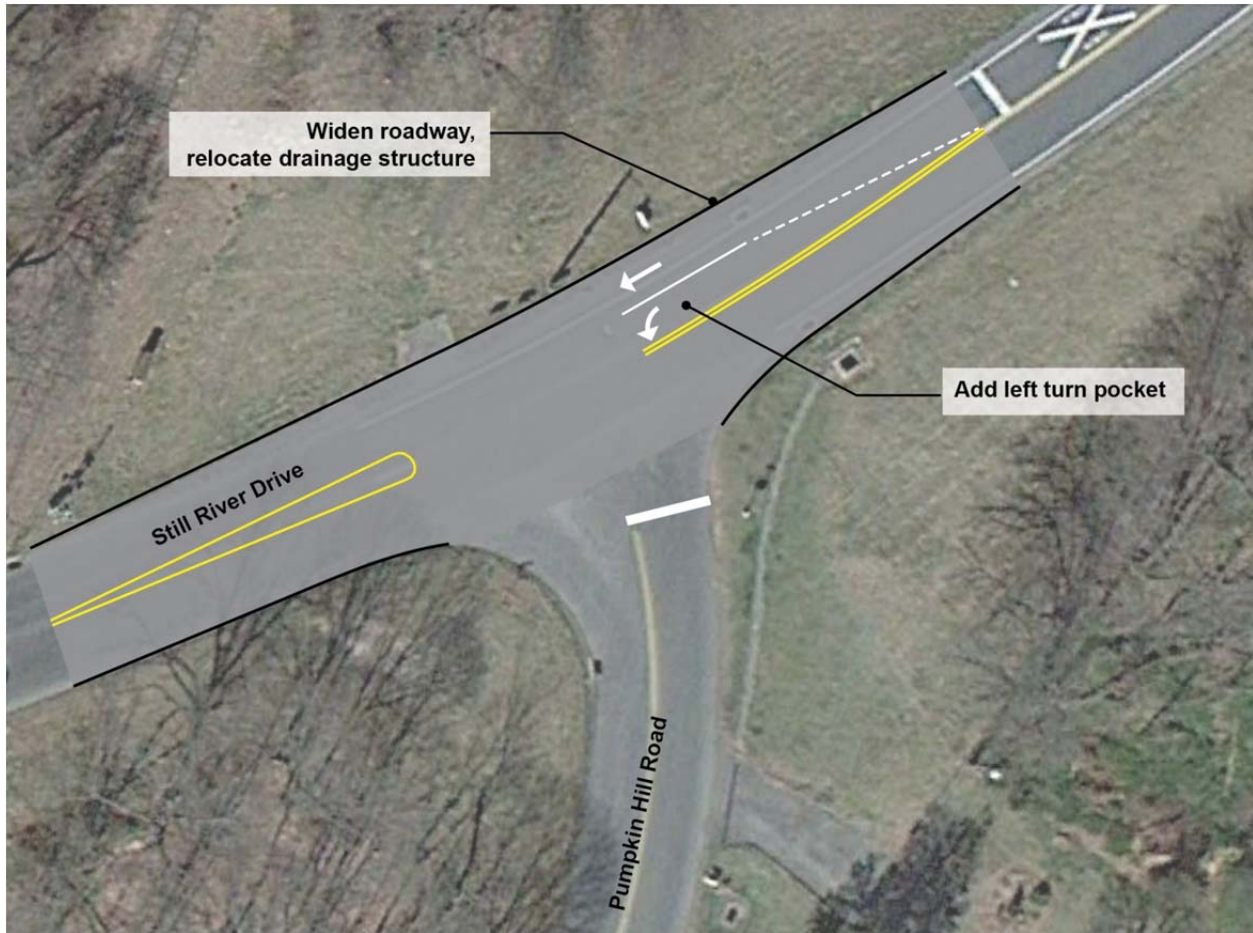


Figure 45 - Left turn lane concept for Still River Drive at Pumpkin Hill Road

### Level of Service Summary

Level of Service (LOS) is a long-standing performance measurement ‘standard’ in the traffic engineering community. Basically, LOS gives a letter grade, A through F with A being the best and F the worst, for the amount of delay a vehicle experiences on a road or intersection. It is a basic measure of congestion that considers impacts to car and truck traffic. This Transportation Management Plan considers a holistic approach in determining the feasibility of transportation projects by identifying locations of concern which threaten mobility, safety and livability goals of the Town; therefore, LOS results should not be used as the sole measure for justification.

In addition to LOS and delay, reserve capacity has also been analyzed for each location. Reserve capacity indicates, by order of magnitude, how much extra capacity remains before the location becomes completely saturated with traffic. Reserve capacity was determined by incrementally increasing traffic volumes to a point where the intersection exhibited gridlock characteristics and was no longer able to serve demand. An annual growth rate of one percent per year was applied to the existing traffic to develop future projections. Each option’s reserve capacity was evaluated against existing conditions using the following criteria:



- High – >20 years of service life available
- Medium – between 10 and 20 years of service life available
- Low – <10 years of service life available

**Table 8 – Level of Service (LOS) Summary for suggested improvement locations**

Location	2012 PM peak	2012 PM peak with improvements	
	LOS (Delay in Sec.)	LOS (Delay in Sec.)	Reserve Capacity
<b>Route 7/Bridge Street</b>	E (75)	C (35)	Medium
<b>Young’s Field Road/Bridge Street (assumes no RR connection at Bennitt Street)</b>			
Option 1: Relocate Young’s Field Road 100’ to the east (unsignalized)	A (10)	B (15)	Low
Option 2: Relocate Young’s Field Road east of park (signalized)	A (10)	A (10)	High
Option 3A: Realign Young’s Field Road with Patriots Way (signalized)	A (10)	E (65)	Low
Option 3B: Realign Young’s Field Road with Patriots Way (signalized) and 4-way at Nicholas	A (10)	A (10)	High
Option 4: Close Young’s Field Road and reroute traffic to Railroad Street (modified intersection)	D (50)	D (40)	Medium
<b>Bridge Street/Railroad Street overlap phase</b>	D (50)	D (50) <sup>1</sup>	Medium
<b>Bridge Street/Grove Street (reconnect Grove St and Prospect Hill Rd)</b>	C (30)	C (30) <sup>2</sup>	High
<b>East Street/Elm Street intersection widening</b>			
Option 1: Provide NB left-turn lane	F (>80)	F (>80) <sup>3</sup>	Low
Option 2: Provide minor widening for NB bypass	F (>80)	F (>80) <sup>4</sup>	Low
Option 3: Provide NB and EB left-turn lanes	F (>80)	F (>80) <sup>5</sup>	Low
<b>Still River Drive/Pickett District Road</b>			
Option 1: Side street stop control	F (>50)	F (>50)	Low
Option 2: Signalized intersection	F (>50)	A (10)	High
Option 3: Modern roundabout	F (>50)	D (30) <sup>6</sup>	Medium
<b>Still River Drive/Pumpkin Hill Road</b>	No data available	No data available	No data available

<sup>1</sup>Overall intersection delay is unchanged, but southbound right-turn delay improves by 10 sec/veh

<sup>2</sup>Negligible reduction in delay based on current travel patterns.

<sup>3</sup>Overall LOS remains F; however NB approach delay reduced by 40 sec/veh.

<sup>4</sup>Overall LOS remains F; however NB approach delay may be reduced slightly, provided NB left demand remains low.

<sup>5</sup>Overall LOS remains F; however NB approach delay reduced by 40 sec/veh and EB approach delay reduced by 60 sec/veh.

<sup>6</sup>Synchro 8 LOS and Delay based on HCM 2010 methodologies.

Source: FHI capacity analysis using Synchro and based on 2012 traffic counts

## Other Network-wide Improvements

In addition to the operations and safety related concepts evaluated in the preceding pages of this report, a number of additional improvements were considered that can either be implemented independently or in conjunction with the aforementioned concepts. Many of the improvements are synergistic, and will enhance or preserve the operations and longevity of prior concepts.



## Signal Coordination

Traffic signal coordination occurs when a group of two or more traffic signals are working together so that cars moving through the group will progress with a minimum of stops. Establishing coordination is easiest to justify when the intersections are in close proximity and there is a large amount of traffic on the coordinated street. Typically, traffic signals within 0.5 miles of each other along a corridor should be considered for coordination. In this case, the Bridge Street corridor serves the highest amount of traffic and the following closely spaced intersections have been analyzed to determine their operations under a coordinated network:

- Railroad Street/Bridge Street
- Main Street/Bridge Street
- Poplar Street/Grove Street/Bridge Street

A time-based coordination system was analyzed to assess the feasibility of signal coordination on Bridge Street. With coordination implemented, a traffic engineering analysis indicated improved intersection operations compared to existing conditions. Railroad Street exhibited the greatest improvement, with total delays reduced by over 10 seconds per cycle. The analysis also revealed minor reductions in total delay at Main Street and Grove Street.

A coordinated system has trade-offs that should be recognized. Because each traffic signal in the group must allow green time for the same movement, motorists accessing Bridge Street from the side streets may experience extended delays. In fact, the engineering analysis confirmed cross street delays increased up to 30 seconds in some locations. This delay could also impact pedestrians attempting to cross Bridge Street. These factors should be considered in light of community concerns over the difficulty to make turns onto Bridge Street from the cross streets and the desire for better pedestrian access across Bridge Street.

Successful coordinated signal timing plans should consider a balanced approach that reflects the needs of the affected stakeholders.

## Adaptive Signal Control

Poor traffic signal timing contributes to traffic congestion and delay. Most conventional signal systems use pre-programmed, timing schedules for various periods of the day. Adaptive signal control technology adjusts the timing of red, yellow and green lights to accommodate changing traffic patterns and ease traffic congestion. The main benefits of adaptive signal control technology over conventional signal systems are that it can:

- Continuously distribute green light time equitably for all traffic movements.
- Improve travel time reliability by progressively moving vehicles through green lights.
- Reduce congestion by creating smoother flow.
- Prolong the effectiveness of traffic signal timing.
- Manage vehicle queues to prevent spillback from affecting upstream intersections.

The Federal Highway Administration (FHWA) has been educating states and municipalities on the benefits and challenges of ASC systems. Under the right circumstances, ASC can be very effective in improving the operations of signalized intersections or corridors. Given the different types of ASC on the market today, a rigorous systems-engineering analysis is recommended to develop a concept of operations and guide the development of system requirements.

Although a detailed analysis of ASC was not achievable for this plan, a number of conditions along Bridge Street were noted as potential for improvement with a proper ACS system in place. These are as follows:

- Heavy left turning traffic with inconsistent arrival intervals during the peak periods of the day
- High accident rates
- Irregular freight train schedules that disrupt the effectiveness of the existing signals
- The need to balance cross street access with Bridge Street progression
- Limited right-of-way to widen Bridge Street and provide more lanes
- The requirement of school buses and certain trucks to stop at the RR tracks diminishes the effectiveness of the existing signals

For these reasons, it is recommended that the Town pursue funding to perform a more detailed systems-engineering analysis of ACS along Bridge Street.

### **Bridge Street Bicycle/Pedestrian Connectivity**

Bicycle and pedestrian connectivity within New Milford's downtown is a key component of the transportation network. Bicycle demand on Bridge Street is evident, as this route is popular with advanced cyclists on long rides across the region. Bridge Street is also used by residents who access the Downtown from the neighborhoods to the south. Additionally, the town has a vision of converting Young's Field Road to a riverfront pathway that would accommodate both bicyclists and pedestrians, which will require a more suitable connection to the Downtown.

There are three barriers to a bicycle connection between the riverfront and downtown: a significant change in grade, the railroad corridor, and high traffic volume on Bridge Street. A connection through the park is currently limited to a staircase on the hill between Patriots Way and Young's Field Road. The connection between Patriots Way and Railroad Street is also limited by a single crossing of the railroad tracks. Additionally, there is no pedestrian connection between the north and south side of Bridge Street at Young's Field Road. A crosswalk at this location is not recommended due to the high traffic volume and limited sight-lines at the Veterans Bridge. Given the constraints, the north side of Bridge Street becomes the most viable corridor for providing a connection between the riverfront and the Downtown.

The bicycle and pedestrian connectivity concept for Bridge Street includes on-street bicycle lanes combined with a limited segment of off-road, multi-use pathway. The bicycle lanes would be five feet wide and would extend from Spring Street to Grove Street on the south side of Bridge Street and between Railroad Street and Grove Street on the north side of Bridge Street. A ten foot wide multi-use pathway, open to bicyclists and pedestrians would connect the existing Young's Field Road to Railroad

Street. This pathway would provide an off-street connection between the riverfront and Railroad Street where bicyclists could safely cross to the south side of the street at the signalized intersection. The grade at this location is sloped in a manner that allows bicyclists to ride their bicycle or dismount and walk, rather than carrying the bicycle up the existing stairs between the park and Patriots Way. A multi-use pathway extending to Railroad Street also allows a safe crossing to the south side of Bridge Street via the crosswalk and pedestrian signals at Railroad Street. This concept is schematically illustrated in Figure 46.

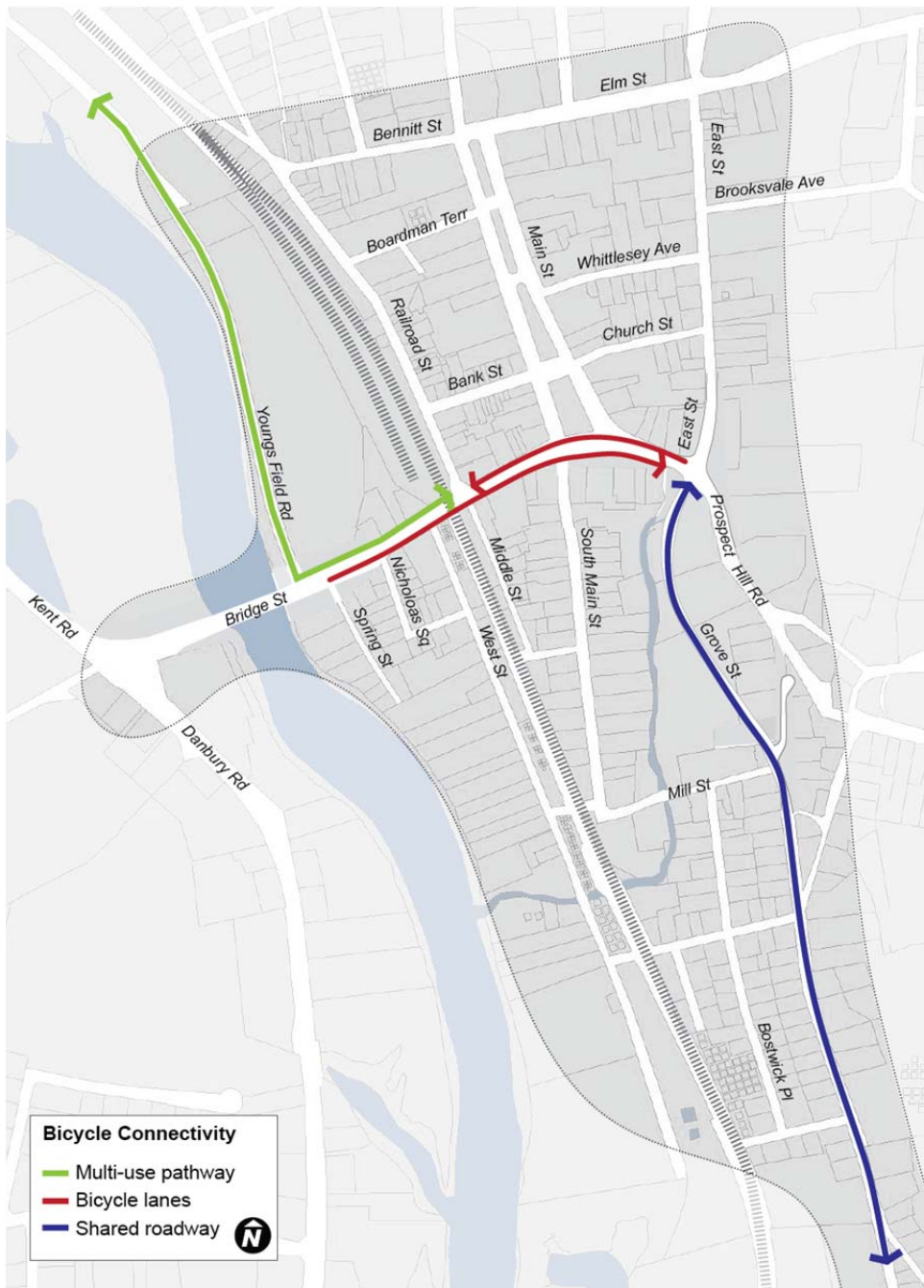


Figure 46 - Proposed bicycle connectivity concept

While the accommodation of bicycle lanes and the pathway would require widening of Bridge Street and relocation of sidewalks, there is no impact expected to private property within the Downtown historical district, or to historic buildings on Bridge Street (shown in Figure 47). Most of the widening roadway would occur within the State-owned right-of-way, with the most significant physical impact being on the south side of the road between Middle Street and South Main Street where the existing retaining wall would need to be taken down and reconstructed to make way for a wider roadway. This area appears to be within the road right-of-way, and would require no private property taking. The only segment of the roadway that may require property taking or easements would be between Young’s Field Park and Railroad Street. Several feet of property from four different property owners would likely be required, with no impact to the structures or property access. Conceptual cross sections at this location for both the existing and proposed condition are provided in Figure 48 and Figure 49 respectively.

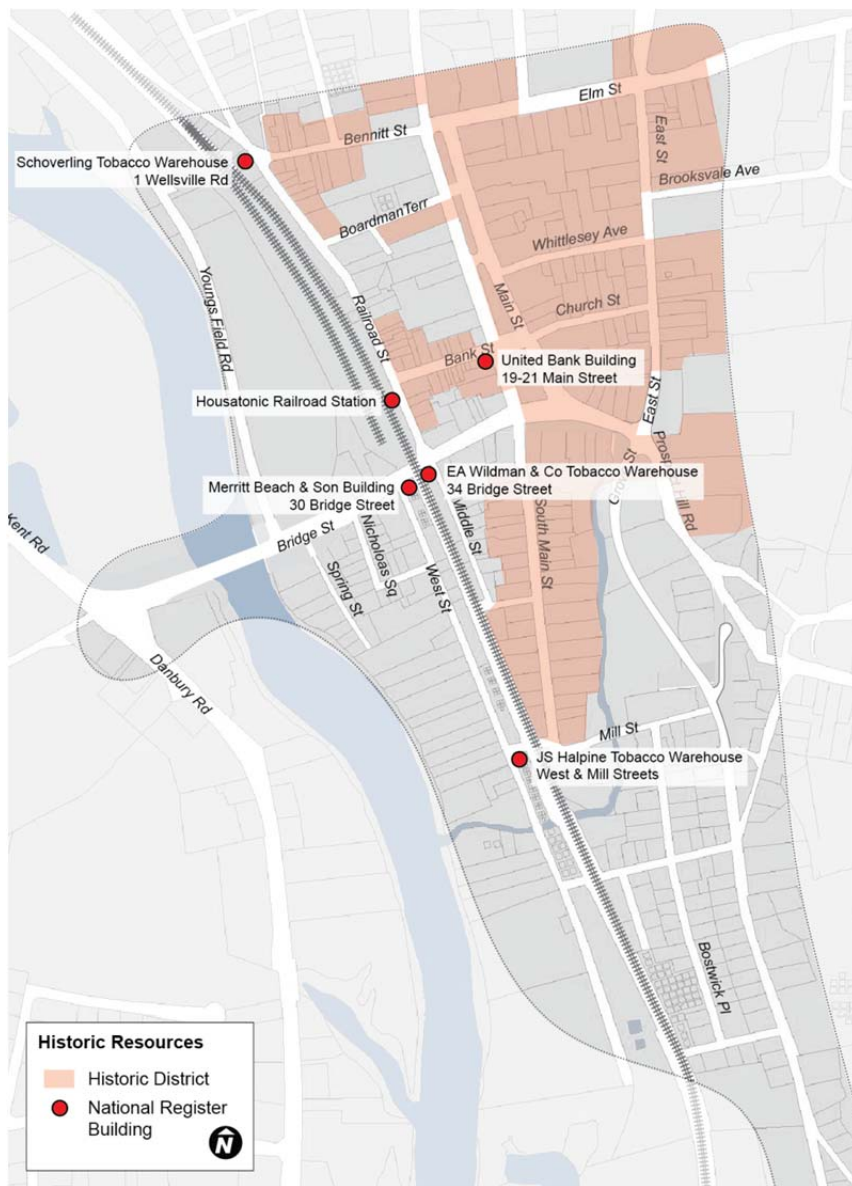


Figure 47 - Historic resources



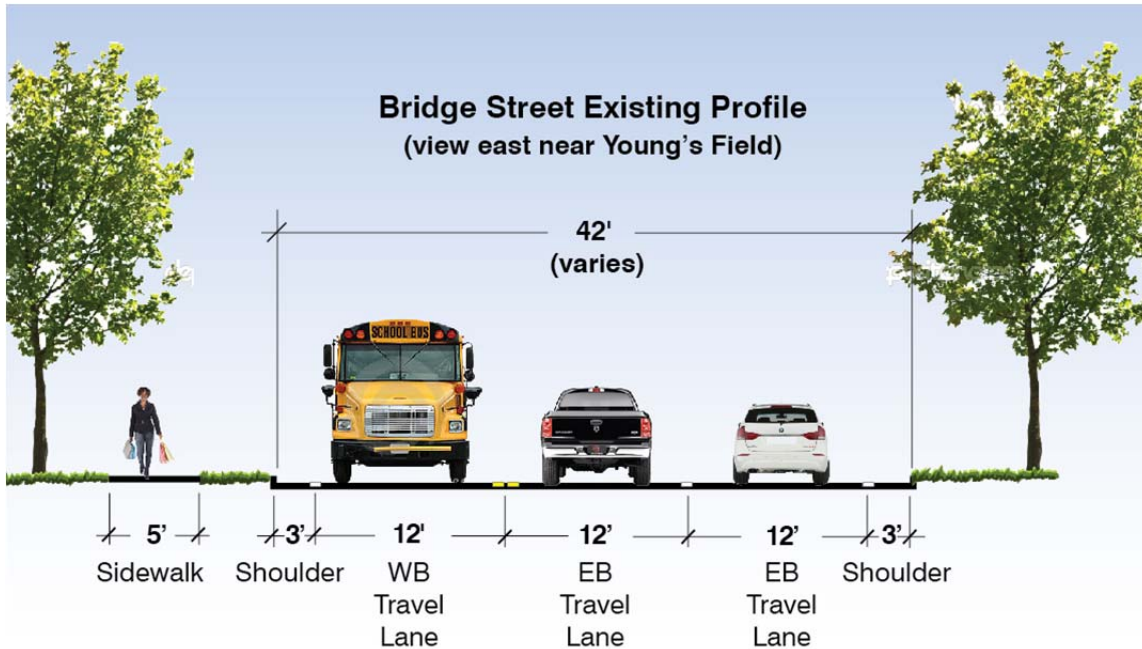


Figure 48 – Existing Bridge Street section east of Young's Field Road

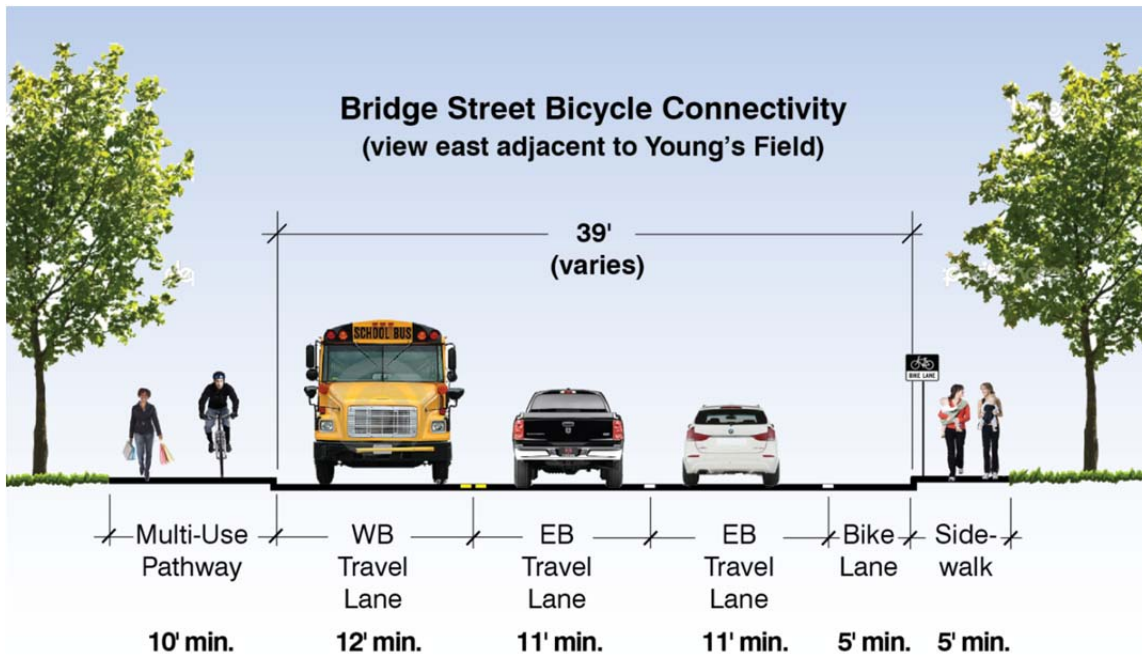


Figure 49 - Proposed Bridge Street cross section including bike lanes and path

Figure 50 through Figure 53 illustrate the elements of the bicycle and pedestrian connectivity concept for Bridge Street.

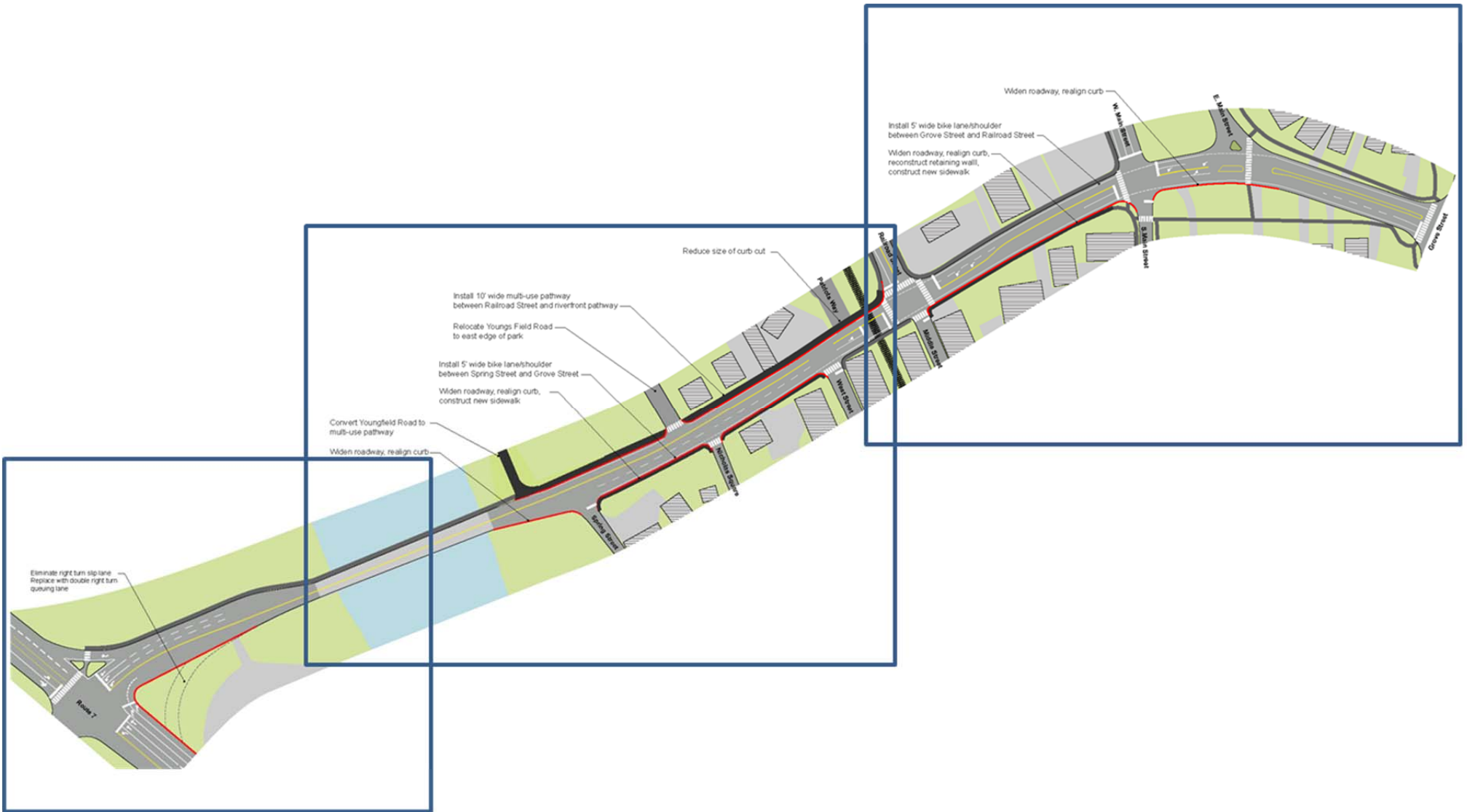


Figure 50 - Bicycle connectivity concept overview map

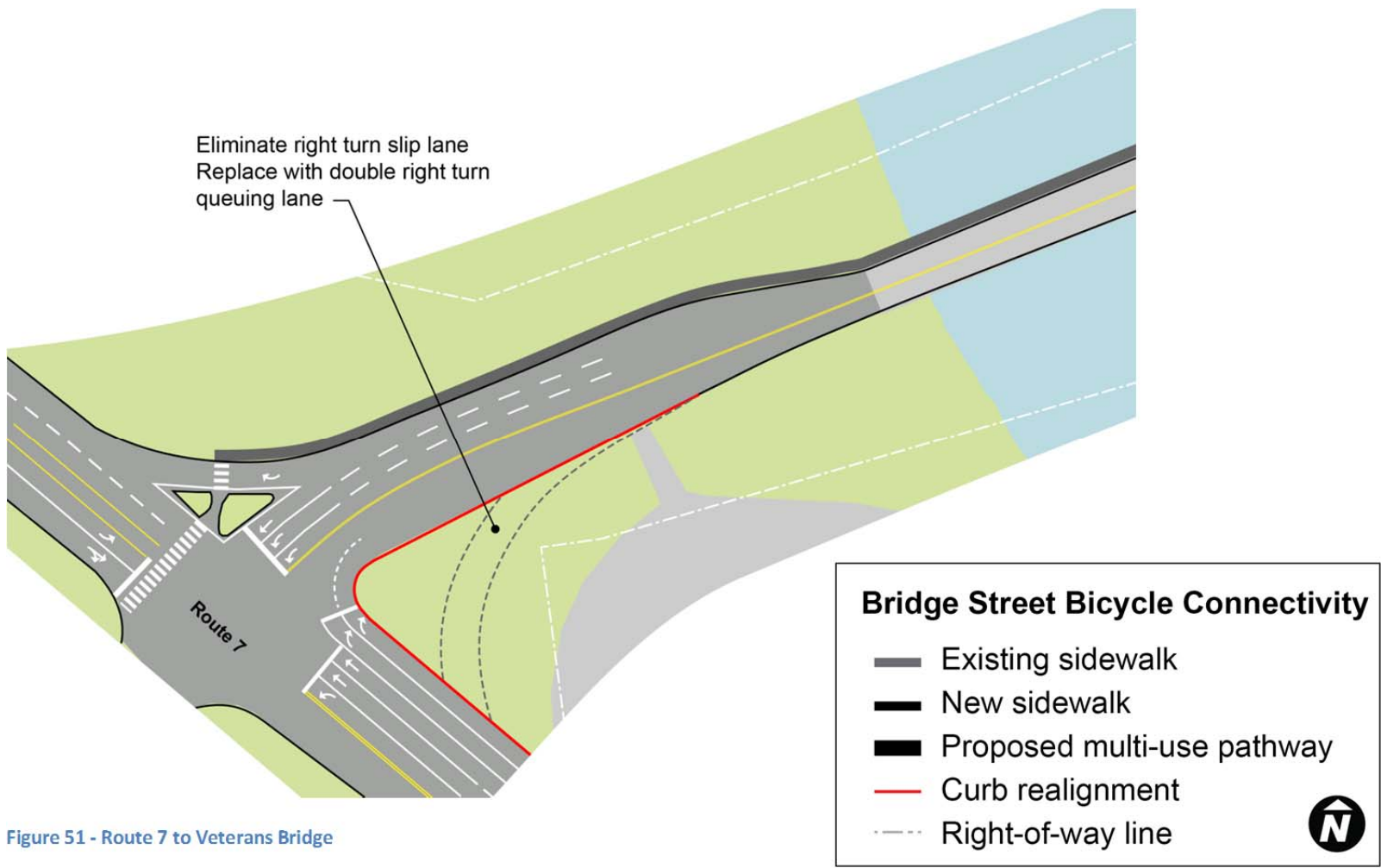


Figure 51 - Route 7 to Veterans Bridge



Figure 52 - Veterans Bridge to Railroad Street





Figure 53 - Railroad Street to Grove Street

**Bridge Street Bicycle Connectivity**

- Existing sidewalk
- New sidewalk
- Proposed multi-use pathway
- Curb realignment
- Right-of-way line



## Sidewalk Gap Improvements

New Milford's downtown has a well-connected pedestrian network that includes sidewalks, multiple crosswalks at intersections and mid-block crosswalks as well as traffic calming on Main Street that eases pedestrian crossings. South of Bridge Street, this network is less complete with notable sidewalk gaps on Mill Street, South Avenue, South Main Street and Bostwick Place. The completion of this network would improve pedestrian connectivity and could be accomplished with the installation of 1,850 linear feet (about 1/3rd of a mile) of sidewalk. The sidewalk could be completed in multiple phases beginning with streets that have the closest proximity to the downtown. Figure 54 shows the existing and proposed sidewalk network.

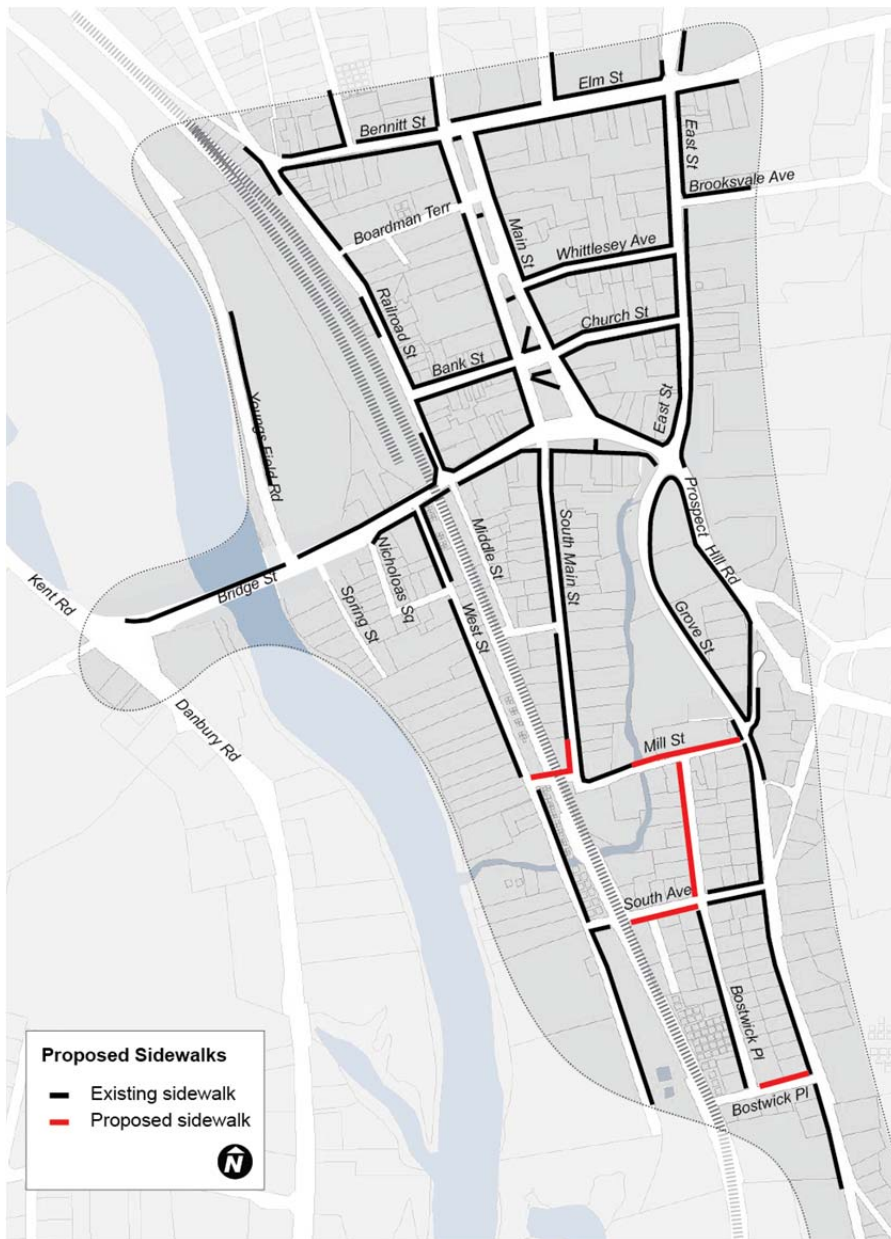


Figure 54 – Sidewalk gap improvements

## Parking Management and Wayfinding

Walkable and bikeable environments are key components of vibrant downtowns. Parking wayfinding or signage systems provide information on the location and type of parking in an area to travelers. Typically, parking wayfinding is combined with other destination-oriented signage in an area in a context sensitive format. Wayfinding signage should clearly communicate:

- the location of parking,
- the name and type of the facility,
- whether it is public or private,
- its hours of operation, and
- fee structure and methods of payment, if applicable.

To ensure an effective use of wayfinding signage, pedestrian accommodations must be in place prior to implementation. Sidewalks and crosswalks are extensive throughout the downtown, and although the Town has extensive pedestrian accommodations, field investigations conducted by FHI indicated parking is generally underutilized despite numerous public comments on the perceived lack of available parking. This discrepancy may be due in part to a lack of appropriate wayfinding signs to integrate parking with downtown businesses.



Figure 55 - Parking wayfinding example

A key issue to increasing the use of underutilized parking in the study area is to create walking paths **and** infrastructure to connect and enhance secondary parking supply locations with downtown destinations. For example, public parking along Patriots Way could be expanded to better serve businesses and help relieve traffic congestion downtown. This includes appropriate signage to make it easier to walk from parking facilities to destinations. Directional signage can guide tourists and visitors to parking areas in and around New Milford, while only parking once. This enhances the parking experience and improves circulation, mobility and access. Wayfinding systems can be integrated into advanced parking information systems that can either provide reserved parking or real-time parking information. This can include location of parking facilities, and also offer information related to availability or even to purchase parking on-line before arriving in New Milford.

Additionally, parking pricing can be implemented to achieve more efficient utilization of resources. Pricing the most convenient spaces will encourage turnover (which is good for business), encourage employees to park remotely (which is also good for business), and result in the perception of more available space in the most sought after locations in the Downtown (again...good for business). Pricing parking in this way provides options. Customers willing to pay for premium spaces will do so and free options will be available for those who need it.

## Reroute school buses

According to Connecticut State law, all commercial vehicles transporting passengers, school buses, and operators of vehicles carrying hazardous materials must stop at railroad crossings. This presents an

additional challenge for the efficient operation of intersections along Bridge Street adjacent to the Metro North Railroad tracks. School buses in particular have been cited by members of the public as a source of delay at the tracks. School buses have predefined routes that must be followed when picking up and dropping off children at school; however, at certain times of the day the buses are running empty after they've dropped off all of the children. Since the buses are still required by law to stop at the tracks, it has been suggested that the town and the bus dispatcher explore alternative routes that avoid Bridge Street when the buses are not loaded with passengers.

### **Long-term Considerations**

New Milford's downtown is blessed with rich historical assets, a scenic riverfront, and a vibrant and walkable commercial district. The arterial roads that provide convenient access to the downtown, also serve the growing regional demand for mobility north and south of the downtown. As a result, Downtown New Milford is experiencing the negative side effects of a transportation system under stress, including frequent traffic congestion, routing accidents, and limited economic development opportunities.

The recommendations for transportation improvements provided in this report are aimed for the near term...that is, within the next 10 years. While these improvements will provide incremental benefits that will provide some relief to the traffic and safety issues currently experienced, they simply cannot keep pace with sustained traffic growth over the long term.

A number of long-term improvements have been studied in recent years, and although many of them have been determined to be unfeasible at this time, they should not be forgotten. New river connections north of the downtown, bypass routes, road expansion, and commuter rail service may be options to consider at a future date. A number of these proposals are summarized in the Technical Appendix, and Figure 56 illustrates them. Bridge Street and East Street are the two most heavily utilized streets, and at some point in time they will no longer be able to handle any more traffic, especially during the peak periods. New Milford should carefully consider future land development proposals to understand their impacts on the road network. A full land use review is recommended in order to align future development goals with transportation planning.



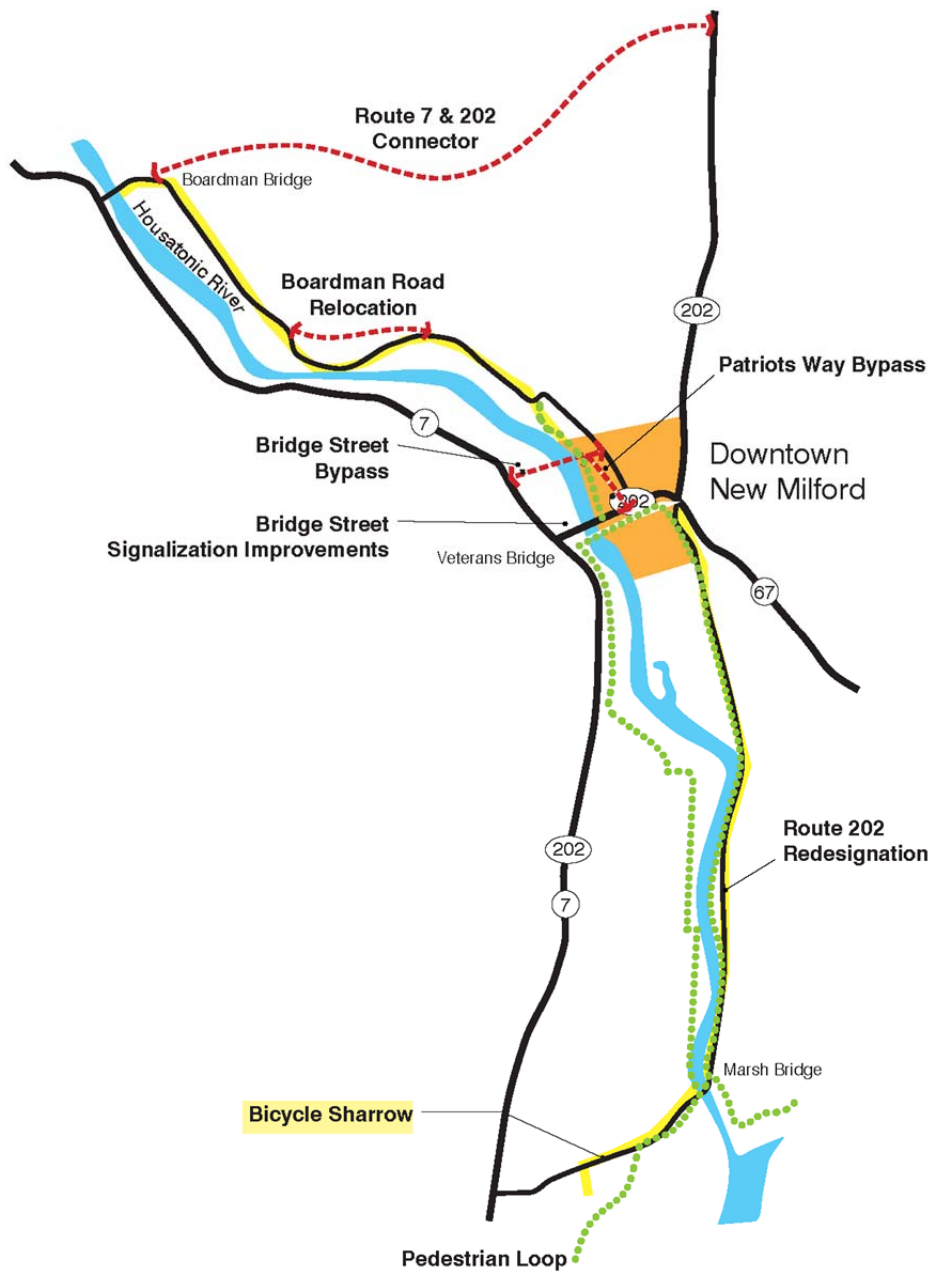


Figure 56 - Summary of New Milford's long-term planning projects

## Full Network Evaluation

This Transportation Management Plan was developed to identify, select, prioritize, and ultimately implement projects in the Town of New Milford. Through this iterative process several important projects have been identified that, when implemented collectively, are expected to provide a measurable improvement to traffic operations in the study area. These projects include:

- Route 7/Bridge Street: convert the existing northbound right to a signal-controlled dual right.
- Young’s Field Road: signalized re-alignment east of the park
- Bennitt Street extension: Provide an at-grade railroad crossing from Bennitt Street to Young’s Field Road
- Bennitt Street/Railroad Street: Signalize the stop controlled intersection
- Elm Street/East Main Street/West Main Street: Signalize the stop controlled intersection
- Bridge Street/Railroad Street: install a southbound overlap signal phase
- Elm Street/East Street: add a northbound left-turn lane and eastbound left-turn lane
- Still River Drive/Pickett District Road: signalize the four way stop/ or replace with a modern roundabout
- Still River Drive/Pumpkin Hill Road: provide a southbound left-turn lane

The Build network evaluation includes all projects identified above. A summary of the Existing and Build network evaluation measures is provided.

Table 9 – Network evaluation summary

Evaluation Measure	All Study Intersections		Change
	2012 PM Peak	2012 with system improvements	
Delay Per Intersection (sec/vehicle)	40	21	48%
Stops Per Vehicle	0.49	0.41	16%
Total Number of Stops	16,778	14,040	16%
Average Speed (mph)	7	12	42%
Total Travel Time (hr)	503	328	35%

Source: Synchro traffic model

By incorporating the identified projects into the study area traffic model, the study area street network improves appreciably. Most notably, average intersection delay drops from 40 seconds per intersection to 21 seconds, about a 48 percent change. Collectively, these projects will help maximize the effectiveness and safety of the existing transportation system without the need for major capacity expansion projects such as bridge replacement or new bypass roads. Although these results appear promising, they reflect an ideal condition. That is, variations in traffic patterns, accidents, freight train schedules, and other unpredictable events can result in operating conditions that are different than predicted. Also, these network results do not necessarily imply that there will be no peak hour congestion, only that delay could be reduced up to 48% on average. For example, the East Street/Elm Street intersection will continue to operate with congestions; however, the extreme delay currently experienced will be significantly reduced.

## Implementation Recommendations

### Prioritization of Improvements

Based on the performance measures selected for this project, a simple matrix was developed to assess how each recommended improvement concept performs. The performance measures were previously listed as follows:

- Congestion on the road network is reduced
- Accidents, especially those involving injuries, decrease for all modes
- The number of trips by walking, cycling, and transit increases
- Prevailing speeds of vehicles on local streets decrease
- Vacancy of downtown storefronts decrease
- Resident satisfaction increases

The prioritization matrix presented in Table 10 includes each of these performance measures and assigns a score of 1, 2, or 3 to each based on each concept's ability to significantly improve conditions (3 points), slightly improve conditions (2 points), or remain neutral (1 point). A concept received zero points if its benefits were unknown or if it resulted in a decrease in performance over existing conditions. This matrix is a useful tool for assisting with implementation decisions, but does not consider cost, availability of funding, right-of-way acquisition, permitting, environmental mitigation, construction timeframe, and other project development factors that may have an influence on the phasing of these recommendations.

Based on a summation of the numerical scores given for each metric, the concepts ranked 1 through 5 are listed as follows:

1. Young's Field Road relocation
2. Still River Road/Pickett District Road roundabout
3. Route 7/Bridge Street dual right turn lanes
4. East Main Street traffic calming
5. East Street/Elm Street northbound left-turn lane
5. Bridge Street bicycle and pedestrian connectivity
5. Bennitt Street rail crossing with improvements to Bennitt Street and Elm Street

Although all of the concepts in the plan are beneficial, these five stand out for their ability to satisfy multiple goals as established by study participants. It should be noted that the application of adaptive signal control holds the potential for additional congestion reduction and improved safety along Bridge Street and potential at the East Street/Elm Street intersection; however, the magnitude of the benefit is unknown until a detail engineering analysis is performed.

Table 10 - Prioritization matrix

Improvement	Performance Measures						
	Congestion Reduction	Safety Improvement	Supports Walking and Biking	Reduces speed on local roads	Supports Economic Development	Public acceptance	Total
Route 7/Bridge Street dual right turn lanes	3	3	2	1	2	3	14
Young's Field Road relocation: Options 2 and 3B	3	3	3	2	3	3	17
Railroad Street right turn overlap	2	1	1	1	1	2	8
Bridge Street/Grove Street retiming	1	1	1	1	1	2	7
East Street/Elm Street turn lanes	2	3	1	1	2	2	11
Elm Street/Main Street signalization	1	3	2	1	1	2	7
East Main Street traffic calming	1	3	3	3	2	1	13
Still River Road/Pickett District Road roundabout	3	3	3	3	1	3	16
Still River Road/Pumpkin Hill Road turn lane	2	2	1	1	1	1	8
Bridge Street signal coordination	1	1	1	1	1	2	7
Bridge Street adaptive signal control	unknown						
Bennitt Street at-grade rail crossing*	0/3	1/2	1/1	1/1	1/3	1/1	6/11
Bridge Street bicycle connectivity	1	2	3	1	2	2	11
Sidewalk gap improvements	1	2	3	1	1	1	9
Wayfinding signage and parking management	2	1	2	1	2	1	9
Reroute school buses	2	2	1	1	1	2	9

\* X/X refers to the score without and with other needed improvements to Bennitt Street and Elm Street

Source: FHI



## Conceptual Cost Estimates

Table 11 lists the total estimated cost for the construction of each improvement option. Cost estimates for each of the concepts were developed based on Connecticut average unit costs. Costs are conceptual and reflect the conceptual level of detail presented at this point in time. More detailed engineering and design may result in substantial differences in cost. In addition, property and/or environmental impacts are not included in the cost estimates. These costs reflect an order-of-magnitude and are intended to provide a level of comparison between options to aid in decision making. Costs are in 2013 dollars.

Table 11 – Conceptual cost estimates

Location	Improvement Option	Conceptual Cost*
<b>Route 7/Bridge Street</b>	Dual northbound turn lanes	\$370,000
<b>Young's Field Road/Bridge Street</b> (could involve additional property acquisition costs)		
Option 1	Relocate Young's Field Road 100' east (unsignalized)	\$1,800,000
Option 2	Relocate Young's Field Road east of park (signalized)	\$2,000,000
Option 3A	Realign Young's Field with Patriots Way (signalized)	\$1,500,000
Option 3B	Realign Young's Field along Patriots Way (signalized) and 4-way with Nicholas Sq.	\$2,000,000
Option 4	Close Young's Field Road and reroute traffic to Railroad Street	\$1,600,000
<b>Bridge Street/Railroad Street</b>	Install Overlap Phase	\$30,000
<b>Bridge Street/Grove Street</b>	Connect Grove Street to Prospect Hill Road (via Old Grove St) and retime Signal	\$100,000
<b>East Street/Elm Street</b> (could involve additional property acquisition costs)		
Option 1	Northbound left turn lane	150,000
Option 2	Widen for northbound bypass	100,000
Option 3	Northbound and eastbound left turn lane	270,000
<b>Elm Street and Main Street</b>	Signalize intersection	\$200,000
<b>East Street</b>	Traffic calming	\$120,000
<b>Still River Road/Pickett District Road</b> (could involve additional property acquisition costs)		
Option 1	Side Street Stop Control	\$2,500
Option 2	Signalize	\$240,000
Option 3	Modern Roundabout	\$410,000
<b>Still River Road/Pumpkin Hill Road</b>	Widen for left turn lane	\$100,000
<b>Bridge Street</b>	Signal coordination/adaptive signal control	TBD
<b>Bennitt Street/Railroad Street</b>	At-Grade Crossing, Signalize	\$1,900,000
<b>Bridge Street bicycle connectivity</b>	Corridor Wide	\$1,000,000
<b>Sidewalk gap improvements</b>	Complete sidewalk network	\$200,000
<b>Wayfinding signage</b>	Provide signage for parking	\$100,000

\*Includes a 1.5 planning multiplier for contingencies. Right-of Way and/or environmental mitigation costs not included.

It is important to recognize the cost estimates identified do not include right-of-way purchase, if needed. Several options will likely result in right-of-way acquisition but it is unclear to what extent. For example, the left-turn lane proposed for East Street/Elm Street will impact the property on the southwest corner; however, this property reportedly belongs to the Hospital and alternative methods to acquire might be pursued. The Young's Field Road re-alignments will generally consume public right-of-way but may impact private establishments adjacent to Bridge Street, particularly for Option 3B. The Town of New Milford and CTDOT should make the ultimate determination on right-of-way impacts before prioritizing and programming projects for construction.

## Potential Funding Sources

There are a number of State and Federal programs that provide assistance to municipalities for road way and community development projects. Many of the recommended improvement in this plan may be eligible for one or more of these programs. The Town of New Milford should work with the regional planning organization, the Housatonic Valley Council of Elected Officials to pursue funding for these projects. Some of the programs are as follows.

### Tiger Grant Program

Administered by: U.S. Department of Transportation (DOT)

<http://www.dot.gov/tiger/>

The U.S. Department of Transportation oversees the Transportation Investment Generating Economic Recovery (TIGER) grant program. As a single program, TIGER resembles a microcosm of the activities that the DOT regularly supports with a wide range of established grants. Eligible projects include bicycle and pedestrian improvements. Eligible TIGER grantees include state, local, tribal and territorial government entities, such as transit agencies, port authorities and multijurisdictional coalitions. Award amounts range from a minimum of \$20 million to a maximum of \$300 million, although DOT may waive the minimum threshold in the case of small projects.

Four rounds of grants have been conducted since the introduction of the program and a fifth round has proposed funding. Future funding for this program is uncertain.

### Congestion Mitigation and Air Quality (CMAQ) Improvement Program

Administered by: FHWA

[http://www.fhwa.dot.gov/environment/air\\_quality/cmaq/](http://www.fhwa.dot.gov/environment/air_quality/cmaq/)

The Congestion Mitigation and Air Quality Improvement (CMAQ) Program assists areas designated as nonattainment or maintenance under the Clean Air Act Amendments of 1990 to achieve and maintain healthful levels of air quality by funding transportation projects and programs.

Projects must be likely to contribute to the attainment of national ambient air quality standards (or the maintenance of such standards where this status has been reached) based on an emissions analysis. CMAQ has seven major project categories, one of which is pedestrian and bicycle projects.

Pedestrian and bicycle projects account for approximately 13 percent of CMAQ projects. CMAQ Improvement Program funds are available to a wide range of government and non-profit organizations, as well as private entities contributing to public/private partnerships. They are controlled by metropolitan planning organizations (MPOs) and state departments of transportation. Often, these organizations plan or implement their own air quality programs besides approving CMAQ funds for other projects. Funding is available for areas that do not meet the National Ambient Air Quality Standards (nonattainment areas) as well as former nonattainment areas that are now in compliance (maintenance areas). CMAQ-funded projects may include bicycle and pedestrian facility improvements, bicycle racks and lockers, and individualized marketing initiatives that promote bicycling and walking (such as maps, brochures, and public service announcements).

The Federal share for most eligible activities and projects is 80 percent; or 90 percent if used on certain activities on the Interstate System; or up to 100 percent for certain identified activities such as traffic control signalization and carpooling projects.

The CMAQ program has funded numerous bicycle and pedestrian improvements including bikeway networks in cities such as Philadelphia, Houston, and New York City, pedestrian and bicycle spot improvement programs, bicycle parking, bicycle racks on buses, sidewalks, trails, and promotional programs such as bike-to-work events. CMAQ funds have also been used to fund bicycle and pedestrian coordinator positions at the State and local level.

### **Highway Safety Funds**

Administered by: FHWA

<http://safety.fhwa.dot.gov/policy/section402/>

Highway Safety Funds are used to support State and community programs to reduce deaths and injuries on the highways. A State is eligible for these formula grants by submitting a Performance Plan, which establishes goals and performance measures to improve highway safety in the State, and a Highway Safety Plan, which describes activities to achieve those goals. TEA-21 revises the periodic rulemaking process used to determine national priority program areas, from one requiring States to direct resources to fixed program areas identified by the rulemaking, to one directing that the States consider such highly effective programs when developing their State highway safety program plans.

### **Surface Transportation Program (STP)**

Administered by: FHWA

[www.enhancements.org](http://www.enhancements.org)

The Surface Transportation Program is the most flexible of all the highway programs and historically one of the largest single programs. States and metropolitan regions may use these funds for highway, bridge, transit (including intercity bus terminals), and pedestrian and bicycle infrastructure projects. STP funds may be used for either the construction of bicycle transportation facilities and pedestrian walkways, or non-construction projects (such as maps, brochures, and public service announcements) related to safe bicycle use and walking. TEA-21 added “the modification of public sidewalks to comply with the Americans with Disabilities Act” as an activity that is specifically eligible for the use of these funds.

Ten percent of each State's STP funds is set-aside for the Hazard Elimination and Railway-Highway Crossing programs, which address bicycle and pedestrian safety issues. Each State is required to implement a Hazard Elimination Program to identify and correct locations which may constitute a danger to motorists, bicyclists, and pedestrians. Funds may be used for activities including a survey of hazardous locations and for projects on any publicly owned bicycle or pedestrian pathway or trail, or any safety-related traffic calming measure. Improvements to railway-highway crossings "shall take into account bicycle safety."

### **Transportation Alternatives Program (TAP)**

Administered by: FHWA

[www.fhwa.dot.gov/map21/guidance/guidetap.cfm](http://www.fhwa.dot.gov/map21/guidance/guidetap.cfm)

For years, federal transportation law has provided dedicated funding to make biking and walking safer and more convenient through three main programs: Transportation Enhancements (TE), Safe Routes to School (SRTS) and Recreational Trails (Rec Trails) — with the majority of annual funding coming through the Transportation Enhancements program. Under the old law (SAFETEA-LU) states were required to spend around two percent of their total transportation funds on these programs. With bike and pedestrian projects comprising some of the eligible uses, this was the single biggest source of funds for safe walking and biking.

MAP-21 consolidates these three programs into the new Transportation Alternatives (TA) program. Instead of a state requirement to spend a percentage of funds, local applicants will compete for grants to fund a broad range of activities that provide transportation options, improve safety and enhance economic vitality.

The Transportation Alternatives Program (TAP) provides funding for programs and projects defined as transportation alternatives, including on- and off-road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility, community improvement activities, and environmental mitigation; recreational trail program projects; safe routes to school projects; and projects for the planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways.

### **Recreational Trails Program (RTP)**

The Recreational Trails Program (RTP) provides funds to the States to develop and maintain recreational trails and trail-related facilities for both non-motorized and motorized recreational trail uses.

The RTP funds come from the Federal Highway Trust Fund, and represent a portion of the motor fuel excise tax collected from non-highway recreational fuel use: fuel used for off-highway recreation by snowmobiles, all-terrain vehicles, off-highway motorcycles, and off-highway light trucks.

The RTP funds are distributed to the States by legislative formula: half of the funds are distributed equally among all States, and half are distributed in proportion to the estimated amount of non-highway recreational fuel use in each State. Seven and a half percent (7.5%) of TA funding is set aside for the RTP program.



Projects eligible for this program include: construction of new trails (motorized and non-motorized); maintenance and restoration of existing recreational trails (motorized and non-motorized); access to trails by persons with disabilities; purchase and lease of trail construction and maintenance equipment; acquisition of land or easements for a trail, or for trail corridors; operation of educational programs to promote safety and environmental protection as related to recreational trails.

### **Community Development Block Grant (CDBG)**

Administered by Department of Housing and Urban Development

*www.hud.gov*

The Community Development Block Grant (CDBG) program, is a flexible program that provides communities with resources to address a wide range of unique community development needs, specifically directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services. Sidewalk improvements, bike lanes, paths and trails are all eligible under the guidelines.

The program provides annual grants on a formula basis to entitled cities and counties to develop viable urban communities by providing decent housing and a suitable living environment, and by expanding economic opportunities, principally for low- and moderate-income persons.

HUD awards grants to entitlement community grantees to carry out a wide range of community development activities directed toward revitalizing neighborhoods, economic development, and providing improved community facilities and services.

Entitlement communities develop their own programs and funding priorities. However, grantees must give maximum feasible priority to activities which benefit low- and moderate-income persons. A grantee may also carry out activities which aid in the prevention or elimination of slums or blight. Additionally, grantees may fund activities when the grantee certifies that the activities meet other community development needs having a particular urgency because existing conditions pose a serious and immediate threat to the health or welfare of the community where other financial resources are not available to meet such needs.

### **Looking Ahead**

The next steps for the Town of New Milford are to obtain consensus on the projects and priorities, seek needed funding, and begin implementing the various proposals. Most of the project can be implemented within a five-year period and some may require ten years to complete. Furthermore, the Connecticut Department of Transportation needs to review and concur with recommendations along state owned highways such as Route 7, Route 202 and Route 67. These are the challenges that lie ahead. This Transportation Management plan recommends a sequence of steps toward achieving full implementation of the plan, as presented in Table 12.

Table 12 - Implementation Steps

<b>Implementation Step</b>	<b>Timeframe</b>
<b>Consult CTDOT on state highway recommendations</b>	0-1 years
<b>Obtain local consensus on recommendations</b>	0-1 years
<b>Coordinate with HVCEO to include recommendations in Transportation Improvement Program (TIP)</b>	0-1 years
<b>Prepare application for 2014 CMAQ funding to study adaptive signal control</b>	0-1 years
<b>Coordinate with CTDOT on high accident locations to determine if Highway Safety Funds are available</b>	0-1 years
<b>Initiate discussions with CTDOT and FRA on rail crossing relocations</b>	1-2 years
<b>Expand traffic calming program to include East Main Street</b>	1-2 years
<b>Perform signal warrant study at Main Street and Elm Street</b>	1-2 years
<b>Perform signal warrant study at Still River Drive and Pickett District Road</b>	1-2 years
<b>Manage parking through wayfinding signage, pricing of premium spaces, and time restrictions</b>	2-3 years
<b>Complete sidewalks in conjunction with local road maintenance projects</b>	2-4 years
<b>Implement Still River Drive projects to optimize use of the bypass</b>	2-4 years
<b>Implement Railroad Street (SB right turn overlap)</b>	2-3 years
<b>Initiate design and construction of Route 7/Bridge Street dual right turn lanes</b>	3-5 years
<b>Initiate design and construction of Young's Field Road relocation</b>	4-6 years
<b>Initiate design of Elm Street/East Street intersection widening</b>	4-6 years
<b>Develop bicycle lanes and shared use path along Bridge Street</b>	5-7 years
<b>Upgrade Elm Street to include signals at Railroad St and East/West Main St, and provide left turn lane at Poplar St</b>	7-8 years
<b>Design and construct new at-grade railroad crossing at Bennitt Street</b>	8-10 years

Source: FHI