COMPLETE STREETS NEEDS ASSESSMENT AND PRIORITIZATION PLAN

TOWN OF HINSDALE, MA
Summer 2016

PREPARED BY:
Berkshire Regional Planning Commission (BRPC)
& the Town of Hinsdale Complete Streets Committee

TABLE OF CONTENTS

INTRODUCTION

The Town of Hinsdale recognizes the need for a multimodal approach to transportation investments, as there is a growing awareness that street design is traditionally focused on automobile travel rather than providing safe accommodations for bicycles and pedestrians. As nonmotorized transportation for travel and recreation becomes increasingly popular, the need to accommodate cyclists and pedestrians in Hinsdale is readily apparent.

Complete Streets are roadways designed to safely and comfortably accommodate all users, regardless of age, ability or mode of transportation. Users include motorists, cyclists, pedestrians, and all vehicle types, including school buses, emergency responders, and freight and delivery trucks among others. In addition to providing safety and access for all users, Complete Street design treatments take into account accommodations for disabled persons as required by the Americans with Disabilities Act (ADA). Design considerations for connectivity and access management are also taken into account with regards to nonmotorized users of the facility.

Enhancements to the multimodal network must be done in a balanced and context-sensitive approach that looks at a wide range of factors from safety to livability and economic development to connectivity. All of these criteria must be considered when thinking about Complete Streets improvements that accommodate all users and all abilities. Complete Streets components include typical roadway design features such as traffic calming, bicycle lanes, sharrows, wayfinding, safe crossings, landscaping, sidewalks, and/or wide shoulders to accommodate nonmotorized travelers in more rural areas. However, not all streets need to include every Complete Streets element. Certain criteria generally dictate which design features are appropriate. In other words, the appropriate level of roadway completeness depends upon its context and function. Complete Streets can be planned as a retrofit to existing streets or incorporated into the design of new streets.

This report has three key expected outcomes. The first is to support Hinsdale's Complete Streets Policy, adopted by the Board of Selectmen on April 14, 2016. The second is to evaluate existing conditions for nonmotorized users of the transportation system. The third is to recommend an implementation strategy for Complete Streets projects that follows a template designed by MassDOT to fulfill the requirements for a Complete Street Project Prioritization Plan.

The newest federal transportation legislation, the Fixing American's Surface Transportation (FAST) Act, supports the multimodal approach to transportation planning and programming, and encourages communities to consider all users of the system in designing a safe, and well-connected system. MassDOT's Complete Streets Funding Program has provided Hinsdale with the opportunity to look at existing conditions, potential improvements, and implementation strategies that support Complete Streets in Hinsdale.

MassDOT Complete Streets Funding Program

Technical assistance to the Town of Hinsdale by BRPC was made possible through funding from MassDOT's Complete Streets program. The Complete Streets program was "authorized by the 2014 Transportation Bond Bill, [and] offers Massachusetts municipalities incentives to adopt policies and practices that provide safe and accessible options for all travel modes." Technical assistance funding of up to $50,000 was available to communities to "conduct a needs assessment, network gap analysis, and/or safety audit to determine a targeted investment strategy for Complete Streets infrastructure."[1]

[1] Mass. Dept. of Transportation (MassDOT). 2016. Complete Streets Flyer. Available from: http://www.massdot.state.ma.us/Portals/8/docs/CompleteStreets/flyer.pdf

To participate and maintain eligibility in the funding program, communities were required to proceed through three tiers of the program. At Tier 1, a Town employee was required to attend a Complete Streets 101 training session and the Town had to adopt a policy affirming the community's commitment to Complete Streets in all aspects of transportation design and construction. At Tier 2, communities were required to draft a prioritization plan that outlined at least 15 eligible projects programmed over a 5-year period. This needs assessment and prioritization plan prepared by BRPC and the Town of Hinsdale Complete Streets Committee meets the requirements for the town's Tier 2 eligibility. At Tier 3, communities were required to submit projects to MassDOT for potential construction funding. Up to $400,000 is available in construction funding yearly through the Complete Streets program. However, this funding is distributed as in a grant program, with no guarantee of funding from year to year. In fiscal year (FY) 2017, Hinsdale applied for $400,000 of project funding for five projects, including several sidewalk construction and traffic calming through the use of speed feedback signs (see **Table 12**).

Eligible Roadways and Project Types

The MassDOT Complete Streets funding program provides potential funding for projects of four main types including: traffic and safety; bicycle facilities; transit facilities; and pedestrian facilities. For a complete list of eligible project types, refer to MassDOT Complete Streets Program Guidance.[2] Additionally, only locally maintained roadways are eligible for potential funding, state highways and roads maintained by other entities are not. However, this assessment examines complete streets needs on all roadways within the Town of Hinsdale, regardless of jurisdiction in an effort to ensure maximum connectivity throughout the transportation network. While some projects identified may not be eligible for funding, this needs assessment could become a tool to advocate for future changes to state roadways.

Background

The Town of Hinsdale developed this report with the support of their Complete Streets Committee, and technical assistance provided by the Berkshire Regional Planning Commission.

The Town of Hinsdale's Complete Streets Committee was established in 2016, after the town adopted their Complete Streets Policy. This Committee is made up of various stakeholders, with representation from the Department of Public Works, Planning Board, Council on Aging, emergency services, the Mission & Vision Working Group, and Town Administrator's office. The town attempted to recruit a member of the public or "citizen representative" for the committee prior to beginning work, but an individual was not able to be identified. The members on the Committee at the time this report was developed were:

- Ryan Aylesworth, Town Administrator
- Rene Senecal, Highway Superintendent
- Ray Bolduc, Town Emergency Management Director (EMD) Massachusetts Emergency Response Commission, Fire Department
- Jeanne Andrews, Council on Aging
- Jim Manning, Mission & Vision Working Group, Council on Aging, Lake Management Committee, Library Trustee
- Susan Rathbun, Police Chief
- Dave Kokindo, Planning Board

[2] Available from: http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/LocalAidPrograms/CompleteStreets/FundingProgram.aspx

Complete Streets have many benefits including safety, multimodal transportation options, economic development, environmental benefits, public health, and accessibility. The Complete Streets Committee discussed these benefits and how completing the streets in Hinsdale can better the community as a whole, for residents and visitors alike. For a complete summary of the public involvement for this planning process, please see **Appendix A**.

PLANNING FRAMEWORK

Implementing Hinsdale's Complete Streets Policy will have various benefits that are experienced by many different stakeholders. With full-scale implementation of Complete Streets elements, the community can see benefits in safety, increased transportation options, support for the Towns economic vitality, environmental benefits, public health impacts, and accessibility for persons with disabilities.

Vision and Intent

As it states in the Town of Hinsdale's Complete Streets Policy:

> *The purpose of the Town of Hinsdale's Complete Streets Policy…is to accommodate all road users by creating a roadway network that meets the needs of individuals utilizing a variety of transportation modes. It is the intent of the Town of Hinsdale to formalize the plan, design, operation, and maintenance of streets so that they are safe for users of all ages, all abilities and all income levels as a matter of routine. This Policy directs decision-makers to consistently plan, design, construct, and maintain streets to accommodate all anticipated users including, but not limited to pedestrians, bicyclists, motorists, emergency vehicles, and freight and commercial vehicles.*

Goals and Objectives

The goals and objectives of this Complete Streets Project Prioritization plan, guided by the Hinsdale Complete Streets Committee, were developed to provide safety, comfort, mobility, and accessibility for all users of the street network, including pedestrians, cyclists, other nonmotorists, transit riders, motorists, commercial vehicles, and emergency vehicles.

1. **Safety** | Prioritize safety for all users of the transportation system.

2. **Traffic Calming** | Promote traffic calming measures in Hinsdale to encourage access for all modes, reduce speeds in activity hubs, and promote attractive streetscapes.

3. **Cost Effectiveness** | Prioritize cost effective improvements that enhance the existing transportation network through maintenance and operations.

4. **Livability and Economic Vitality** | Increase the livability and economic vitality of the town by improving access to active mode facilities by residents and enhancing the Hinsdale village so it is walkable, bikeable, and can be used by all modes.

5. **Connectivity** | Provide transportation choices by improving system connectivity within and between modes.

6. **Project Readiness** | Prioritize projects that are "shovel ready," require minimal or no design/engineering work, or are currently under design.

7. **Mobility** | Improve infrastructure and transit/specialized transit services to ensure those with limited mobility can move in and around Hinsdale.

8. **Context Sensitivity** | Develop a multimodal transportation system that is sensitive to the historic districts and rural/scenic character of Hinsdale.

Performance Measures

Mode Share

The Town of Hinsdale currently sees a commute mode-share dominated by automobile travel (98% of commuters). The mode-share is described in **Table 1**. The Town would like to see modest increases in all modes other than automobile, which collectively could reduce the number of car commuters by about 2.5%.

Table 1. Hinsdale Mode-Share for Commuters

Mode	Percent of Commuters	Mode Share Goals
Car	97.8%	95.25%
Transit	0.0%	0.5%
Bicycle	0.0%	0.5%
Walk	0.9%	1.5%
Taxi, Other (motorcycle, etc.)	0.4%	0.75%
Work from Home	0.9%	1.5%

Source: 2006-2010 CTPP data

During the development of their planning framework, the Hinsdale Complete Streets Committee developed system-wide performance measures for each of their eight goals. The performance measures, listed by goal area, are shown in **Table 2**.

Table 2. Annual System Performance Measures

Goal	Performance Measure	Data Source
Safety	Total crashes by severity and mode	MassDOT HSIP Crash Clusters[3]
Traffic Calming	Annual number of citations for speeding	Hinsdale Police Dept.
Cost Effectiveness	Maintenance and operations projects annually	Hinsdale Highway Dept.
Livability and Economic Vitality	Number of residents within ¼ mile of a dedicated active mode facility	MassGIS – Land Use (2005)[4]
	Annual number of improvements in the urban area	Town of Hinsdale Complete Streets Committee
Connectivity	Share of non-automobile commuters	U.S. American Community Survey (ACS)[5]
Project Readiness	Number of projects in design/engineering phase	Hinsdale Highway Dept.

[3] http://geo.massdot.opendata.arcgis.com/datasets/cc323741010d4b17b71ca664e2050457_1
[4] http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/lus2005.html
[5] http://factfinder.census.gov/

Goal	Performance Measure	Data Source
Mobility	Number of new ADA-compliant curb ramps	Town of Hinsdale Complete Streets Committee
	Linear feet of ADA-compliant sidewalk or pathway	Town of Hinsdale Complete Streets Committee
Context Sensitivity	Annual number of projects in historic districts or adjacent to open space areas	Town of Hinsdale Complete Streets Committee

Related Plans

The Town of Hinsdale worked with the Berkshire Regional Planning Commission (BRPC) in 2016 to develop this Complete Streets Prioritization Plan, which examines needs for Complete Streets in the town and maps out potential projects for implementation. Additionally, the town is concurrently working with BRPC to develop a Vision Plan for Hinsdale, which is anticipated to be completed in late spring 2017. Ongoing public participation in the development of the Vision Plan was referenced for the development of this plan. Other existing plans were consulted as well, as referenced below.

Vision Plan Survey

In a public survey to inform the Vision Plan for Hinsdale, 66.4% of respondents rate the condition of town roads as "poor," and 85.5% of respondents believe that the condition of town roads need to be improved. Additionally, 21% of respondents list the poor condition of roads and/or sidewalks as the single thing they like least about living in Hinsdale.

As for walkability in Hinsdale, a large percentage of survey respondents (41.2%) disagreed with the statement *There are sidewalks along the routes I prefer to walk*, and of those respondents, only 25.3% at least somewhat agreed with the statement *I feel safe walking along town roads, even if there are no sidewalks*. Only 18.7% of respondents disagreed with the statement *There are crosswalks located at appropriate locations in town*, and of those respondents, 64.7% also disagreed with the statement *I feel safe crossing town roads, even if there are no crosswalks*. Overall, 40.5% of respondents at least somewhat agreed with the statement *I feel safe walking along town roads, even if there are no sidewalks*, and 61.9% at least somewhat agreed with the statement *I feel safe crossing town roads, even if there are no crosswalks*. Only 35% of respondents at least somewhat agreed with the statement *It is convenient for me to walk from my home to locations around town*, however 60.9% at least somewhat agreed with the statement *It is convenient for me to park at one location in town and walk to other locations around town*.

These survey responses indicate the need from Hinsdale residents to invest in walkability improvements particularly those that improve safety and walking convenience, as well as those that reduce the need to drive, likely from more remote areas of town. While residents generally felt safe *crossing* the road, more residents felt unsafe *walking* in Hinsdale than those that felt safe. Residents also reported a lack of convenience in walkability, with many reporting that they would have to drive and park at one location to walk to other locations in town. This challenge has been seen in other rural communities and identified in research, with a recent brief by Active Living Research reporting "there is a need for environments that support active recreation, even if residents must drive to get to them.[6]

[6] Active Living Research. Research Brief. September 2015. Promoting Active Living in Rural Communities. Available from: http://activelivingresearch.org/promoting-active-living-rural-communities.

Open Space and Recreation Plan

The Town of Hinsdale's Open Space and Recreation Plan was completed in July 2007, and although it was never officially adopted, it does demonstrate support for bicycle/pedestrian-friendly policies. One of the objectives of the plan is that "Hinsdale has a welcoming, pedestrian-friendly town center," and an action item for another objective was to "Map existing/potential mountain bike trails."

Community Development Plan

The Town of Hinsdale's Community Development Plan of 2004 further defines importance of pedestrian and bicycle connections in the downtown and to remote areas, summarizing the community need as follows:

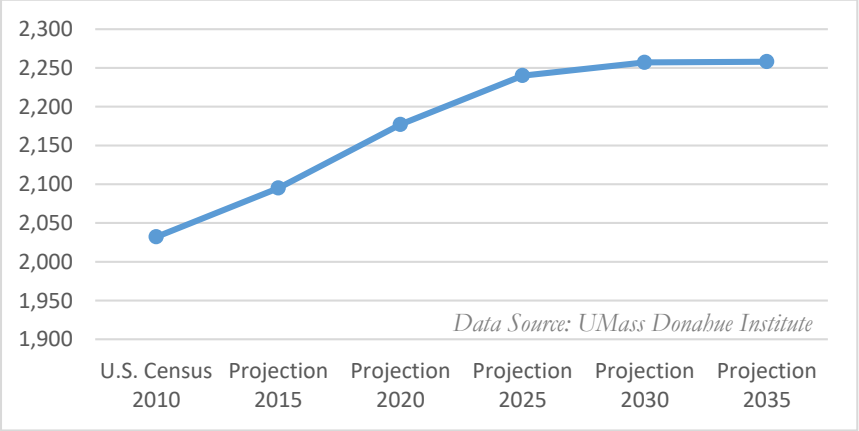
> *The need for non-motorized connections is two-fold. First, pedestrian and bicycle-friendly pathways throughout Hinsdale and especially in the downtown area are needed in order to foster greater community interaction. Second, trails that connect the downtown to more remote areas would provide a means for hikers or mountain bike riders to access existing recreational areas and provide a linkage between them.*

EXISTING CONDITIONS

Sociodemographic Profile

The Town of Hinsdale is a small town just over 2,161 residents, which has seen population growth since 2000. From the US. Census estimate of population in 2010 (2,032), the UMass Donahue Institute predicts that the population of the town will grow to just approximately 2,258 residents by the year 2035, and increase of 11% (see **Figure 1**). This is uncommon in Berkshire County, which as a whole has been declining in population since the 1970s, and all but a few municipalities, such as Hinsdale, are predicted to decline in population over the next few decades.

Figure 1. Population Projection



According to recent data, about 30% of the population is over the age of 55, and by 2030 it is expected that around 55% of the population will be over the age of 55. As aging in place becomes more popular among seniors, the composition of the population is important to consider when addressing things like wayfinding, walkability, and roadway safety. Additionally, as a rural community, Complete Streets improvements could be seen as a form of public health infrastructure, enabling active transportation for older residents and creating a connected network of town parks and recreation areas.

Climate

There are about 189 sunny days per year and about 139 precipitation days per year,[7] the latter of which may make travelling by bicycle or foot difficult at times throughout the year. Berkshire County receives snowfall throughout the winter months, and is at a higher elevation than most of Massachusetts. That said, the summer months aren't as hot on average as the rest of the state, and many are great days to travel using active modes.

Topography

A charming, quiet, and remote place, Hinsdale owes much of its character to the natural landscape it inhabits. The hills to its east and west protect the town from the world outside its borders. The Hinsdale Flats Wildlife Management Area, a 1,757-acre wetland complex in the center of the town, rewards the curious and the brave with abundant wildlife, unique vegetation, and rugged roads and trails for exploring. The back roads that wind over hills and through thick forests open up to farm fields and breathtaking views to the hills beyond. Settlement is clustered largely in the valley along the river, allowing Hinsdale's outer reaches to remain relatively wild and out of the way.

The primary slopes of Hinsdale occur in north-south patterns corresponding to the mountain ranges which border the town. Slopes of 15 percent and greater account for approximately 20 percent of the land area. The descent from mountain peaks to the valley center is as much as 700 feet and mostly occurs over a horizontal distance of less than 2 miles. The rate of descent begins fast but decreases towards the valley bottom - as is reflected by steeper slopes concentrated around the higher elevations. Since mountain ranges border the town, many scenic hillsides extend outside the periphery of the town.

Land Use Characteristics

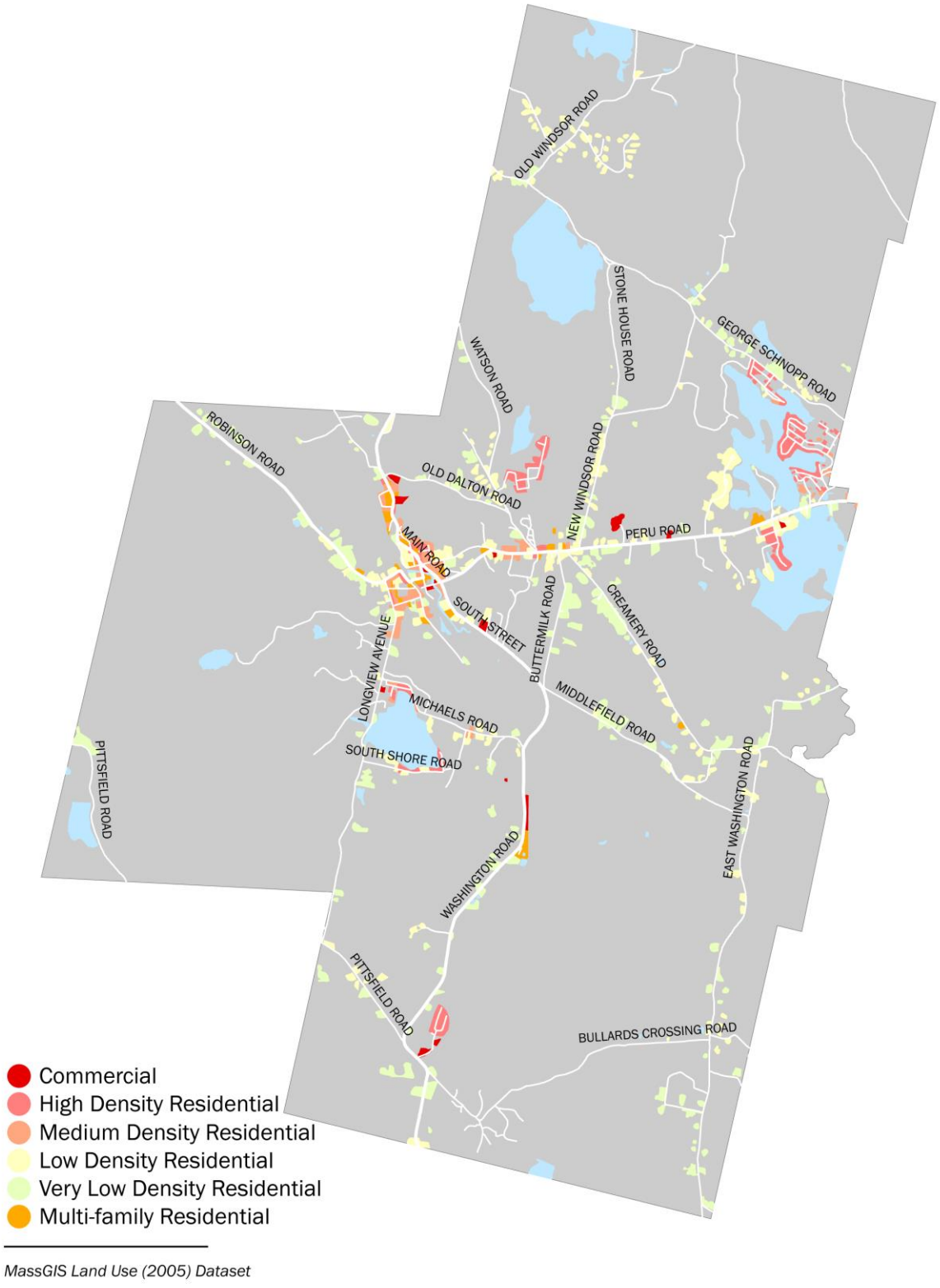
The Town of Hinsdale is a rural community with an average population density of approximately 100 residents per square mile, based on the 2014 American Community Survey population for the town (2,161) and the town's total land area (21.7 square miles).

Neighborhood Density

Neighborhood density can be seen in **Figure 2**. The densest neighborhoods in Hinsdale include those in the center of town, which includes many multi-family residential structures. Other densely populated areas of town include the two mobile home parks and neighborhoods around Lake Ashmere and Plunkett Reservoir. Aside from a few instances of multi-family residential housing, the outer streets have low or very low residential density.

[7] http://www.bestplaces.net/climate/city/massachusetts/hinsdale

Figure 2. Neighborhood Density



MassGIS Land Use (2005) Dataset

Urban Area, Residential Villages, and Town Features

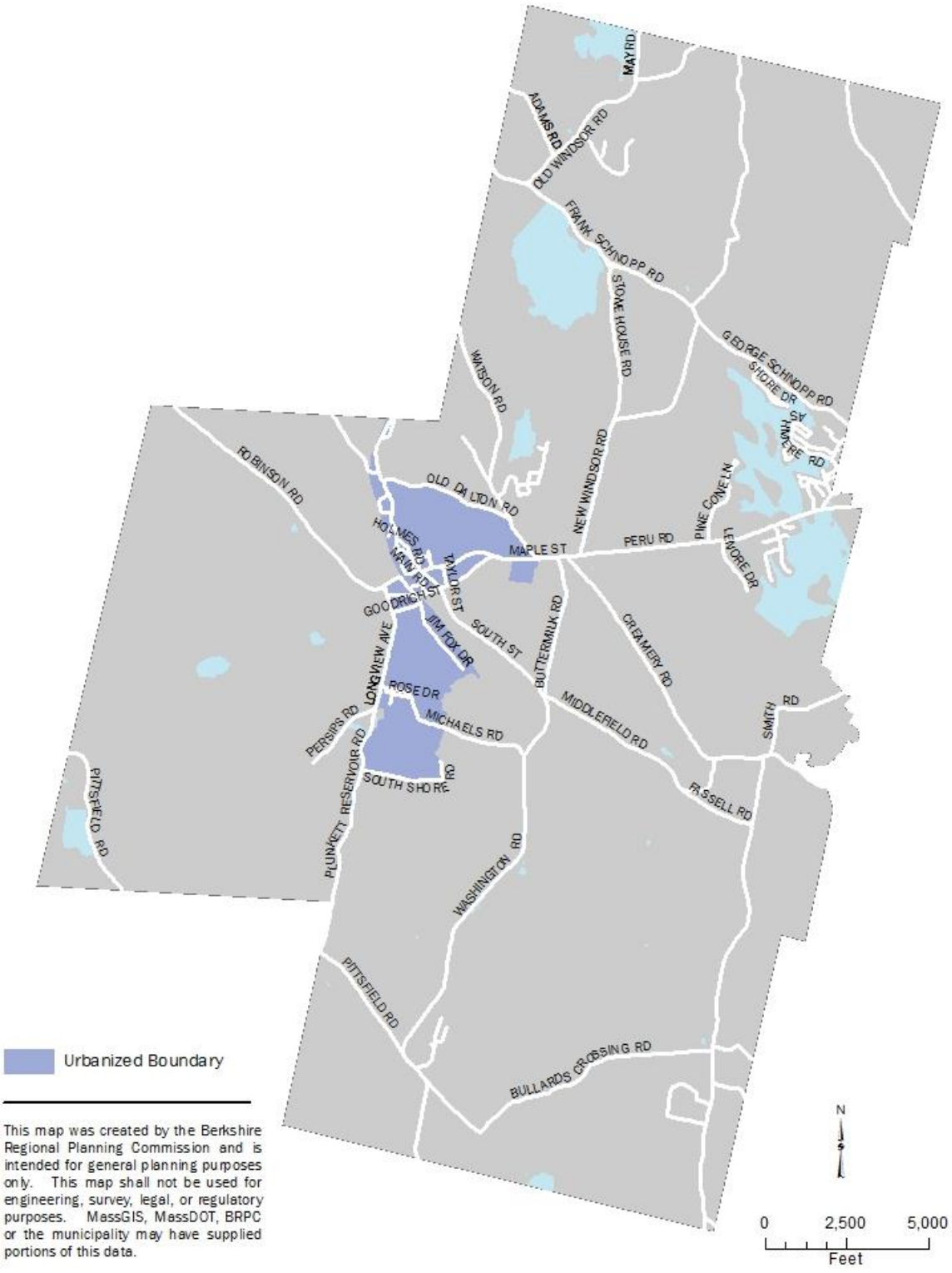
The Town of Hinsdale has one main village center (see **Figure 3**), which is considered an urban area by the U.S. Census Bureau (see **Figure 4**) and includes the residential concentration around Plunkett Reservoir. There is a secondary concentration of residences around Ashmere Lake. Most major shopping/retail is conducted outside of the town in neighboring communities.

Hinsdale is primarily rural, and has a low population density. The town is part of the Central Berkshire Regional School District, with students Grades 6 and above traveling to the adjacent Town of Dalton for school, while younger students attend Kittredge Elementary School in the center of Hinsdale.

The town offers many recreational opportunities including Ashmere Lake and Plunkett Reservoir, Hinsdale Athletic Field and Town Center Playground, the Appalachian Trail and Old Mill Trail, and the Fire Association and Main Street Pavilions. The town also has a public library and post office in the town center.

Figure 3. The Village Center Contains Businesses Such as Ozzie's Steak and Eggs on Maple Street

Figure 4. Hinsdale's Urban Area

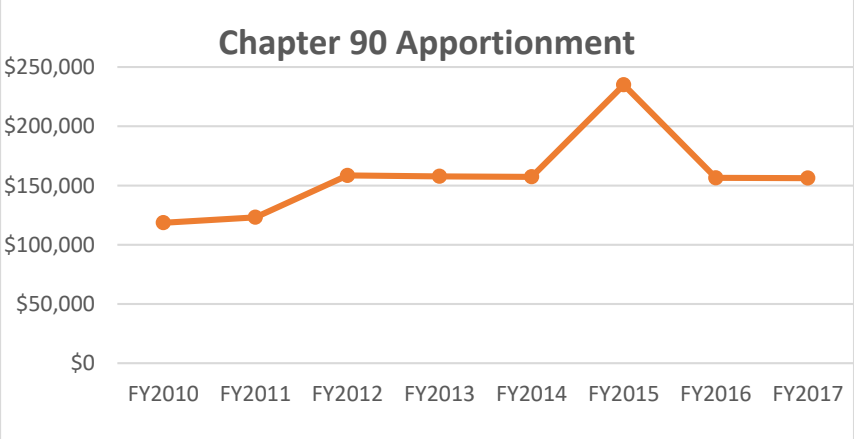


Fiscal Conditions

In Massachusetts, the Chapter 90 highway funding program was enacted in 1973 to entitle municipalities to reimbursement of documented expenditures on approved highway projects. Funds are provided through state Transportation Bond Issues, and can be used for a variety of project types and municipal uses including preservation and improvement projects that create or extend the life of capital facilities, garages, salt sheds, buildings for storage of equipment, and road building machinery, equipment and tools.

Chapter 90 apportionments fluctuate from year to year and are distributed based on a formula that factors in road miles (58.33%), population (20.83%) and employment (20.83%). In Hinsdale, Chapter 90 funding is generally between $115,000 and $160,000 each fiscal year (FY), with a significant increase in 2015 to over $235,000 due to additional statewide funding that fiscal year that was allocated by the Governor Baker administration (see **Figure 5**).

Figure 5. Chapter 90 Apportionment FY2010-FY2017



Transportation Conditions

Road Network

There are 50.72 miles of road in Hinsdale, of which 5.07 miles are under MassDOT's jurisdiction, 5.62 miles are privately owned, 0.94 miles are of unknown jurisdiction, and the remaining 39.09 miles are town accepted roads (see **Table 3**). The 5 miles of MassDOT road consists entirely of Route 8, which is a designated truck route. The private roads are largely grouped around Ashmere Lake, Plunkett Reservoir, and the two mobile home parks. The only road of unknown jurisdiction crosses the northeast corner of the town and is not connected to the rest of the road network in Hinsdale (See **Figure 6**).

Users of the roads include private motor vehicles, freight/commercial vehicles, emergency vehicles, bicyclists, pedestrians, school bus riders, and the occasional farm equipment, recreational vehicles, and equestrians that can be found in a small rural town.

Note: Bullard's Crossing Road is shown throughout maps in this report as connecting between Route 8 (Washington Rd) to East Washington Road. However, there is no actual physical connection due to removal of a railroad bridge along Bullard's Crossing Road some years ago.

Table 3. Hinsdale Road Jurisdiction

Jurisdiction	Mileage	Percent of Roads
MassDOT	5.07	10.0%
Town	39.09	77.1%
Private	5.62	11.1%
Unknown	0.94	1.9%
Total	**50.72**	**100.0%**

Road Condition

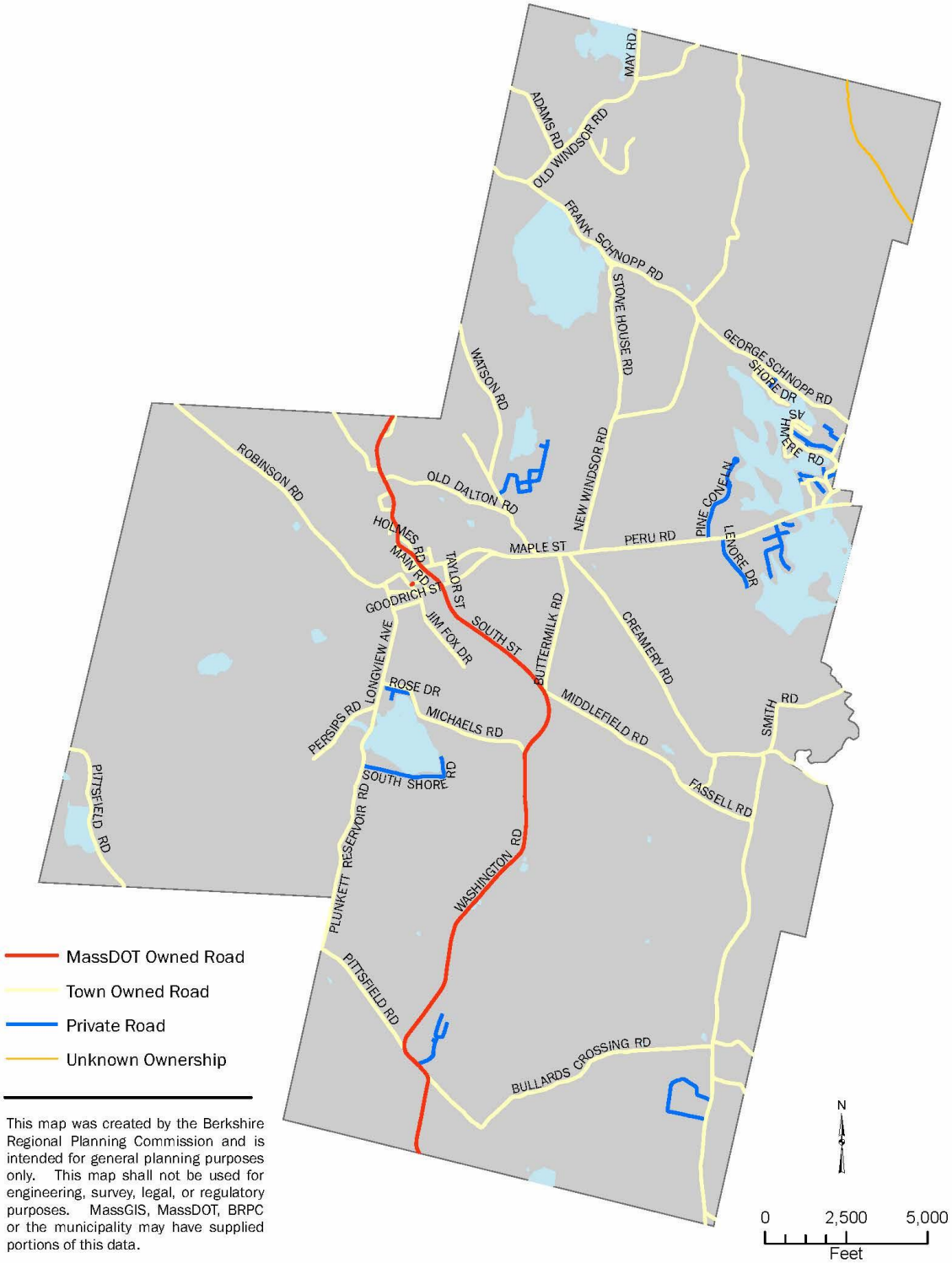
In 2014, Berkshire Regional Planning Commission produced a Road Condition Report for Hinsdale. BRPC collected data according to the Pavement Surface Evaluation and Rating (PASER) scale developed by The University of Wisconsin-Madison Transportation Information Center. PASER is a windshield road surface rating system that uses a 1 to 10 scale. In the PASER system a '10' is a new or newly reconstructed roadway. A '1' is a completely failed roadway. Ratings are assigned according to the type and amount of visual defects.

At that time of the report, the majority of the roads (73.65%) were in fair condition, with a PASER rating between 4 and 7. Only 13.41% of roads were in good condition, with a PASER rating between 8-10, and 12.94% were in poor condition, with a PASER rating between 1-3 (see **Table 4**).

Table 4. Hinsdale Road Condition in 2014

Condition	PASER Rating Scale	Percent of Roads
Good	8-10	13.41%
Fair	4-7	73.65%
Poor	1-3	12.94%

Figure 6. Roads by Jurisdiction



Functional Classification

Functional classification is a way of grouping roadways into classes or systems based on character and type of traffic service they are intended to provide. All roadways are grouped into one of three classes (arterial, collector or local), and provide for transportation based on a spectrum between overall mobility and land access. Arterials provide for travel over long distances, but offer a lesser degree of land access than local or collector roads. Conversely, local roadways provide a high degree of land access, but traverse shorter distances and provide less overall mobility (see **Table 5**).

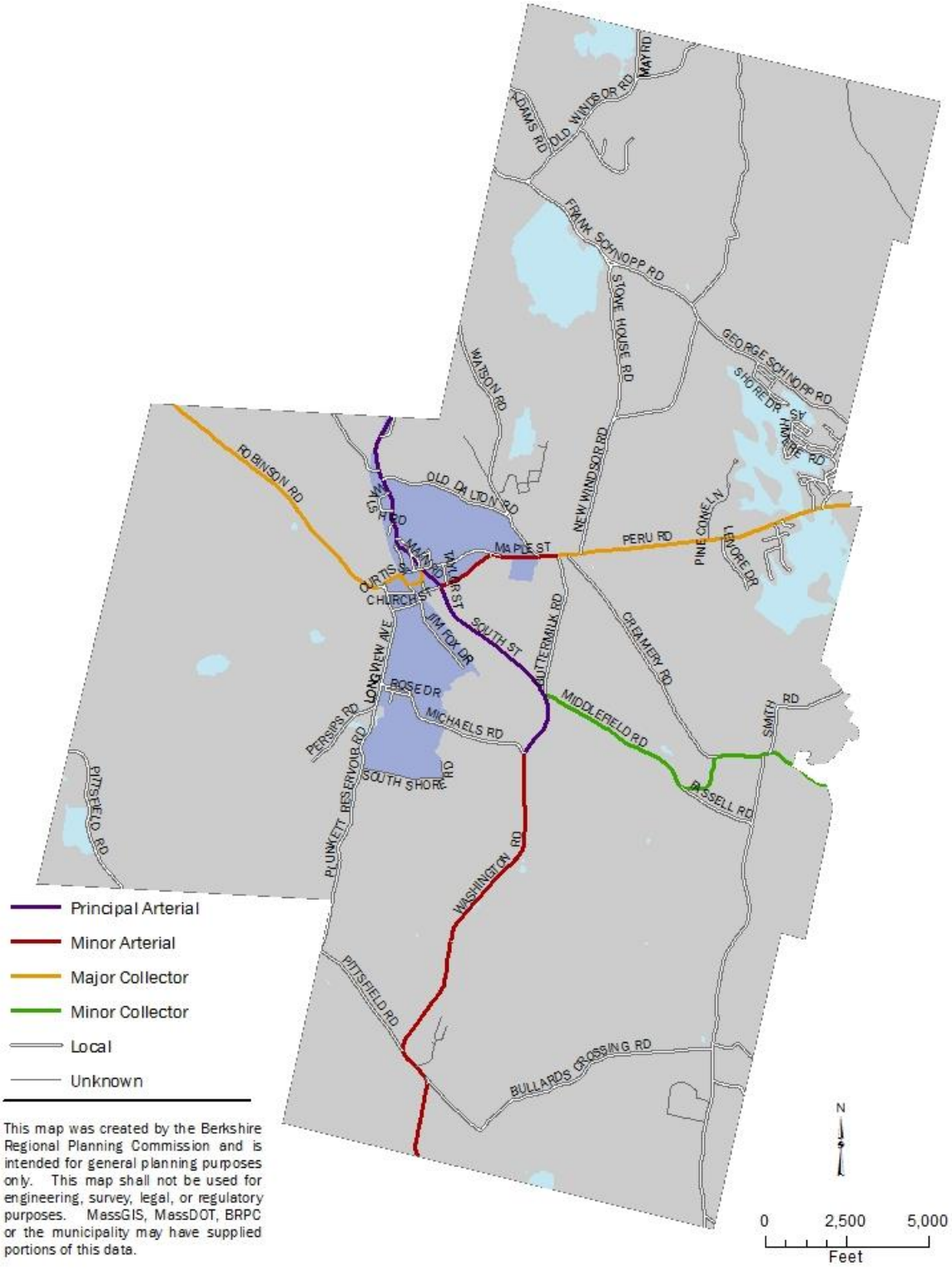
Table 5. Functional Classification Descriptions[8]

Functional System	Services Provided
Arterial	Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
Collector	Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic from local roads and connecting them with arterials.
Local	Consists of all roads not defined as arterials or collectors; primarily provides access to land with little or no through movement.

Within Hinsdale, Route 8 is a principal arterial road from the border with the Town of Dalton to the north, through the center of town, and until the intersection with Michaels Road, at which point it becomes a minor arterial road. The major collectors are Robinson Road, which begins at the border with Dalton to the northwest and connects to the town center, Curtis Street, which picks up where Robinson Road ends, Bridge Street, which connects Curtis Street to Main Street, and Peru Road from the Town of Peru to the east to the intersection with Buttermilk Road, where it becomes Maple Street, a minor arterial road. Middlefield Road, which extends from South Street eastward to the Town of Middlefield, is classified as a minor collector (see **Figure 7**).

[8] Table adapted from Federal Highway Administration, Flexibility in Highway Design. Available from: http://www.fhwa.dot.gov/environment/publications/flexibility/ch03.cfm

Figure 7. Roads by Functional Classification



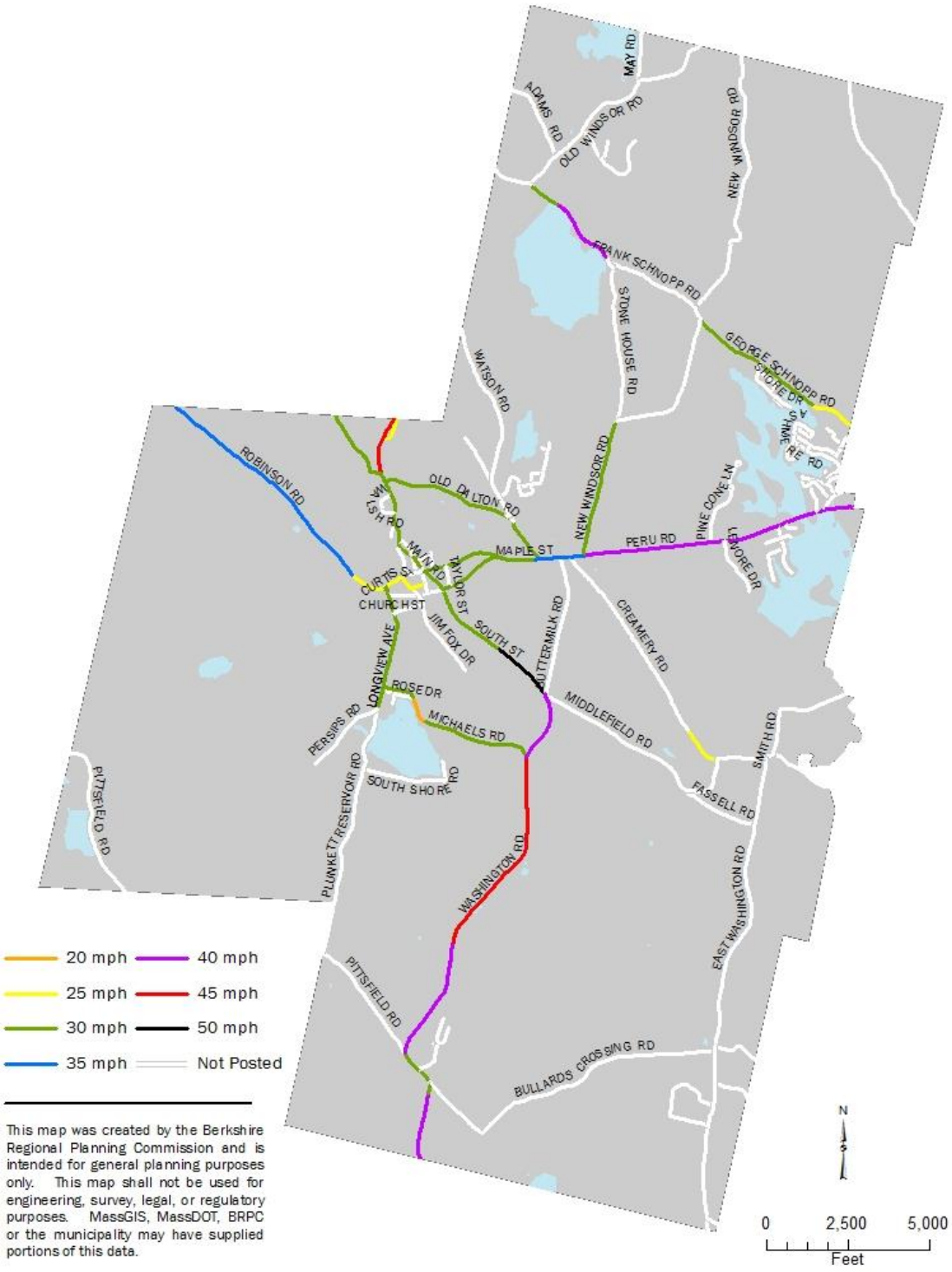
Speed Limits

Speed limits, in conjunction with other factors like traffic volume, shoulder width, sight distance, have an impact on both the actual and perceived safety of nonmotorized travelers when they travel along a roadway without a dedicated facility. When speeds are higher, the severity of accidents involving nonmotorists is drastically increased, and separation from fast moving vehicle traffic is preferred. On low-volume roadways with high speed limits, ensuring safety for nonmotorized travelers within the corridor is critical for safety (actual and perceived). When speeds are high and there is little room to accommodate nonmotorists, looking at parallel routes, or separate facilities is important.

Most of the urban area of town has a speed limit of 30 mph or below. Route 8 has the only stretches of road reach speed limits of 45 or 50 mph, and the section of 50 mph (see **Figure 8**) is quite short. Most outlying stretches at 25 mph. A map of speed limits is shown below in **Figure 9**.

Figure 8. Speed Limit Sign on Route 8

Figure 8. Speed Limits



Road Surface Type

Road surface type has potential implications for Complete Streets improvements, specifically for pedestrian and bicycling facilities. Generally, unpaved (dirt or gravel) roadways are considered exempt from many potential improvements. Unpaved roadways cannot be striped, and thus rely solely on warning signage to convey information, which means that elements such as bike lanes or shared lane markings cannot be added to these roadways. Moreover, pedestrian facilities, such as sidewalks are generally not included along unpaved roadways, unless they are in the form of an informal path alongside the roadway.

In general, vehicle speeds on unpaved roadways are lower due to road width and the surface type. Traffic volumes are generally lower as well. Low traffic speeds and volumes can make these roadways ideal for pedestrians, particularly recreational walkers. However, the surface type may create issues with accessibility as required by the Americans with Disabilities Act (ADA). ADA regulations requires that all accessible floor and ground surfaces be "firm, stable and slip resistant" and other ADA guidance notes that "most loose materials, including gravel will not meet these requirements unless properly treated to provide sufficient surface integrity and resilience[9]." Additionally, unpaved roads are sometimes used by cyclists, particularly those who ride mountain bikes with wider tires, and may be preferred due to relatively low traffic volumes. The narrow tires of many road bikes limit their use on unpaved roadways.

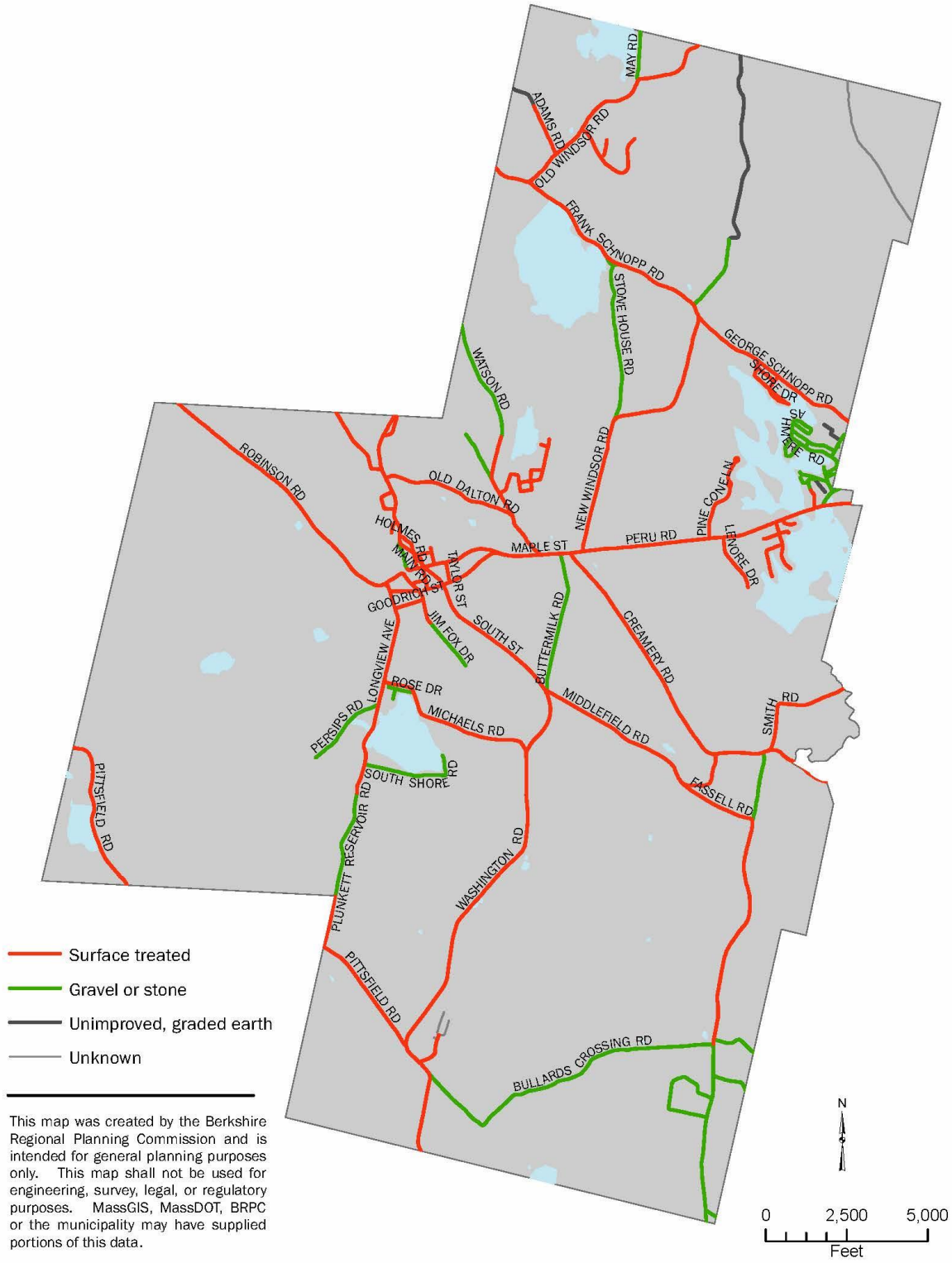
The majority (68.9%) of roads in Hinsdale are paved, while about a quarter of the roads (25.5%) are gravel or stone, particularly around the lakes and in other outlying areas of town. Few roads unimproved / graded earth surface, and one road is unknown (See **Table 6** and **Figure 10**).

Table 6. Hinsdale Road Surface

Surface Type	Mileage	% of Roads
Paved	34.95	68.9%
Gravel/Stone	12.96	25.5%
Unimproved / Graded Earth	1.03	2.0%
Unknown	1.79	3.5%
Total	**50.72**	**100.0%**

[9] https://www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards/guide-to-the-ada-standards/chapter-3-floor-and-ground-surfaces#3021

Figure 9. Roads by Surface Type



Pedestrian Conditions

Sidewalk Network

The current sidewalk network in Hinsdale is primarily limited to the center of town (see **Figure 11**). When entering the town center on Route 8 from the south, the sidewalk picks up on the west side of the road, a little more than a quarter mile south of the Hinsdale Town Hall and is continuous for 0.4 miles until there is a brief gap at the former gas station near the intersection with Plunkett Ave. and Main Street. The sidewalk then picks up again and continues to the north along Route 8 for about 0.7 miles before it ends at the eastern section of Old Dalton Road; there is a short spur onto the western section of Old Dalton Road to the Old Mill Trailhead. The Old Mill Trail is a 1.25-mile path that runs roughly parallel to Route 8 and the Housatonic River, offering a scenic yet accessible off-road walking route into Dalton.

Entering the town center on Maple Street from the east, the sidewalk begins on the north side of the street at the intersection with Old Dalton Road, and continues for the remaining length of the road, 0.7 miles. The last ~450 feet of Maple Street has sidewalk on both sides, where it passes the Hinsdale Public Library, the U.S. Post Office, an ATM, and Ozzie's Steak and Eggs.

The sidewalk on Maple Street connects to Main Street, which has sidewalks on each side of the road that are in good or excellent repair. There is a short section of sidewalk on the north side of Plunkett Ave. from the intersection at Route 8, east to a terminus just before the intersection with Taylor Street. There is also a short section on Taylor Street that doesn't connect to Plunkett Ave.

The west side of the Main Street sidewalk turns onto Bridge Street, and then a crosswalk connects the sidewalk on Bridge Street to the sidewalk on Commonwealth Ave. Only a short section exists on Commonwealth Ave, beginning abruptly just north of Bridge Street and extending only as far south as Church Street, which has sidewalk running its entire length but ending with no further connection. Goodrich Street runs roughly parallel to Church Street and only has sidewalk for less than half its length; the sidewalk it has does not connect to the roadways on either end.

Crossings

There are few marked pedestrian crosswalks in the Town of Hinsdale, and the majority of the marked crossings are concentrated in the town center. There is a crosswalk on Main Street across Plunkett Ave Extension that is perpendicular to another marked crosswalk across Route 8 to connect to Plunkett Ave. These crosswalks both have ADA-compliant curb ramps with detectable warnings. There is also a crosswalk along Main Street across Bridge Street.

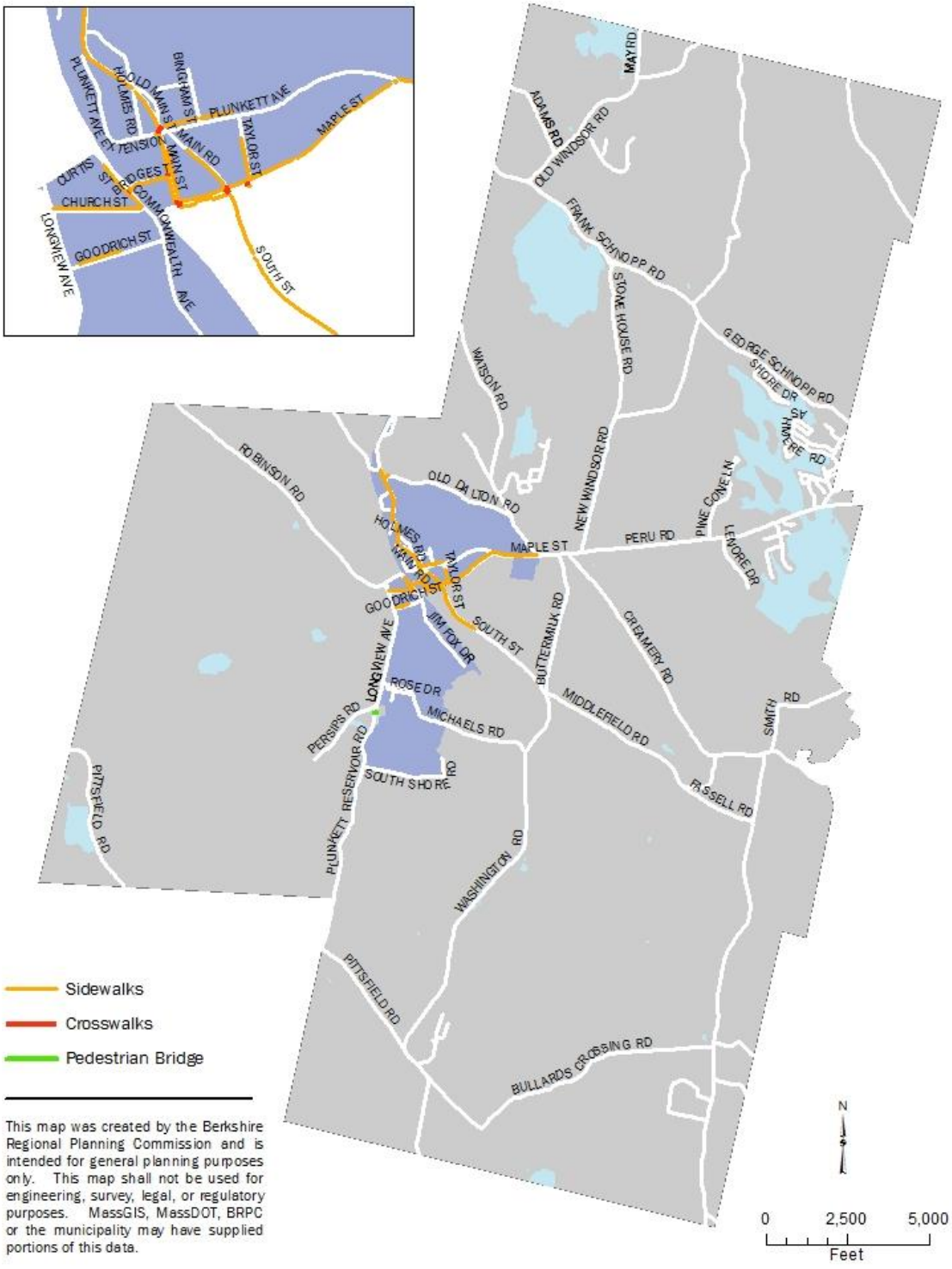
There are crosswalks on two sides of the four-way intersection of Maple Street and Route 8, which has the only signalized intersection in town. One crosswalk crosses Maple Street on the west side of Route 8, and a second one crosses Route 8 on the north side of Maple Street. There's another pair of crosswalks at the intersection of Maple Street and Main Street, one across each road.

There is also a crosswalk across Maple Street further to the east, in front of Kittredge Elementary School, to connect the school to the sidewalk on the north side of Maple Street.

Lastly, there is a marked crosswalk across Commonwealth Ave on the south side of Bridge Street, which connects the town center sidewalk network to the partial sidewalk network in the adjacent neighborhood. This crossing also has ADA-compliant curb ramps with detectable warnings.

Although it is not town-owned or maintained, there is a pedestrian bridge on Plunkett Reservoir Road, north of the beach access, that was installed by Camp Romaca to provide safe crossing for campers.

Figure 10. Existing Sidewalk Network



Off-Road Pedestrian Network and Trails

A portion of the Appalachian Trail passes through Hinsdale, although there is no trailhead or access point located in town. The nearest trailhead is located along Grange Hall Rd. in Dalton (which becomes Robinson Rd. at the Hinsdale town line). The Appalachian Trail is the longest hiking-only footpath in the world, and extends from Maine to Georgia.

There are several other smaller trails in town, including the Old Mill Trail located off Old Dalton Rd. near its intersection with Route 8. The Old Mill Trail travels for 1.5 miles along the East Branch of the Housatonic River between Dalton and Hinsdale parallel to Route 8. Approximately three-quarters of a mile of this trail is considered accessible to people with disabilities.

Bicycle Conditions

On-Road Bicycle Conditions

There are no roadways with bike lanes in Hinsdale, nor are there roadways with shared lane markings/signage. As noted above under the Road Condition section, most of the roads in Hinsdale are only in poor or fair shape. Uneven pavement and unmaintained gravel roads make on-road bicycling difficult. Additionally, roads with better pavement condition tend to experience higher speeds, which can result in safety issues for cyclists.

Off-Road Bicycle Conditions

There are no official off-road bicycle trails in Hinsdale, however the Complete Streets Committee was able to identify several locations are known to be used by mountain bikers, with or without authorization of the landowner. This suggests that there is some demand for sanctioned off-road bicycle trails.

Bicycle Parking

No public bicycle racks currently exist in the Town of Hinsdale.

Signage/Wayfinding

There are no existing wayfinding systems in town, but once the gaps in the sidewalk system are closed and the system is expanded, there will be an opportunity to create walking loops and promote the new level of walkability through context-sensitive wayfinding signage.

Safety

Safety is a major reason many communities look at Complete Streets improvements, and though safer infrastructure is absolutely a way to reduce the injuries and deaths of cyclists, pedestrians, and other vulnerable users, there is also a behavioral component that must be supported through encouragement and education.

Table 7 shows all crash data in Hinsdale from January 1, 2011 through August 5, 2016 by street name; this includes all car crashes, with and without injuries, and not just those that involved bicyclists or pedestrians. Washington Road (Route 8) has the highest number of crashes during this time period, at 17 total. There is a stretch of road that gets up to 45 mph, then goes down to 40 mph, and then drops to 30 mph at the intersection with Pittsfield Road. Main Street (most of which is Route 8 to the north of the city center), Old Dalton Road, and South Street (Route 8) all have 10 accidents during this time. Main Street and Old Dalton Road have speed limits of 30 mph, however one section of South Street goes from 30 mph to 50 mph. Frank Schnopp Road has had at least one accident per year, for a total of 9. Robinson Road has 7 accidents overall, yet 4 occurred in 2014.

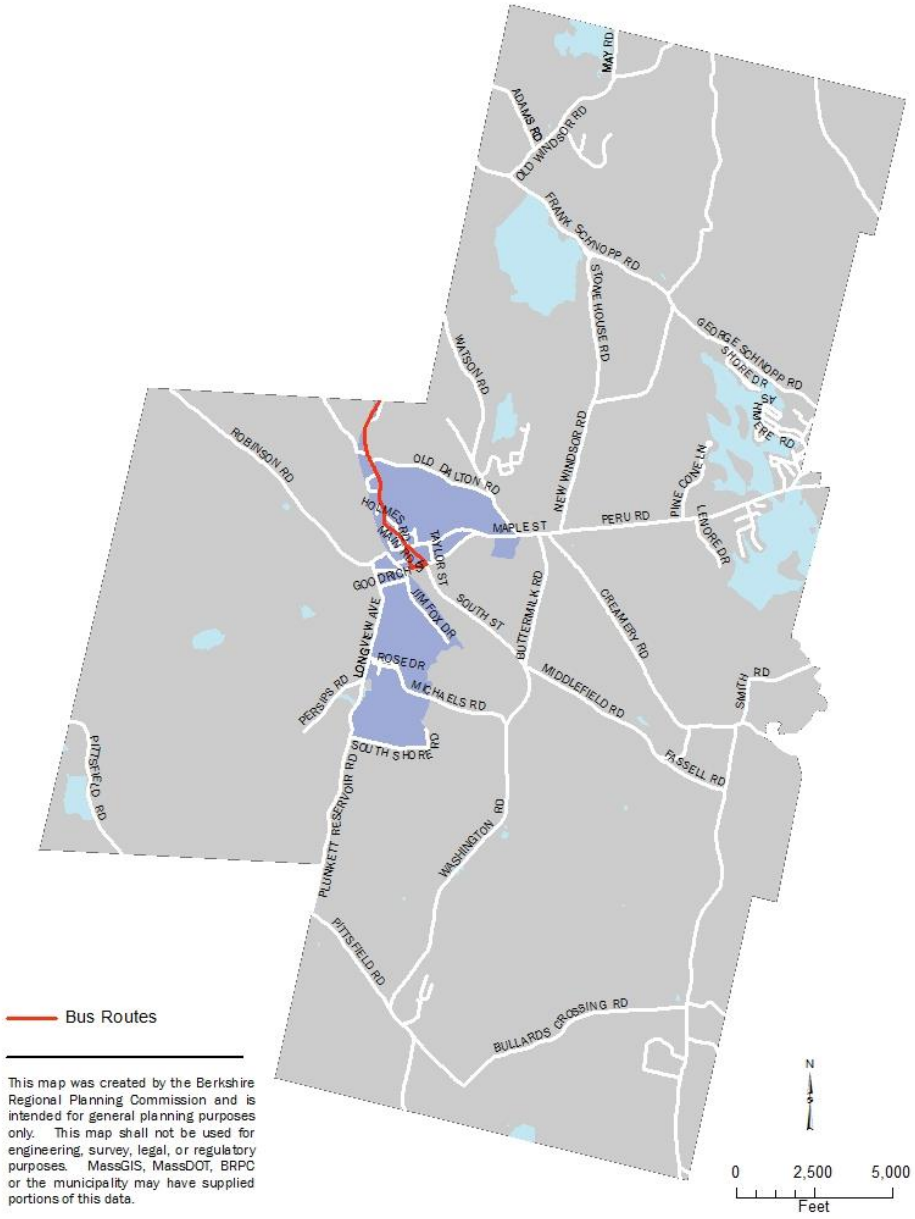
Table 7. Number of Accidents by Year, 2011-2016

Road	2011	2012	2013	2014	2015	2016*	Total
Washington Road	4	-	3	2	3	5	**17**
Main Street	2	1	1	2	3	1	**10**
Old Dalton Road	-	1	2	4	1	2	**10**
South Street	2	3	-	2	3	-	**10**
Frank Schnopp Road	1	1	2	2	2	1	**9**
Robinson Road	-	-	1	4	1	1	**7**
Maple Street	2	1	-	-	2	1	**6**
Middlefield Road	-	2	1	1	1	1	**6**
Curtis Street	1	1	-	1	-	1	**4**
Michaels Road	-	-	1	2	1	-	**4**
Peru Road	-	1	1	2	-	-	**4**
Pittsfield Road	1	2	-	1	-	-	**4**
Plunkett Avenue	1	-	-	1	1	1	**4**
Commonwealth Avenue	-	1	1	1	-	-	**3**
Creamery Road	1	-	-	1	-	1	**3**
East Washington Road	-	1	1	-	1	-	**3**
George Schnopp Road	-	-	2	-	-	1	**3**
Hinsdale Road	1	2	-	-	-	-	**3**
Longview Avenue	-	1	2	-	-	-	**3**
Ashmere Drive	-	-	-	-	2	-	**2**
Country Road	-	-	-	-	2	-	**2**
River Road	1	1	-	-	-	-	**2**
Old Windsor Road	-	1	-	1	-	-	**2**
Plunkett Reservoir Road	-	-	-	1	1	-	**2**
Ashmere Road	-	1	-	-	-	-	**1**
Bridge Street	-	-	-	1	-	-	**1**
Buttermilk Road	-	1	-	-	-	-	**1**
Church Street	-	-	-	1	-	-	**1**
Gentian Hill Road	-	-	-	-	-	1	**1**
Kirchner Road	-	-	1	-	-	-	**1**
New Windsor Road	-	-	-	1	-	-	**1**
North Washington State Road	-	-	-	1	-	-	**1**
Smith Road Extension	-	-	-	1	-	-	**1**
South Shore Road	-	-	1	-	-	-	**1**
Stonehouse Road	-	-	-	-	1	-	**1**
Total	**17**	**22**	**20**	**33**	**25**	**17**	**134**
							***data for 2016 is through August 5, 2016 only**

Public Transportation (BRTA Bus Route)

Berkshire Regional Transit Authority (BRTA) operates a bus route (see **Figure 12**) that connects the center of Hinsdale to Dalton and Pittsfield, including shopping areas, an intermodal transportation center, and Berkshire Community College. The bus route currently brings the bus from Dalton on Route 8. The bus follows Main Street when it separates from Route 8, and turns left onto Maple Street where it stops to pick up passengers at the Post Office. The bus then continues on Maple Street to take a left at the traffic signal onto Route 8 and heads back to Dalton. Anyone wishing to ride can hail the bus, which will stop and let passengers board so long as it is safe to do so. Commonly used informal stops include Glenn's Hinsdale General Store and the intersection of Route 8 and Old Dalton Road, near the Hinsdale Trading Post.

Figure 11. Hinsdale BRTA Bus Route



NEEDS

Qualitative system gap analysis based on field observations, existing planning documents and GIS data, and aerial imagery. The analysis looks at on- and off-road networks and has identified gaps in the network and intersections that are barriers to nonmotorized travel. This is a baseline to be used for the identification of potential Complete Streets Improvements in Hinsdale.

Linear Gaps

Linear gaps are considered "missing links" >.5 mile where bike/pedestrian facilities are desired but do not currently exist or are not currently adequate if they do exist based on existing/future demand. Generally, these are areas that are main travel corridors or desirable in connecting residential areas to key activity centers.

Major linear gaps identified by the Complete Streets Committee include:

- Longview Ave. – Longview Ave. lacks pedestrian and cycling accommodations along its entire length. As this section of roadway is home to several youth summer camps, as well as a public beach, this might be an area to target for nonmotorized improvements. The committee also noted the tendency of vehicles to speed along this section of roadway, so traffic calming measures might be necessary as well.
- Route 8 – While sidewalk extends through much of the village center along Route 8 and is in relatively good condition (see **Sidewalk Condition**), during the summer months, vegetation overhangs the sidewalk, which hinders its use. The town should advocate for general and vegetative maintenance of sidewalk along this section of roadway by MassDOT.
- Maple St. / Route 143 – Maple St. provides a connection between Hinsdale's densest neighborhoods located in the village center and along Ashmere Lake and the town's elementary school. Pedestrian access along this street is provided by roughly .5 miles of existing sidewalk in varied condition. As this street moves eastward, it becomes wider, providing a generous shoulder that can be used by pedestrians and cyclists. The town should look closely at potential improvements along this section of roadway, such as repairing and extending the existing sidewalk, and ultimately providing an improved nonmotorized connection between residents of Ashmere Lake and the village center.

Location-specific Gaps and Barriers

Location specific gaps and barriers are either point-specific locations such as a crosswalk or lack of ADA ramps or an entire intersection that presents a barrier to nonmotorized travel and is unsafe for vulnerable users. This might be due to inadequate crossing treatments, confusing geometry, long crossing distances, lack of crosswalks or traffic control devices. Generally, these are areas that provide access to or within major destinations or are desirable in connecting residential areas to primary activity centers.

Sidewalk Condition

Of the 2.63 miles of sidewalk network, two-thirds is in good or excellent condition and the other third is in fair or poor condition (see **Table 8**).

Table 8. Hinsdale Sidewalk Condition by Mile

Condition	Mileage	% of Sidewalk
Excellent	0.24	9.0%
Good	1.52	57.6%
Fair	0.45	17.0%
Poor	0.43	16.4%
Total	**2.63**	**100.0%**

The sidewalks that are in excellent condition are connected, on either side of and including Bridge Street (see **Figure 13**). The sidewalks in good condition are mostly on the numbered routes (Route 8 and Route 143), although a section of Main Street off of Route 8 is also in good condition, and part of Route 143 is in fair condition, along with a spur of sidewalk on Old Dalton Road at the intersection with Route 8.

Figure 12. Sidewalk on Bridge Street in Excellent Condition

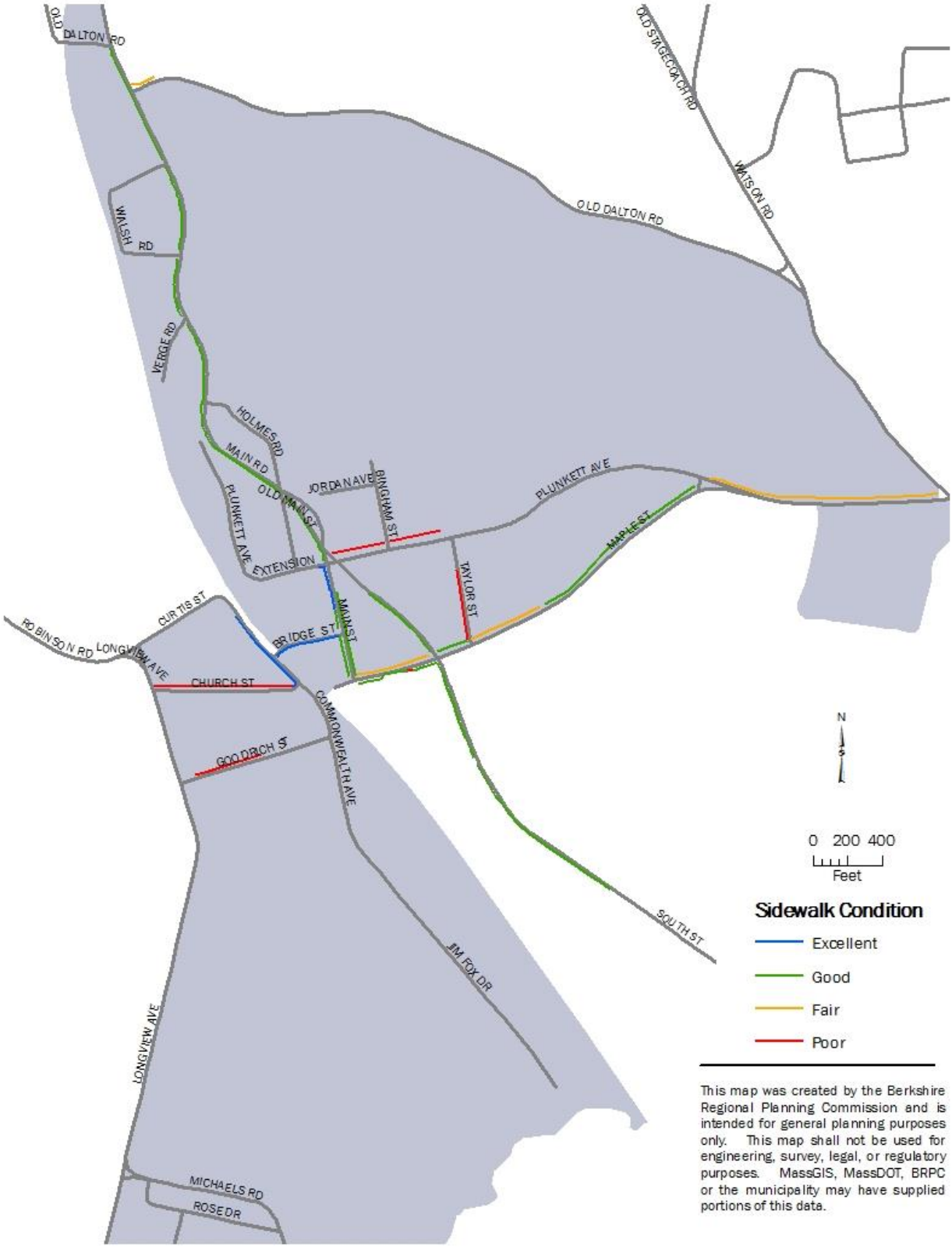
Route 143 currently alternates between sidewalk that is good and sidewalk that is only fair, which can be discouraging to those who may otherwise like to walk that route or have mobility impairments that prohibit them from using the facility. There are four segments of sidewalk that are in poor condition: Plunkett Ave, Taylor Street, Church Street (see **Figure 14**), and Goodrich Street. The sidewalks on these neighborhood streets have long been neglected, and are in need of serious repair. (See **Table 9** and **Figure 15**).

Figure 13. Sidewalk on Church Street in Poor Condition

Table 9. Hinsdale Sidewalk Condition by Segment

Sidewalk Segment	Mileage	Condition
Bridge Street	0.08	Excellent
Commonwealth Avenue	0.04	Excellent
Curtis Avenue	0.06	Excellent
Main Street	0.06	Excellent
Main Road	0.69	Good
Main Street	0.18	Good
Maple Street	0.33	Good
South Street	0.32	Good
Maple Street	0.42	Fair
Old Dalton Road	0.03	Fair
Church Street	0.15	Poor
Goodrich Street	0.08	Poor
Maple Street	0.00	Poor
Plunkett Avenue	0.12	Poor
Taylor Street	0.08	Poor

Figure 14. Sidewalk Condition



Sidewalk Gap Analysis

The current sidewalk network in Hinsdale contains several gaps, where sidewalk is either non-existent or in such poor shape that they are not passable. The four segments of sidewalk that are in poor condition, as shown on the map in **Figure 15**, are also the areas where there are gaps in the existing network.

1. There is a gap between the north side of Plunkett Ave and the west side of Taylor Street, as shown in **Figure 16**. The yellow line represents the current sidewalk, and the green polygon represents the gap. The sidewalk on Plunkett Ave ends at a driveway just before the intersection with Taylor Street, whereas the sidewalk on Taylor Street ends almost 200 feet before the intersection.

Figure 15. Sidewalk Gap between Plunkett Ave and Taylor Street

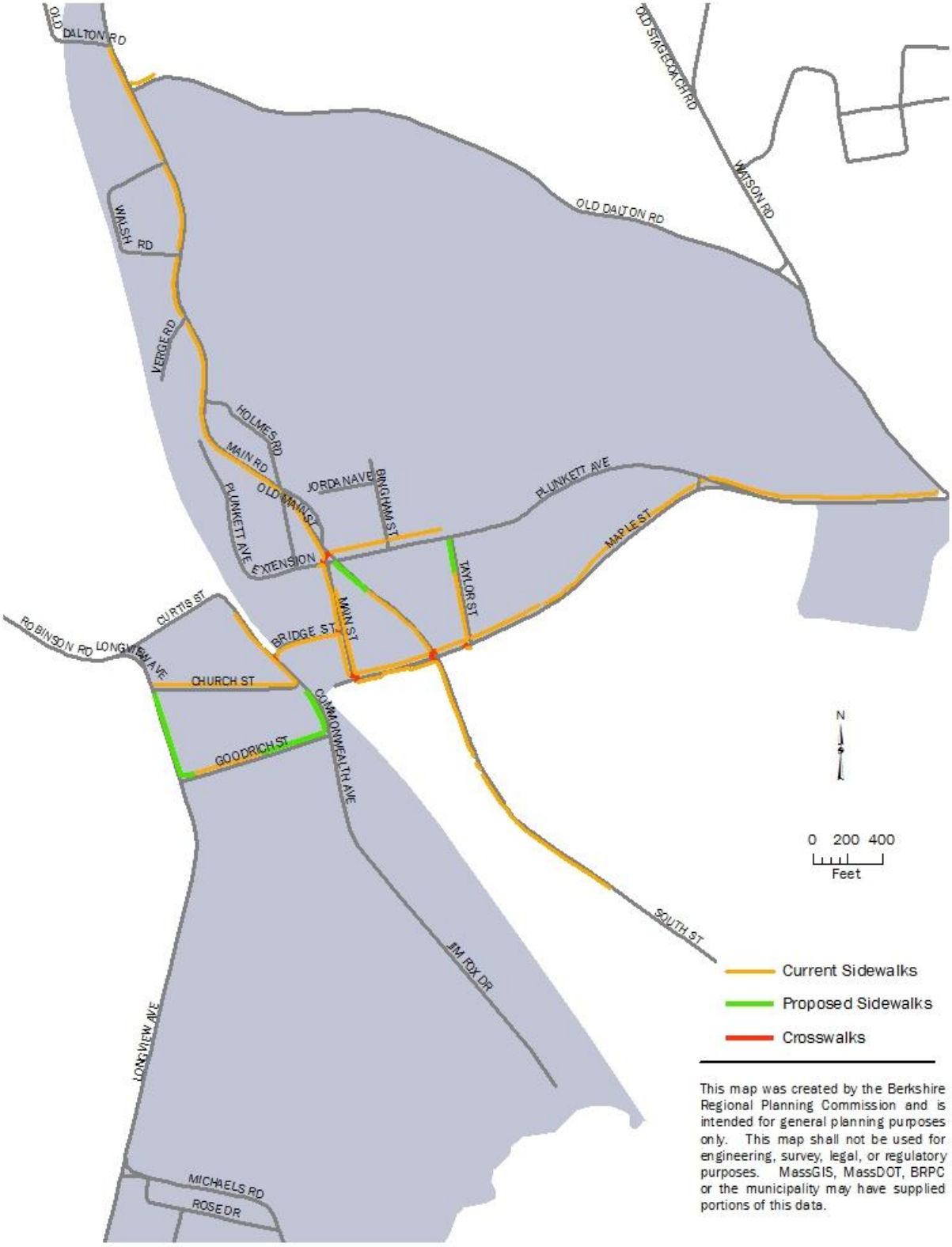
2. There is no sidewalk on Commonwealth Ave between Church Street and Goodrich Street, as shown in green in **Figure 17**. It would take about 250 feet of sidewalk on Commonwealth Ave to close the loop.
3. The sidewalk on Goodrich Street, as shown in yellow, starts and ends abruptly (see **Figure 18**), leaving gaps on both east and west ends of Goodrich Street. There is a nearly 400-foot gap on the east end of the street, toward Commonwealth Ave, and an 87-foot gap on the west end to Longview Ave, both shown in green.
4. There is no sidewalk on either side of Longview Ave, not even between Church Street and Goodrich Street to close the loop. It would take over 500 feet of sidewalk on Longview Ave to connect these two residential streets.

Figure 16. Sidewalk Gaps between Commonwealth Ave, Goodrich Street, Longview Ave, and Church Street

Figure 17. Start/End of Sidewalk on Goodrich Street Facing East Toward Commonwealth Ave

Proposed sidewalk additions and extensions to close these gaps are shown in **Figure 19**.

Figure 18. Proposed Sidewalk



Public Transit (BRTA Bus Route)

The Complete Streets Committee discussed the current bus route, and the traffic and safety issues that arise from the current bus stop location. Committee members expressed a preference that the bus use the dirt driveway around the gazebo at the corner of Main Street and Maple Street as a place to turn around and stop to let passengers board or disembark. Representatives of BRTA attended a committee meeting, and explained that the railroad company, who owns the property proposed in that scenario, will not permit BRTA buses to use the driveway because a portion of it is located within 50 feet of the railroad.

The Complete Streets Committee also discussed the possibility of requesting that a scheduled stop be added at the intersection Old Dalton Road and Maple Street (Route 143), which would require a deviation from the current bus route and some infrastructure considerations along Maple Street at the proposed stop location. While intersection reconstruction at Old Dalton Road and Maple Street was identified as a project to pursue through the Complete Streets Program, it was determined that a request for a transit stop would not be included as a project at this time. It is the professional opinion of the Highway Superintendent that the addition of a transit stop (and possibly a shelter) would not influence the way in which the intersection is redesigned, nor would it disrupt the planned re-pavement of Old Dalton Road.

Intersections

Several intersections in Hinsdale were identified by the Complete Streets Committee as being unsafe for both drivers and pedestrians and in need of possible redesign and reconfiguration. Many of these intersections are currently in a "Y" configuration, where two roadways meet at an acute angle. Reconfiguring and redesigning these intersections to make the roadways meet at a 90º (right) angle could help to improve safety for drivers as well as reduce the distance needed to cross the intersection for pedestrians. The Federal Highway Administration (FHWA) states that:

> *"There is broad agreement that right-angle intersections are the preferred design. Decreasing the angle of the intersection makes detection of and judgments about potential conflicting vehicles on crossing roadways much more difficult. In addition, the amount of time required to maneuver through the intersection increases, for both vehicles and pedestrians, due to the increased pavement area"*[10]

Right angle intersections can also provide a measure of traffic calming by preventing drivers from treating Y-intersections as a "merge lane" by requiring them to complete a full stop before proceeding through the intersection. Some intersections in Hinsdale that could benefit from reconfiguration include:

Maple Street (Route 143) and Old Dalton Road

Old Dalton Road forks just before it meets Maple Street (Route 143), splitting into two sections roadway separated by a triangular traffic island. One section of road is one-way traffic turning from Maple Street onto Old Dalton Road, and the other section of the road is two-way traffic. The two sections of roadway increase pedestrian crossing distance and complexity. Due to the angled nature of the right turn from Old Dalton Road to Maple Street, drivers may not obey the stop sign and instead treat it as a yield or merge lane. See **Figure 20**.

[10] https://www.fhwa.dot.gov/publications/research/safety/humanfac/01103/ch1.cfm

Figure 19. Intersection of Maple Street (Route 143) and Old Dalton Road

Main Street, Plunkett Ave, and Route 8

Perhaps the most complex intersection in Hinsdale is where Route 8 is crossed by Plunkett Ave. in the same area that Main Street forks off. This causes confusion over right-of-way, and adds additional challenges for pedestrians, despite the two cross walks. There is also a currently unused business at the intersection, between Main Street and Route 8; some drivers may turn in there from Main Street in order to turn onto Route 8 from a right angle. See **Figure 21**.

Figure 20. Intersection of Main Street, Plunkett Ave, and Route 8

Maple Street (Route 143) and Plunkett Ave

Maple Street curves as it meets Plunkett Ave, which forks to create a triangular traffic island that is bisected by an informal user-created walkway between the sections of sidewalk on Maple Street. The shallow angle at which the two roads meet creates a broad expanse of paved area that increases pedestrian crossing distance and complexity. Additionally, the stop sign on the traffic island is positioned in such a way that it appears to only apply to one side of the traffic entering Maple Street from Plunkett. See **Figure 22**.

Figure 21. Intersection of Maple Street (Route 143) and Plunkett Ave

Longview Ave, Robinson Road, and Curtis Street

The north end of Longview Ave forms a Y-intersection, with the main part of the road curving west to join with Robinson Road at the juncture where Robinson Road changes to Curtis Street. A small section of Longview continues straight and connects with Curtis Street (see **Figure 23**). The island formed by the Y-intersection contains a fire hydrant, a telephone pole, and two street signs.

Figure 22. Intersection of Longview Ave, Robinson Road, and Curtis Street

Middlefield Road (Skyline Trail) and Fassell Road

Fassell Road and Middlefield Road meet at an acute angle, presenting a hazard for driver's hoping to make a left turn from Middlefield Road and increasing the distance needed to cross this intersection as a pedestrian.

Due to the intersection's proximity to a curve on Middlefield Road with limited visibility, this danger is compounded. See **Figure 24**.

Figure 23. Intersection of Middlefield Road (Skyline Trail) and Fassell Road

Middlefield Road (Skyline Trail), Route 8, and Buttermilk Road

Another highly complex intersection, these three roads intersect in a K-shape. Buttermilk Road, which is unpaved, meets Middlefield Road at an obtuse angle just a few feet before Middlefield Road meets Route 8 at an acute angle. There is also a section of dirt on the interior of the latter angle, suggesting that drivers heading north on Route 8 may fork off to the right to connect to Buttermilk Road, which requires immediately crossing Middlefield Road. Unclear right-of-way and the high potential for informal turns make this intersection particularly hazardous. See **Figure 25**.

Figure 24. Intersection of Middlefield Road (Skyline Trail), Route 8, and Buttermilk Road

East Washington Road and Fassell Road

East Washington Road changes from paved to dirt at the same spot where Fassell Road curves away from East Washington Road. The resulting intersection has a large sand delta coming from the dirt portion of East Washington Road to the intersection with Fassell Road. The lack of pavement markings and the width of the road at the intersection creates a hazard. See **Figure 26**.

Figure 25. Intersection of East Washington Road and Fassell Road

Middlefield Rd (Skyline Trail) and East Washington Rd

East Washington Road comes from the south to intersect with Middlefield Road traveling east-west, creating a Y-shaped intersection with a grass island that contains a utility pole. A lack of pavement markings and signage make it difficult to determine if each part of the Y is a single lane on East Washington Road. See **Figure 27**.

Figure 26. Intersection of Middlefield Rd (Skyline Trail) and East Washington Rd

Middlefield Rd (Skyline Trail) and Creamery Rd

As Middlefield Road comes from the south and curves to the east, Creamery Road comes from the west and ends as it blends with Middlefield Road. The resulting intersection has a large paved delta, part of which is marked by a painted stop line from Creamery Road. See **Figure 28**.

Figure 27. Intersection of Middlefield Rd (Skyline Trail) and Creamery Rd

Old Windsor Rd and Frank Schnopp Rd

Old Windsor Road comes from the northeast to intersect with Frank Schnopp Road while it travels southeast, and forms a Y-intersection with a large grass island in the middle. The lanes on each side of the Y both appear large enough to handle two-way traffic. See **Figure 29**.

Figure 28. Intersection of Old Windsor Rd and Frank Schnopp Rd

GENERAL RECOMMENDATIONS

This section outlines some general recommendations that are not site-specific and may occur at a higher level than the project level. These recommendations are intended to outline opportunities to support Complete Streets in Hinsdale and are known as the "5 E's."

Engineering + Design

This element broadly covers some of the design and engineering recommendations that will enhance the multimodal accommodations, and encourage people to utilize active modes. For general and specific engineering recommendations, please see **Complete Streets Improvements** section.

Education

Education is an important component of implementing any new traffic pattern, nonmotorized infrastructure, or trail. Safety increases as more people become aware of the rules of the road (see Enforcement section below), and as options become safer people are more likely to use facilities. Educating residents and visitors is an important part of encouragement too (see below), as visitors may not be aware of new facilities, sidewalks, or trails connecting them to key destinations.

Encouragement

With new multimodal options, users must be encouraged to utilize multimodal infrastructure. Whether it is Bike to School day or a weekend walk to the library, the opportunities should be encouraged and highlighted so residents and visitors are aware of the multimodal options. Encouragement may mean designated a Bike to Work day, or distributing walking maps to residents that show where safe sidewalks, paths, or trails exist and connect to their key destinations.

Enforcement

Ensuring the rules of the road are enforced across all modes of transportation is an important component of ensuring safe travel for all. There are key violations that occur by vehicle drivers and cyclists which impact the safety of the road for everyone. Massachusetts General Law addresses some of the key rules of the road for motorists and cyclists across the Commonwealth, and enforcing these laws is important for vehicle drivers and cyclists alike. Cyclists must adhere to the rules of the road (ex. obeying traffic signals) and there are special regulations outlined in the Massachusetts General Law[11] that guide cyclist behavior:

- Cyclists may keep right when passing a motor vehicle moving in the travel lane.
- Cyclists must signal by either hand the intention to stop or turn, except when the use of both hands is necessary for the safe operation of the bicycle.
- Cyclists may ride on sidewalks outside of business districts when necessary in the interest of safety (unless expressly prohibited). When cyclists ride on sidewalks, they must yield the right of way to pedestrians and give an audible signal before passing any pedestrians.
- Cyclists riding together may not ride more than 2 abreast, but on a road with more than one lane in the direction of travel, must ride within a single lane.
- Cyclists must only ride on or astride a permanent seat attached to the bicycle, although passengers may ride on a permanent seat attached to the bicycle or in a trailer towed by the bicycle.
- Cyclists may not transport anyone between the ages of one to four (or weighing 40 pounds or less), on a bicycle except in a "baby seat." Cyclists may not transport any person under the age of one year.
- Cyclists and passengers 16 and younger must wear a helmet.

[11] [11] https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter85/Section11b

- Cyclists must give an audible warning whenever needed to insure safe operation of the bicycle, however the use of a siren or whistle is prohibited.
- Cyclists must park the bicycle in a manner as not to obstruct vehicular or pedestrian traffic.
- Cyclists cannot be drawn by another moving vehicle, nor can they town any other vehicle or person except when a bicycle trailer is property attached to the bicycle that allows for firm control and braking.
- Cyclists cannot carry a package/bundle except in or on a basket, rack, trailer, or other device designed for such purposes. The operator shall keep at least one hand upon the handlebars at all times.
- Bicycles must be equipped with a braking system that enables the operator to bring the bicycle traveling at a speed of 15 mph to a smooth, safe stop within 30 feet on a dry, clean, hard, level surface.
- Cyclists riding between one-half hour after sunset to one-half hour before sunrise, must display to the front of the bicycle a white light from a distance of at least 500 feet, and to the rear a red light or reflector visible for no less than 600 feet when directly in front of lawful lower beans of motor vehicle headlights.
- Cyclists riding between one-half hour after sunset to one-half hour before sunrise, must display a reflector on each pedal of the bicycle or, around each angle a reflective material visible from the front and rear for a distance of 600 feet.
- Cyclists riding between one-half hour after sunset to one-half hour before sunrise, must display a reflector on each pedal of the bicycle or, around each angle a reflective material visible from the side for a distance of 600 feet.
- Cyclists many not operate a bicycle in the public way with handlebars raised so that the operator's hands are above their shoulders while gripping them.
- Cyclists must report any accident involving either personal injury or property damage in excess of $100, or both, to the police department in the community in which the accident occurred.

Because bicycles are more commonly used as a mode of transportation for many people, it is important the rules of the road are understood and enforced. Additionally, there are laws[12] outlining motorist's responsibility as they relate to bicycle travel:

- Drivers of motor vehicles must slow down and pass cyclists at a safe distance and at a reasonable and proper speed.
- Drivers of motor vehicles that overtake and pass a cyclist proceeding in the same direction shall make a right turn at an intersection or driveway unless the turn can be made at a safe distance from the cyclist at a speed that is reasonable and proper.
- Drivers of motor vehicles approaching for a left turn on a two-way street must do so yielding the right of way to any vehicle approaching from the opposite direction, including a bicycle on the right of other approaching vehicles, which is within the intersection or so close thereto as to constitute an immediate hazard.
- Drivers and passengers of motor vehicles shall not open a door of the motor vehicle unless it is reasonable safe to do so without interfering with the movement of other traffic, including cyclists and pedestrians.

[12] https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter90/Section14

Snow and Ice Removal

In Massachusetts, the recent (2010) Supreme Court ruling (*Papadopoulos v. Target Corp*[13]) overruled 125 years of legal precedent and announced that all Massachusetts property owners can be held legally responsible for failing to remove snow and ice from the property. This ruling rejects the old common law rule that property owners could simply leave naturally accumulated snow and ice untreated and still escape liability. The court held that all property owners must remove or treat snow and ice like any other dangerous property condition.[14]

Evaluation

Per the Town of Hinsdale's Complete Streets Policy, it is important to integrate Complete Streets elements into the daily operations, planning, design, and implementation of transportation projects. To make this easier, the Complete Streets Committee developed a checklist for the Highway Department to refer to during the project development process

Context

- What is the adjacent land use? Are there any activity centers that might attract cyclists or pedestrians?
- What is the available right-of-way? How is it allocated by mode?
- What are the challenges for the project to address bicycle and pedestrian travel?

Function

- What is the functional classification of the roadway?
- What connections does the roadway provide?
- Are there options for nonmotorized users on/near the facility (ex. path, multi-use trail, sidewalk)?

Safety

- What is the crash history at or along the project area?
- Is there a high percentage of crashes involving nonmotorized travelers?
- Is there a difficult crossing or intersection for nonmotorized travelers?

COMPLETE STREETS IMPROVEMENTS

Complete Streets improvements can come in many forms, whether signage or entire sidewalks, the different elements are based on their context and needs. Improvements are for a variety of modes, whether motorists, cyclists, or pedestrians, Complete Streets are for everyone.

Below are recommendations for specific improvements to the transportation network that support Complete Streets principles and goals. Any improvements will need design and/or engineering and it is encouraged that the Town reference the detailed best practices, as applicable, which include but are not limited to:

- MassDOT Project Development and Design Guide
- FHWA Manual of Uniform Traffic Control Devices (MUTCD)
- AASHTO A Policy on the Geometric Design of Highways and Streets
- NACTO Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- NACTO Transit Street Design Guide

[13] http://masscases.com/cases/sjc/457/457mass368.html
[14] http://massrealestatelawblog.com/tag/massachusetts-snow-removal-law/

- ITE Designing Walkable Urban Thoroughfares: A Context Sensitive Approach
- US Access Board Streets and Sidewalks Guidelines
- AASHTO Guide for Planning, Designing, and Operating Pedestrian Facilities
- National Complete Streets Coalition Resources

These improvements may be paid for by a variety of funding sources, which include but are not limited to:

- MassDOT Complete Streets Funding Program
- Chapter 90 Funds
- MassWorks Grants
- Federal TIP Funds (STPBG, CMAQ, STPBG Set Aside, etc.)

In addition to those general recommendations in the section prior, the Complete Streets Committee has identified improvements by project type and they are outlined in the applicable category below.

Advocacy

The approximately five-mile stretch of Route 8 in Hinsdale is under the jurisdiction of the state and therefore outside the control of the town. Nevertheless, the town has a vested interest in the road and how it contributes to the implementation of Complete Streets in Hinsdale, in addition to how it impacts bicycle and pedestrian connectivity in and around the town.

In the Town of Hinsdale, the recommendation is to advocate for the maintenance, replacement, and completion of the existing gap in the sidewalk along Route 8 to ensure network connectivity and safety for pedestrians.

Intersection Reconstruction to Reduce Complexity and Pedestrian Crossing Distance

As discussed in the **Needs** section, intersections can be reconstructed to improve safety and visibility as well as reduce pedestrian crossing distance and the overall complexity of the intersection. In Hinsdale several intersections could benefit from reconstruction, with the end goal of changing these "Y"- or other-shaped intersections into safer 90º (right) angle, or "T"-shaped intersections. Priority intersections for reconstruction identified by the Hinsdale Complete Streets Committee include: Old Dalton Road and Maple Street (Route 143); Main Street, Plunkett Ave Extension, and Route 8; Maple Street (Route 143) and Plunkett Ave; Longview Ave and Robinson Road; Fassell Road and Middlefield Road (Skyline Trail); Buttermilk Road, Middlefield Road (Skyline Trail), and Route 8; and Fassell Road and East Washington Road.

Sidewalks

Sidewalks are a critical component of many small village areas and as such, ensuring pedestrian movement and access improves connectivity, improves public health and safety, and promotes increased economic development. Sidewalks should be vertically and horizontally separated from the roadway. It is desirable for a sidewalk through zone to be a minimum of 6 feet, although 5 feet is acceptable if right-of-way does not allow it. The minimum of 5 feet is due to ADA requirements, to ensure all ages and abilities can use the facility. In non-village centers it may be more advantageous to look at combining pedestrians and cyclists on a shared use path.

In the Town of Hinsdale, the recommendation is to replace the existing crumbling sidewalk on Maple Street (Route 143) between the intersections with Route 8 and Old Dalton Road; Plunkett Ave between Route and Taylor Street; Church Street; and Goodrich Street, including extending the sidewalk for the length of the street. New sidewalks should be added on Maple Street (Route 143) from the current terminus at Old Dalton Road eastward to New Windsor Road; Taylor Street; and Longview Ave from Curtis Street all the way down to the beach at Plunkett Reservoir.

General Maintenance

Once replaced or installed, it is important that sidewalks are cyclically maintained, including the maintenance and removal; of vegetation adjacent to the sidewalk to ensure it does not encroach or overhang the sidewalk.

Pedestrian Crossings

Crosswalks

Crosswalks are designated places where pedestrians cross the street. Crosswalks can be marked or unmarked, and are used widely throughout the spectrum of functional classes. Crosswalks are encouraged at all legs of an intersection and at approaches where there is a stop sign. Crosswalks can be used with a variety of other treatments like curb extensions, pedestrian refuge islands, and traffic calming measures. Ensure all curb ramps at each end of a crosswalk is accessible, as required by the Americans with Disability Act (ADA).

In the Town of Hinsdale, the recommendation is to include crosswalks at key locations associated with intersection reconstructions and sidewalk replacement/installation.

Traffic Calming

Traffic calming takes elements of design and landscaping together to slow down cars and increase awareness of pedestrians and cyclists. This can improve nonmotorized safety, enhanced walkability, improved stormwater management, and contribute to the beautification of the natural character in rural areas. Traffic calming comes in many different forms and may include vertical deflections (speed humps or raised intersections), horizontal shifts (traffic circle or chicane), and/or roadway narrowing (choker or center island). These treatments are often accompanied by visual enhancements like trees, plantings, wayfinding, and/or street furniture.

Speed Feedback Signs

In the Town of Hinsdale, the recommendation is to include speed feedback signs on Robinson Road and Longview Ave. Robinson Road has been recently repaved, which has resulted in increased speeds according the Complete Streets Committee. A speed feedback sign for southbound traffic, heading toward the center of town, should calm traffic as it enters an area with increased likelihood of pedestrians and nonmotorized users. On Longview Ave, speed feedback signs in both directions should reduce vehicle speeds and increase safety for pedestrians and bicyclists going to and from Plunkett Lake and for residents and staff of summer camps located along this road. Feedback signs along Longview will also help to calm traffic as it enters the village center.

Speed feedback signs, particularly newer or enhanced models can also collect data about roadways, such as total number of vehicles and the number of speeding and non-speeding vehicles that pass the sign. Feedback signs can be powered via solar panel, AC power connection, or battery. In Hinsdale, the use of solar powered speed feedback signs will reduce maintenance needs and installation costs associated with use of either battery powered or AC powered signs respectively.

Stop Sign w/ Beacon

Hinsdale Complete Streets Committee members identified two locations where stop signs are frequently ignored, including the intersections of Ashmere Drive and New Windsor Roads with Route 143. It is recommended that the town install stop signs with a flashing beacon at these locations to increase stop sign visibility and driver compliance.

Site Furnishings

Lighting

Lighting enhances the safety (and perceived safety) of the roadways and poor/nonexistent lighting can lead to difficulty when using infrastructure at night or when visibility is less than optimal. Lighting enhances the safety for all users, and can vary depending on the adjacent land uses. Costs for lighting can vary depending on fixture type (in pavement or streetlight) and frequency.

In the Town of Hinsdale, the recommendation is to consider lighting when reconstructing intersections, or when installing new sidewalks, particularly when either project involves crosswalks. In the village center, the addition of context sensitive street lighting could help enhance streetscape projects in this area.

Street Furniture

Street furniture can serve as a buffer between the roadway or cycle track and a walkway, which provides a safety benefit to all travelers. Additionally, incorporating street furniture (benches, bus shelters, kiosks, etc.) into a streetscape project improves the attractiveness/walkability of the pedestrian network. Street furniture costs vary depending on the type of street furniture, style, and manufacturer.

In the Town of Hinsdale, the recommendation is to consider street furniture in strategic locations in the village center area, and when considering new or improved transit stops.

Bicycle Parking and Amenities

Bicycle parking is a key element to the usability of bicycles for transportation, if there is nowhere to safely park a bicycle, people will be less likely to rely on it for transportation. Bicycle parking is good to have in all of the major activity centers (school, library, town hall, etc.) and in downtown areas for visitors to shops and restaurants. There are many options for bicycle parking, and for reference see the Association of Pedestrian and Bicycle Professionals' *Essentials of Bike Parking.*[15]

In the Town of Hinsdale, the recommendation is to include bicycle racks at key locations on Main Street, namely at the gazebo, the library, and the playground. A bicycle rack is also proposed at the trailhead of the Old Mill Trail on Old Dalton Road. The Old Mill Trail is for pedestrian use only, and a bicycle rack could encourage cyclists to stop and enjoy the scenic trail on foot. To help support bike tourism in Hinsdale, the town should also install a bike repair station, perhaps at the gazebo and public park at the intersection of Main St. and Maple St.

Wayfinding

Wayfinding is an important element that supports all modes. Ensuring all users of the transportation system can easily navigate the network is critical to the use of nonmotorized and motorized travelers. In the Town of Hinsdale, the recommendation is to include wayfinding signage for popular walking loops as well as to help nonmotorized users navigate between town amenities, public facilities, major destinations and other attractions in Hinsdale. Wayfinding can also educate residents and visitors about aspects of town including cultural, historic, and environmental features. A wayfinding system could encourage residents to walk for exercise, or to walk instead of drive to businesses and services in the town center.

Moreover, developing a town wayfinding system is a unique opportunity to "brand" the town as part of economic development activities and creates a coordinated system for navigating the area. Wayfinding can create a consistent and distinct system that conveys the town's "story" and "personality" to visitors.

[15] http://www.apbp.org/?page=publications

Typically, wayfinding systems include simple directional signage as well as detailed "nodes" that convey more in-depth information, such as through interpretive signage or kiosks. These signage systems and locations are unified through design elements such as fonts and typography, imagery, and color scheme. The town should consult a designer who will assist the town in developing a wayfinding system and in planning sign locations and content. Additionally, wayfinding content, such as maps, should be integrated into the town's website to ensure that visitors can use mobile phones to navigate the town and explore destinations online before visiting the community.

Shoulders

Paved shoulders have benefits for vehicle drivers, cyclists and pedestrians.[16] Shoulders are often an option to accommodate nonmotorized travelers in low density areas where dedicated facilities aren't feasible. Wide shoulders are shown to increase the safety for nomotorized travelers by separating them from the vehicle lane, although there is the potential that with wider shoulders, speeds can increase. Cyclists report feeling more comfortable having extra space that is outside the vehicle lane, and an extra 4-6 feet[17] can provide them with precious separation from moving vehicles.

The Town of Hinsdale should evaluate the usage of wider shoulders to accommodate bicycle and pedestrian travelers where other dedicated facilities are infeasible. Providing paved shoulders as part of routine resurfacing, restoration, rehabilitation, and/or reconstruction work on roadways is a way to implement the Hinsdale Complete Streets Policy given due consideration. This can occur by either reducing lane widths, where this can occur safely, or by extending the paved road surface. Based on guidance from MassDOT, shoulder widths to accommodate pedestrians and cyclists should be at least 4' wide for a Case 4 Shared Bicycle/Pedestrian Accommodation[18].

PRIORITIZATION PLAN AND IMPLEMENTATION

Methodology

In an effort to develop a data-driven process to guide the prioritization of Complete Streets projects in Hinsdale, the Complete Streets Committee developed a planning framework that outlined: goals, performance measures, evaluation criteria/scoring, and weighting. This framework ensured the goals were measurable, and that scoring of the projects directly related to the plan's goals. The Committee was asked to weight and rank each goal, and that was integrated into the multi-criteria analysis used to prioritize the Town's improvements. Based on combined weighting and ranking scores from each committee member, projects related to the safety and traffic calming goal areas received the greatest weight. Projects related to the goal area of context sensitivity were weighted the lowest.

The planning framework matrix can be seen in **Table 10**.

[16] http://safety.fhwa.dot.gov/ped_bike/tools_solve/walkways_brochure/

[17] https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/multimodal_networks/8_paved_shoulders.pdf

[18] https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH_5.pdf

Table 10. Planning Framework Matrix

SYSTEM			PROJECT-SPECIFIC	
Goal Area/Theme	Goal	System Performance Measure	Project Scoring	Weight
Livability and Economic Vitality	Increase the livability and economic vitality of the town by improving the access to active mode facilities by residents and enhancing the Hinsdale village so it is walkable, bikeable, and can be used by all modes.	number of residents within 1/4 mile of a dedicated active mode facility, annual number of improvements in urban area	0 - not in a residential or urban area 1 - in/adjacent to a low-density residential area 2 - in/adjacent to a medium-density residential area 3- in/adjacent to a high-density residential area or urban area	1.25
Connectivity	Provide transportation choices by improving system connectivity within and between modes.	share of non-automobile commuters (ACS)	0 - does not address connectivity within or between modes 1 - addresses existing gap, barrier, and/or connectivity between modes 2 - addresses more than one existing gap, barrier, and/or connectivity between modes 3 - addresses more than two existing gaps, barriers, and/or connectivity between modes	1.22
Safety	Prioritize safety for all users of the transportation system.	total crashes by severity and mode	0 - project reduces or does not impact safety for users of the transportation system 1 - project addresses safety concern for one vulnerable user group (cyclist, pedestrian, etc.) 2 - project addresses safety concern for two vulnerable user groups (cyclist, pedestrian, etc.) 3 - project addresses safety concern for all users (drivers, vulnerable users, etc.)	2.36
Context Sensitivity	Develop a multimodal transportation system that is sensitive to the historic districts and rural/scenic character of Hinsdale	annual number of projects in historic districts or adjacent to open space areas	0 - project has a negative impact on the existing character of the project area 1 - project protects the existing character of the project area 3 - project protects and enhances the character of the project area	0.67
Traffic Calming	Promote traffic calming measures in Hinsdale to encourage access for all modes, reduce speeds in activity hubs, and promote attractive streetscapes.	annual number of citations for speeding	0 - project has no traffic calming component 1 - project has traffic calming component that impacts ONE of the following: speed reduction, streetscape improvement, encourages access for all modes 2 - project has traffic calming component that impacts TWO of the following: speed reduction, streetscape improvement, encourages access for all modes 3 - project has traffic calming component that impacts ALL of the following: speed reduction, streetscape improvement, encourages access for all modes	1.43

SYSTEM			PROJECT-SPECIFIC	
Goal Area/Theme	Goal	System Performance Measure	Project Scoring	Weight
Mobility	Improve infrastructure and transit/specialized transit services to ensure those with limited mobility can move in and around Hinsdale.	number of new ADA compliant curb ramps, linear feet of ADA compliant sidewalk or pathway	0 - project does not address sidewalk or pathway, curb ramps, or public/specialized transit 1- project addresses ONE of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit 2 -project addresses TWO of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit 3 - project addresses ALL of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit	0.9
Project Readiness	Prioritize Complete Streets projects in Hinsdale that are "shovel ready", require minimal or no design/engineering work, or are currently under design.	number of projects in design/engineering phase	0 - project has been identified but requires design 1 - project at 25% design stage 2 - project at 50% or 75% design stage 3 - project does not require design, or is at 100% design stage	0.92
Cost Effectiveness	Prioritize cost effective improvements that enhance the existing transportation network through maintenance and operations	maintenance and operations projects annually	0 - project is not a maintenance or operations project 1 - project has minimal maintenance costs (ex. signage, wayfinding, bicycle parking, etc.) 2 - project is a maintenance and/or operations project that enhances an existing facility for nonmotorized travelers 3 - project is "completing the street" for a programmed roadway project (in next 5 years) at a minimal cost relative to the overall project (<20%)	1.26

Project Selection and Final List

Using the final scores (weighted and unweighted), the Committee developed its final list of projects to submit to MassDOT. Project readiness was a key factor in decision making, as well as overall budgeting based on an anticipated $400,000 per year for construction funding. It should be noted that as several recommended projects are located on MassDOT owned roads, cooperation with MassDOT District 1 will be necessary to move these projects forward. The Town of Hinsdale will submit these projects, in writing, to the District 1 Highway Director. For the final Tier 2 list, see **Table 11** below; for the complete list of potential improvements, see **Appendix B**.

Table 11. Final Complete Streets Project Prioritization (Tier 2) List

Project #	Project Type	Project Location
Project 1	New Sidewalk	Longview Ave from Curtis Street to Goodrich Street
Project 2	New Sidewalk	Maple Street (Route 143) from Old Dalton Road to New Windsor Road
Project 3	Intersection Reconstruction	Old Dalton Rd and Maple Street (Route 143)
Project 4	Intersection Reconstruction	Main Street, Plunkett Ave. Ext, and Route 8
Project 5	Intersection Reconstruction	Maple Street (Route 143) and Plunkett Ave
Project 6	Sidewalk Replacement	Taylor Street

Project #	Project Type	Project Location
Project 7	New Sidewalk	Commonwealth Ave.
Project 8	Intersection Reconstruction	Longview Ave and Robinson Road
Project 9	Sidewalk Replacement	Maple Street (Route 143) from Route 8 to Old Dalton Road
Project 10	Speed Feedback Sign	Longview Ave, both directions
Project 11	Intersection Reconstruction	Fassell Road and Middlefield Road (Skyline Trail)
Project 12	Sidewalk Replacement	Plunkett Ave. from Route 8 to Taylor Street
Project 13	Sidewalk Replacement	Goodrich Street
Project 14	Sidewalk Replacement	Church Street
Project 15	Intersection Reconstruction	Buttermilk Road, Middlefield Road (Skyline Trail), and Route 8
Project 16	Intersection Reconstruction	Fassell Road and East Washington Road
Project 17	Speed Feedback Sign	Robinson Road, southbound towards the village
Project 18	Bike Racks	Library, Gazebo (near Maple and Main), Kid's Playground (near Route 143 & Taylor)
Project 19	Bike Rack	Old Mill Trailhead
Project 20	Stop Sign w/ Beacon	Route 143 and New Windsor Road
Project 21	Stop Sign w/ Beacon	Route 143 & Ashmere Drive

Funding Schedule

In FY 2017, Hinsdale applied for $400k in construction funding for five projects. These projects include new sidewalk along Commonwealth Ave. and a portion of Longview Ave., and sidewalk replacement along Church St. and Goodrich St. The town will also seek funding for the installation of two speed feedback signs along Longview Ave. to calm traffic. See **Table 12** for a 7-year schedule for implementation of the Town of Hinsdale Tier 2 Prioritization Plan (**Table 11**). This schedule is contingent on construction funding from MassDOT, as well as investment in design and engineering from the town necessary to advance many of these projects. Please note that project cost estimates identified in this schedule are for conceptual purposes only. As the Town of Hinsdale invests in design and engineering to make these projects construction ready, these estimates will change, which may necessitate changes to this schedule. Only by investing in design and engineering will a more accurate estimate of project costs be realized.

Table 12. 7-Year Funding Schedule

Amount Available	***$400,000***	***$400,000***	***$400,000***	***$400,000***	***$400,000***	***$400,000***	***$400,000***
Project	**FY 2017**	**FY 2018**	**FY 2019**	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**
New Sidewalk - Commonwealth Ave.	$138,572						
Sidewalk Replacement - Church St.	$87,614						
Sidewalk Replacement - Goodrich St.	$ 163,954						
Speed Feedback Sign - Longview	$19,550						
New Sidewalk - Longview Road from Robinson to Goodrich St.	$133,092						

Intersection Reconstruction - Old Dalton Rd & Maple St. (Rte 143)		$276,019					
Intersection Reconstruction - Maple St (143) & Plunkett St		$181,302					
New Sidewalk - Maple St (Rte. 143) - Old Dalton Road to New Windsor Rd.			$198,215				
Sidewalk Replacement - Maple St (Rte. 143) - Route 8 Int. to Old Dalton Rd			$169,335				
Bike Racks - Old Mill Trail				$4,313			
Stop Sign W/ Beacon -Rte 143 and New Windsor Rd.				$6,613			
Stop Sign W/ Beacon - Rte 143 & Ashmere				$6,613			
Intersection Reconstruction - Main St./Plunkett Ext. & Route 8				$219,475			
New Sidewalk - Taylor Road				$111,614			
Speed Feedback Sign - Robinson Road				$10,350			
Bike Racks - Library, Gazebo (near Maple and Main), Kid's Playground (near 143 & Taylor)				$15,525			
Intersection Reconstruction - Longview Ave. & Robinson Rd.					$169,221		
Sidewalk replacement - Plunkett St.- Route 8 to Taylor					$85,857		
Intersection Reconstruction -Fassell Rd & Middlefield Rd (Skyline)					$147,569		
New Sidewalk - Longview Road w/ Walkway over causeway						$741,552	
Intersection Reconstruction - Buttermilk Rd,							$294,163

Middlefield Rd(Skyline) & Rte 8							
Intersection Reconstruction -Fassell Rd & E. Washington Rd							$111,912
Amount Proposed	$542,782	$457,321	$367,550	$374,501	$402,648	$741,552	$406,074
Amount Remaining (Red Text indicates total < $400k, black text indicates total < $400k	$142,782	$57,321	($32,450)	($25,499)	$2,648	$341,552	$6,074

Implementation

In an effort to ensure the Town of Hinsdale is able to successfully implement their Complete Streets Policy, the Complete Streets Committee and BRPC staff developed several tables that detail short-term next steps, and annual steps that ensure timely implementation of Complete Streets projects in the Town of Hinsdale. Immediate implementation steps can be seen in **Table 13** and annual steps in **Table 14**.

Table 13. Immediate Implementation Tasks

Action	Responsible Party	Timeline	Others Interested
Complete Streets Committee Meeting – Follow up to MassDOT project selection response	Complete Streets Committee	Following feedback on prioritization plan	Selectboard, Finance Committee
Determine budget for design and engineering work	Highway Dept.	Fall 2016	Selectboard, Finance Committee, Complete Streets Committee
Contract with engineering firm to begin design of other projects on prioritization plan	Highway Dept.	Fall/Winter 2016	Selectboard, Finance Committee, Complete Streets Committee

Table 14. Yearly Implementation Tasks and Project Cycle

Action	Responsible Party	Timeline (Yearly)	Others Interested
Project Identification	Complete Streets Committee	Spring	Selectboard, Highway Dept. Citizens
Score and rank new projects, Revise Tier 2 List	Complete Streets Committee	Late Spring	Board of Selectmen, Highway Dept., Residents
Project Budgeting	Complete Streets Committee, Community Members	Summer or Fall 2016	Selectboard, Finance Committee, Highway Department
Prepare RFP for design needs on identified projects requiring engineering or design	Highway Dept.	Fall 2016	Selectboard, Finance Committee, Complete Streets Committee
Construction	Highway Dept.	Following Spring	Board of Selectmen, Complete Streets Committee
Evaluate and document performance (See Performance Measures section)	Complete Streets Committee	Following Summer or Fall	Board of Selectmen, Highway Dept., Residents

APPENDIX A: PUBLIC OUTREACH AND ENGAGEMENT

For complete meeting minutes and meeting materials, please contact the Town of Hinsdale.

Complete Streets Committee Meeting #1: August 1, 2016

The first meeting of the Complete Streets Committee meeting occurred on Monday, August 1, 2016 at 9:00am at Hinsdale Town Hall. The participants were:

Complete Streets Committee Members

- Ryan Aylesworth, Town Administrator
- Rene Senecal, Highway Superintendent
- Ray Bolduc, Town Emergency Management Director (EMD) Massachusetts Emergency Response Commission, Fire Department
- Jeanne Andrews, Council on Aging
- Jim Manning, Mission & Vision Working Group, Council on Aging, Lake Management Committee, Library Trustee
- Susan Rathbun, Police Chief

BRPC Staff

- Eammon Coughlin, Berkshire Regional Planning Commission
- Nancy Doucette, Berkshire Regional Planning Commission

The goal of this meeting was to kick off the project and provide committee members an outline of the process. The committee reviewed existing conditions, goals and performance measures, and the project schedule. Committee members were asked to bring a list of project ideas to the following meeting.

Complete Streets Committee Meeting #2: August 5, 2016

The second meeting of the Complete Streets Committee meeting occurred on Friday, August 5, 2016 at 11:00am at Hinsdale Town Hall. The participants were:

Complete Streets Committee Members

- Ryan Aylesworth, Town Administrator
- Rene Senecal, Highway Superintendent
- Ray Bolduc, Town Emergency Management Director (EMD) Massachusetts Emergency Response Commission, Fire Department
- Jeanne Andrews, Council on Aging
- Jim Manning, Mission & Vision Working Group, Council on Aging, Lake Management Committee, Library Trustee
- Susan Rathbun, Police Chief

BRPC Staff

- Eammon Coughlin, Berkshire Regional Planning Commission
- Nancy Doucette, Berkshire Regional Planning Commission

This goal of this meeting was to develop a planning framework for the project, based on the goals established at the first meeting. Committee members ranked and weighted each goal area, the results of which were combined after the meeting by BRPC staff. Committee members then shared their project ideas; a list of 37 projects was generated.

Complete Streets Committee Meeting #3: August 12, 2016

The third meeting of the Complete Streets Committee meeting occurred on Friday, August 12, 2016 at 11:00am at Hinsdale Town Hall. The participants were:

Complete Streets Committee Members

- Ryan Aylesworth, Town Administrator
- Rene Senecal, Highway Superintendent
- Ray Bolduc, Town Emergency Management Director (EMD) Massachusetts Emergency Response Commission, Fire Department
- Jeanne Andrews, Council on Aging
- Jim Manning, Mission & Vision Working Group, Council on Aging, Lake Management Committee, Library Trustee
- Susan Rathbun, Police Chief

BRPC Staff

- Eammon Coughlin, Berkshire Regional Planning Commission
- Nancy Doucette, Berkshire Regional Planning Commission

BRTA Staff:

- Kirk Dand, Berkshire Regional Transit Authority
- Dave Brown, Berkshire Regional Transit Authority

The goal of this meeting was to share the results of the goal weighting and the prioritized list of the projects identified at the previous meeting. Projects were prioritized based on the performance measures for each weighted goal. The committee then discussed the results and narrowed down to a list of 20 projects.

Complete Streets Committee Meeting #4: August 26, 2016

The fourth and final meeting of the Complete Streets Committee meeting occurred on Friday, August 2, 2016 at 11:00am at Hinsdale Town Hall. The participants were:

Complete Streets Committee Members

- Ryan Aylesworth, Town Administrator
- Rene Senecal, Highway Superintendent
- Ray Bolduc, Town Emergency Management Director (EMD) Massachusetts Emergency Response Commission, Fire Department
- Jeanne Andrews, Council on Aging
- Jim Manning, Mission & Vision Working Group, Council on Aging, Lake Management Committee, Library Trustee
- Susan Rathbun, Police Chief

BRPC Staff

- Eammon Coughlin, Berkshire Regional Planning Commission
- Nancy Doucette, Berkshire Regional Planning Commission

The goal of this meeting was to review the updated project ranking, the draft cost estimates for the short list of projects, and an initial draft of the needs assessment report.

APPENDIX B: COMPLETE LIST OF POTENTIAL IMPROVEMENTS

Table B-1 outlines the complete list or "universe" of all potential complete streets improvements identified by the Hinsdale Complete Streets Committee. Projects in this list were further refined into a final list for submittal to MassDOT. Project locations have also been mapped in **Figure B-1**

Red text in the table denotes projects that are located along state highways, and which are not eligible for funding through the MassDOT Complete Streets Program. The town should work closely with MassDOT to advocate for and include these improvements in future state roadway work. It should be noted, that while not eligible for funding, new sidewalk on Route 8 between Maple Street and Plunkett Ave. was ranked highly according to the weighting and ranking system developed by committee members, and would close the only gap on that main corridor.

Below the table are project descriptions for each of the potential improvements, in order of weighted score. If the project was on the final list submitted to MassDOT, there is an accompanying cost estimate table.

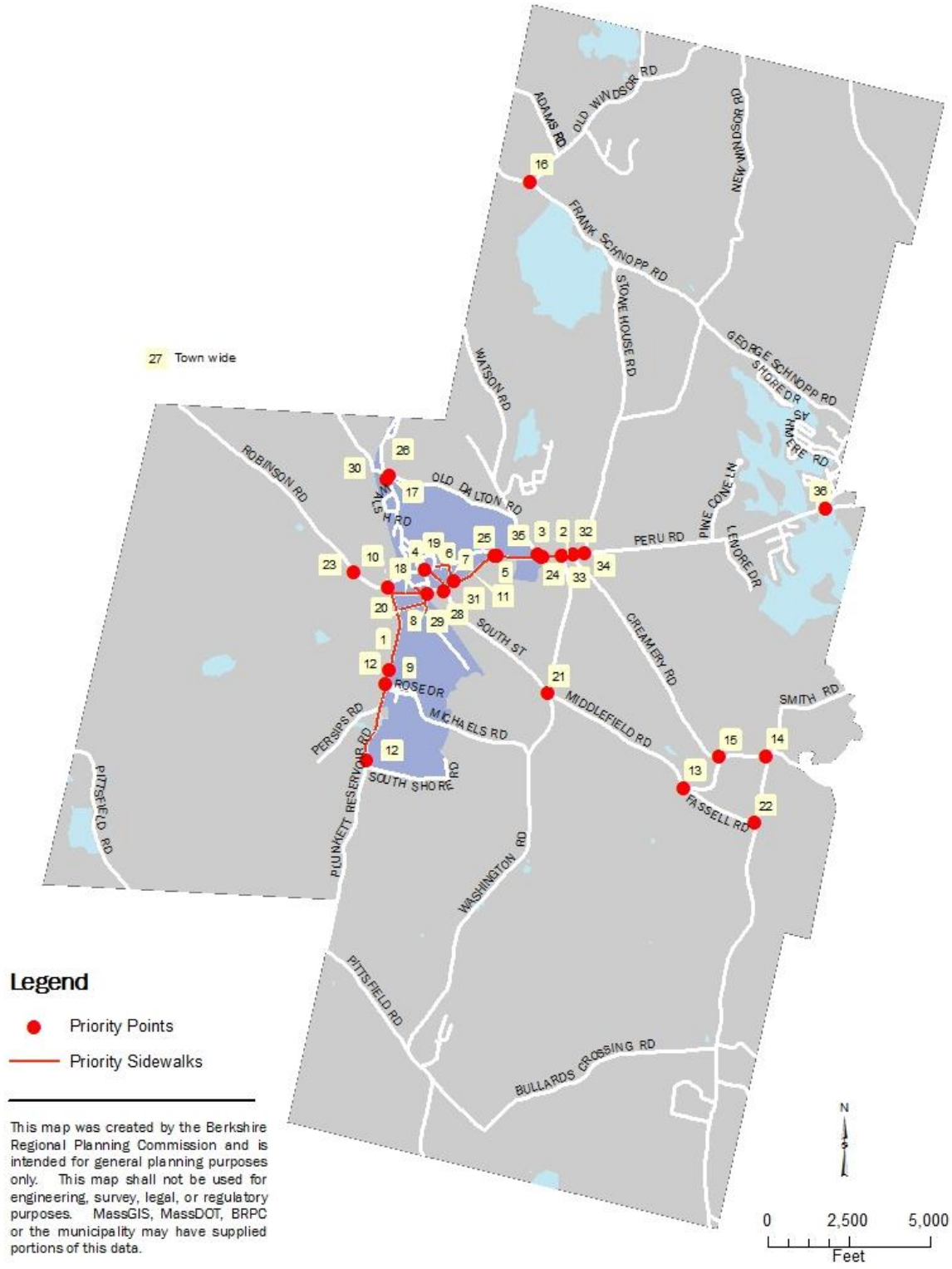
Table B-1. Complete List of Potential Improvements

			Economic Vitality & Livability	Connect-ivity	Safety	Context Sensitivity	Traffic Calming	Cost Effective-ness	Project Readi-ness	Mobility	Score Unweighted	Score Weighted
PROJECT #	PROJECT TYPE	PROJECT LOCATION WEIGHT	1.25	1.22	2.36	0.67	1.43	0.9	0.92	-	1.26	-
PROJECT 1	New Sidewalk	Longview Ave (from Plunkett Beach to Curtis St) (potential walkway over causeway)	3	3	3	3	2	1	0	2	17	22.78
PROJECT 1A	New Sidewalk	Longview Ave (from Robinson Rd to Goodrich St										
PROJECT 1B	New Sidewalk	Longview Ave (from Goodrich St to Plunkett Beach) (potential walkway over causeway)										
PROJECT 2	New Sidewalk	Maple St (Route 143) - Old Dalton Road to New Windsor Rd	3	2	3	3	2	1	0	2	16	21.56
PROJECT 3	Intersection Reconstruction	Old Dalton Rd & Maple St. (Route 143)	3	1	3	3	2	2	0	2	16	21.24
PROJECT 4	Intersection Reconstruction	Main St/Plunkett Ext & Route 8	3	1	3	3	2	2	0	2	16	21.24
PROJECT 5	Intersection Reconstruction	Maple St (Route 143) & Plunkett Ave	3	1	3	3	2	2	0	2	16	21.24
PROJECT 6	New Sidewalk	Route 8 - Maple St. to Plunkett Ave.	3	1	3	3	2	1	0	2	15	20.34
PROJECT 7	New Sidewalk	Taylor St	3	1	3	3	2	1	0	2	15	20.34
PROJECT 8	New Sidewalk	Commonwealth Ave	3	1	3	3	2	1	0	2	15	20.34
PROJECT 9	Intersection Reconstruction	Longview Ave, Robinson Rd, & Curtis Street	3	1	3	3	2	2	0	0	14	18.72

			Economic Vitality & Livability	Connect-ivity	Safety	Context Sensitivity	Traffic Calming	Cost Effective-ness	Project Readi-ness	Mobility	Score Unweighted	Score Weighted
PROJECT 10	Sidewalk Replacement	Maple St (Route 143) - Route 8 Intersection to Old Dalton Rd	3	3	1	3	2	1	0	2	15	18.06
PROJECT 11	Speed Feedback Sign	Longview Ave (x2)	3	0	3	1	2	0	3	0	12	17.12
PROJECT 12	Intersection Reconstruction	Fassell Rd & Middlefield Rd (Skyline Trail)	1	1	3	3	2	2	0	0	12	16.22
PROJECT 13	Intersection Reconstruction	E. Washington & Middlefield Rd (Skyline Trail)	1	1	3	3	2	2	0	0	12	16.22
PROJECT 14	Intersection Reconstruction	Creamery Rd & Middlefield Rd	1	1	3	3	2	2	0	0	12	16.22
PROJECT 15	Intersection Reconstruction	Old Windsor Rd & Frank Schnopp Rd	1	1	3	3	2	2	0	0	12	16.22
PROJECT 16	Sidewalk Replacement	Old Dalton Rd (Near Old Mill Trail)	3	1	1	3	2	1	0	2	13	15.62
PROJECT 17	Sidewalk Replacement	Church St.	3	1	1	3	2	1	0	2	13	15.62
PROJECT 18	Sidewalk Replacement	Plunkett Ave. - Bingham Rd to Taylor St	3	1	1	3	2	1	0	2	13	15.62
PROJECT 19	Sidewalk Replacement	Goodrich St.	3	1	1	3	2	1	0	2	13	15.62
PROJECT 20	Intersection Reconstruction	Buttermilk Rd, Middlefield Rd (Skyline Trail) & Route 8	0	1	3	3	2	2	0	0	11	14.97
PROJECT 21	Intersection Reconstruction	Fassell Rd & E. Washington Rd	0	1	3	3	2	2	0	0	11	14.97
PROJECT 22	Speed Feedback Sign	Robinson Rd (southbound towards village)	1	0	3	1	2	0	3	0	10	14.62
PROJECT 23	Crosswalk	Maple St (Route 143) - Old Dalton Intersection	3	1	1	1	0	1	3	0	10	11.66

			Economic Vitality & Livability	Connect-ivity	Safety	Context Sensitivity	Traffic Calming	Cost Effective-ness	Project Readi-ness	Mobility	Score Unweighted	Score Weighted
PROJECT 24	Crosswalk	Maple St (Route 143) - Plunkett Intersection	3	1	1	1	0	1	3	0	10	11.66
PROJECT 25	Crosswalk	Route 8 to Old Dalton Rd	3	1	1	1	0	1	3	0	10	11.66
PROJECT 26	Pedestrian Wayfinding	Whole Town	3	1	0	3	1	1	0	0	9	9.31
PROJECT 27	Bike Rack	Library	3	1	0	1	0	1	3	0	9	9.3
PROJECT 28	Bike Rack	Gazebo (near Maple and Main)	3	1	0	1	0	1	3	0	9	9.3
PROJECT 29	Bike Rack	Kid's Playground (near Route 143 & Taylor)	3	1	0	1	0	1	3	0	9	9.3
PROJECT 30	Bike Rack	Old Mill Trailhead	3	1	0	1	0	1	3	0	9	9.3
PROJECT 31	Crosswalk	Maple St (Route 143) - Creamery Intersection	1	1	1	1	0	1	3	0	8	9.16
PROJECT 32	Crosswalk	Maple St (Route 143) - Buttermilk Intersection	1	1	1	1	0	1	3	0	8	9.16
PROJECT 33	Stop Sign w/ Beacon	Route 143 and New Windsor Rd	1	0	0	1	1	2	3	0	8	7.91
PROJECT 34	Culvert Replacement	Old Dalton Rd	3	0	0	1	0	3	0	0	7	7.12
PROJECT 35	Stop Sign w/ Beacon	Route 143 & Ashmere Dr	0	0	0	1	1	2	3	0	7	6.66

Figure B-1 Potential Improvements



This map was created by the Berkshire Regional Planning Commission and is intended for general planning purposes only. This map shall not be used for engineering, survey, legal, or regulatory purposes. MassGIS, MassDOT, BRPC or the municipality may have supplied portions of this data.

Project Descriptions (in order of weighted score) and Cost Estimates

Cost Estimates

Cost estimates were prepared by BRPC for the Town of Hinsdale. Cost estimates are for conceptual purposes only and are not based on construction drawings or other engineering design. Only by town investment in design and engineering and full evaluation by an engineer or designer will more accurate project costs be developed. Project area sizes and sidewalk lengths were estimated using Google Earth Pro and conditions were evaluated through field work by BRPC staff. Estimated costs were prepared using data from the MassDOT Weighted Bid Averages.[19] All projects costs were estimated with a 15% contingency added to the total.

Project 1: Install New Sidewalk on Longview Ave from Robinson Rd to Plunkett Reservoir Beach

This project would establish a new sidewalk on the east side of Longview Ave, beginning in a neighborhood near the center of town and extending one mile out to allow residents to safely walk to the public beach on Plunkett Reservoir. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings, and a crosswalk to access the beach. This project may include an open metal catwalk adjacent to the road where it crosses the causeway at the reservoir (see **Figure B-2**), given that the road cannot be widened to create a sidewalk and pedestrians walking or standing in the roadway creates a safety hazard. For a cost estimate, see **Table B-2**.

Figure B-2. Causeway on Longview Ave over Plunkett Reservoir

Table B-2. Cost Estimate for Project 1

Install New Sidewalk on Longview Ave from Robinson Rd to Plunkett Reservoir Beach				
Materials	Cem. Conc. w/ Granite Curb			
Side	East			
Length Total	5400			
Robinson to Goodrich	*830*			
Causeway	*180*			
Goodrich to Beach	*4390*			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$15,000	1	$ 15,000

[19] Available from: https://hwy.massdot.state.ma.us/CPE/WeightedAverageCriteria.aspx

Install New Sidewalk on Longview Ave from Robinson Rd to Plunkett Reservoir Beach				
Permitting	Allowance	$7,000	1	$ 7,000
Erosion Control	Allowance	$10,000	1	$ 10,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation - Robinson to Goodrich (154 CY)	CY	$ 37.50	154	$ 5,775.00
Excavation - Goodrich to Beach Length (812 CY)	CY	$ 37.50	812	$ 30,450.00
Utility Pole Relocation	Each	$10,000	5	$ 50,000.00
Remove and Reset Mailbox	Each	$240	16	$ 3,840.00
Sidewalk - Robinson to Goodrich	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (77 CY)	CY	$54.00	77	$ 4,158.00
Granite Curb (830 LF)	LF	$60.00	830	$ 49,800.00
Concrete Sidewalk (457 SY)	SY	$87.00	457	$ 39,759.00
Asphalt Patching (42 tons)	Ton	$203.00	42	$ 8,526.00
Sidewalk - Goodrich to Beach	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (404 CY)	CY	$54.00	404	$ 21,816.00
Granite Curb (4390 LF)	LF	$60.00	4390	$ 263,400.00
Concrete Sidewalk (2415 SY)	SY	$76.50	2415	$ 184,747.50
Asphalt Patching (220 tons)	Ton	$203.00	220	$ 44,660.00
Curb Ramps	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
2 per Intersection (3 Total Intersections on East Side of Road)	Each	$2,500	8	$ 20,000.00
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
1 per intersection (3 total on East Side of Road)	Each	$2,000	3	$ 6,000.00
Pedestrian Walkway over Causeway	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Retrofit Causeway with Metal Walkway	Allowance	$200,000	1	$ 200,000.00
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	7	$ 1,680
New Signage	Allowance	2500	1	$ 2,500

Install New Sidewalk on Longview Ave from Robinson Rd to Plunkett Reservoir Beach				
Subtotal				$ 982,512
15% Contingency				$ 147,377
Total				**$ 1,129,888**
Total Requested from MassDOT (Total minus design and permitting)				**$ 1,107,888**

Project 1A: Install New Sidewalk on Longview Ave from Robinson Rd to Goodrich St

This project would establish a new sidewalk on the east side of Longview Ave, beginning at Robinson Road and extending only to Goodrich Street, to fill the sidewalk gap in that neighborhood. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings. For a cost estimate, see **Table B-3**.

Table B-3. Cost Estimate for Project 1A

Install New Sidewalk on Longview Ave from Robinson Rd to Goodrich St				
Materials	Asphalt w/ Asphalt Curb			
Side	East			
Length Total	5400			
Robinson to Goodrich	830			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$4,000	1	$ 4,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation - Robinson to Goodrich (154 CY)	CY	$ 37.50	154	$ 5,775.00
Utility Pole Relocation	Each	$10,000	2	$ 20,000.00
Remove and Reset Mailbox	Each	$240	3	$ 720.00
Sidewalk - Robinson to Goodrich	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (77 CY)	CY	$54.00	77	$ 4,158.00
Asphalt Curb (830 LF)	LF	$13.88	830	$ 11,520.40
Asphalt Sidewalk (104 Tons)	Tons	$300.00	104	$ 31,200.00
Asphalt Patching (42 tons)	Ton	$203.00	42	$ 8,526.00

Install New Sidewalk on Longview Ave from Robinson Rd to Goodrich St				
Curb Ramps	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
2 per Intersection (3 Total Intersections on East Side of Road)	Each	$1,750	6	$ 10,500.00
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
1 per intersection (3 total on East Side of Road)	Each	$1,000	3	$ 3,000.00
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	3	$ 720
New Signage	Allowance	2500	1	$ 2,500
Subtotal				$ 121,819
15% Contingency				$ 18,273
Total				**$ 140,092**
Total Requested from MassDOT (Total minus design and permitting)				**$ 133,092**

Project 1B: Install New Sidewalk on Longview Ave from Goodrich St to Plunkett Beach

This project would extend new sidewalk on the east side of Longview Ave from Goodrich Street to Plunkett Reservoir Beach, to allow residents to safely walk to the public beach from the neighborhoods in the town center. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings. This project may include an open metal catwalk / walkway adjacent to the road where it crosses the causeway at the reservoir, given that the road cannot be widened to create a sidewalk and pedestrians walking or standing in the roadway creates a safety hazard.

Project 2: Install New Sidewalk on Maple St (Rte. 143) from Old Dalton Rd to New Windsor Rd

This project would address a gap in the existing sidewalk network by extending the sidewalk on Maple Street from its current terminus at Old Dalton Road further east to New Windsor Road. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings, and crosswalks at the intersection with Buttermilk Road and the intersection with Creamery Road. For a cost estimate, see **Table B-4**.

Table B-4. Cost Estimate for Project 2

Install New Sidewalk on Maple St (Rte. 143) from Old Dalton Rd to New Windsor Rd				
Materials	Cem. Conc. With No Curb			
Length	1400			
Side	North			

Install New Sidewalk on Maple St (Rte. 143) from Old Dalton Rd to New Windsor Rd				
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$8,000	1	$ 8,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (260 CY)	CY	$ 37.50	269	$ 10,087.50
Utility Pole Relocation	Each	$10,000	5	$ 50,000.00
Remove and Reset Mailbox	Each	$240	10	$ 2,400.00
Sidewalk	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (130 CY)	CY	$54.00	77	$ 4,158.00
Concrete Sidewalk (457 SY)	SY	$87.00	770	$ 66,990.00
Curb Ramps	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
2 per Intersection (3 Total Intersections on North Side of Road)	Each	$2,500	6	$ 15,000.00
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
1 per intersection (3 total on North Side of Road)	Each	$2,000	3	$ 6,000.00
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and Seed disturbed areas	Allowance	$3,000	1	$ 3,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	4	$ 960
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 182,796
15% Contingency				$ 27,419
Total				$ 210,215
Total Requested from MassDOT (Total minus design and permitting)				$ 198,215

Project 3: Reconstruct the Intersection of Maple St (Rte. 143) and Old Dalton Rd

This project would address the intersection of Maple Street and Old Dalton Road with the goal of eliminating the Y-shaped intersection and reduce the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. The utility pole on the island at this intersection will be relocated during a FY17 MassWorks project to repave Old Dalton Road. For a cost estimate, see **Table B-5**.

Table B-5. Cost Estimate for Project 3

Reconstruct the Intersection of Maple St (Rte. 143) and Old Dalton Rd				
Materials	NA			
Size (SF)	11000			
Side	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$10,000	1	$ 10,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Utilities Allowance	Allowance	$10,000	1	$ 10,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation (407 CY)	CY	$ 37.50	407	$ 15,262.50
Utility Pole Relocation	Each	$10,000	3	$ 30,000.00
Remove and Reset Mailbox	Each	$240	2	$ 480.00
Protect Existing Cemetery Arch	Allowance	$5,000	1	$ 5,000.00
New Asphalt	Unit	Cost/Unit	Estimate	Cost
Gravel Borrow (162 CY) -6" Depth - Assume 20% reduction in pavement area	CY	$54.00	162	$ 8,748.00
Asphalt (220 tons) -Assume 20% reduction in pavement area (8800 SF total)	Tons	$247.00	220	$ 54,340.00
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
Assume 4	Each	$2,500	4	$ 10,000.00
Crosswalks	Unit	Cost/Unit	Estimate	Cost
New Crosswalk	Each	$2,000	1	$ 2,000.00
Landscaping	Unit	Cost/Unit	Estimate	Cost

Reconstruct the Intersection of Maple St (Rte. 143) and Old Dalton Rd				
Loam and seed disturbed areas	Allowance	$3,000	1	$ 3,000
Revegetation	Allowance	$7,000	1	$ 7,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	4	$ 960
New Signage	Allowance	1000	1	$ 1,000
Lighting	Unit	Cost/Unit	Estimate	Cost
Pedestrian scale light pole	Each	13000	3	$ 39,000
Utility Box and Connection	Allowance	10,000	1	$ 10,000
BRTA Transit Stop	Unit	Cost/Unit	Estimate	Cost
Turn-out area for bus	Allowance	10000	1	$ 10,000
Bus Shelter	Each	18000	1	$ 18,000
Subtotal				$ 252,191
15% Contingency				$ 37,829
Total				**$ 290,019**
Total Requested from MassDOT (Total minus design and permitting)				**$ 276,019**

Project 4: Reconstruct the Intersection of Main St, Plunkett Ave, and Rte. 8

This project would address the intersection of Main Street, Plunkett Ave, and Route 8 with the goal of reducing confusion over right-of-way, pedestrian crossing distances, and overall complexity at the intersection. Crosswalks will also be added to connect the existing and proposed sidewalk network. For a cost estimate, see **Table B-6**.

Table B-6. Cost Estimate for Project 4

Reconstruct the Intersection of Main St, Plunkett Ave, and Rte. 8				
Materials	NA			
Size (SF)	15000			
Side	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$12,000	1	$ 12,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400

Reconstruct the Intersection of Main St, Plunkett Ave, and Rte. 8				
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Utilities Allowance	Allowance	$15,000	1	$ 15,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (555CY)	CY	$ 37.50	555	$ 20,812.50
Utility Pole Relocation	Each	$10,000	3	$ 30,000.00
New Asphalt	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (222 CY) -6" Depth - Assume 20% reduction in pavement area	CY	$54.00	222	$ 11,988.00
Asphalt (300 tons) -Assume 20% reduction in pavement area (12000 SF total)	Tons	$247.00	300	$ 74,100.00
Curb Ramps	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Assume 3 total	Each	$2,500	3	$ 7,500.00
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
New Crosswalk	Each	$2,000	2	$ 4,000.00
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and seed disturbed areas	Allowance	$3,000	1	$ 3,000
Revegetation	Allowance	$7,000	1	$ 7,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	4	$ 960
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 204,761
15% Contingency				$ 30,714
Total				**$ 235,475**
Total Requested from MassDOT (Total minus design and permitting)				**$ 219,475**

Project 5: Reconstruct the Intersection of Maple St (Rte. 143) and Plunkett Ave

This project would address the intersection of Maple Street and Plunkett Ave. with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. Project challenges include a traffic island with utility pole that will likely need to be relocated. For a cost estimate, see **Table B-7**.

Table B-7. Cost Estimate for Project 5

Reconstruct the Intersection of Maple St (Rte. 143) and Plunkett Ave				
Materials	NA			
Size (SF)	12000			
Side	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$10,000	1	$ 10,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Utilities Allowance	Allowance	$10,000	1	$ 10,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation (444 CY)	CY	$ 37.50	444	$ 16,650.00
Utility Pole Relocation	Each	$10,000	3	$ 30,000.00
Remove and Reset Mailbox	Each	$240	2	$ 480.00
New Asphalt	Unit	Cost/Unit	Estimate	Cost
Gravel Borrow (177 CY) - 6" Depth - Assume 20% reduction in pavement area	CY	$54.00	177	$ 9,558.00
Asphalt (240 tons) -Assume 20% reduction in pavement area (9600 SF total)	Tons	$247.00	240	$ 59,280.00
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$2,500	1	$ 2,500.00
Crosswalks	Unit	Cost/Unit	Estimate	Cost
New Crosswalk	Each	$2,000	1	$ 2,000.00
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and seed disturbed areas	Allowance	$3,000	1	$ 3,000
Revegetation	Allowance	$7,000	1	$ 7,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	4	$ 960
New Signage	Allowance	1000	1	$ 1,000

Reconstruct the Intersection of Maple St (Rte. 143) and Plunkett Ave				
Subtotal				$ 169,828
15% Contingency				$ 25,474
Total				**$ 195,302**
Total Requested from MassDOT (Total minus design and permitting)				**$ 181,302**

Project 6: Install New Sidewalk on Route 8 from Maple St to Plunkett Ave

This project would establish a new section of sidewalk on Route 8 to close the existing gap between Maple St and Plunkett Ave, the goal of creating a complete walking loop in the center of town by filling in existing gaps. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings. This project is on a road under MassDOT jurisdiction.

Project 7: Install New Sidewalk on Taylor St

This project would establish a new sidewalk on east side of Taylor Street, with the goal of creating a complete walking loop in the center of town by filling in existing gaps. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings. For a cost estimate, see **Table B-8**.

Table B-8. Cost Estimate for Project 7

Install New Sidewalk on Taylor St				
Materials	Cem. Conc. w/ no curb			
Side	East			
Length Total	600			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$3,000	1	$ 3,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	1	$ 2,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (111 CY)	CY	$ 37.50	111	$ 4,162.50
Utility Pole Relocation	Each	$10,000	3	$ 30,000
Remove and Reset Mailbox	Each	$240	3	$ 720
Sidewalk	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (55.2 CY)	CY	$54.00	55.2	$ 2,980.80

Install New Sidewalk on Taylor St				
Concrete Sidewalk (330 SY)	SY	$87.00	330	$ 28,710
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$2,500	4	$ 10,000
Crosswalks	Unit	Cost/Unit	Estimate	Cost
1 per intersection	Each	$2,000	2	$ 4,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
New Signage	Allowance	1500	1	$ 1,500
Subtotal				$ 102,273
15% Contingency				$ 15,341
Total				**$ 117,614**
Total Requested from MassDOT (Total minus design and permitting)				**$ 111,614**

Project 8: Install New Sidewalk on Commonwealth Ave

This project would establish a new sidewalk on the west side of Commonwealth Road, with the goal of creating a complete walking loop in the center of town by filling in existing gaps. The sidewalk would include ADA-compliant curb ramps at all public roadway crossings. For a cost estimate, see **Table B-9**.

Table B-9. Cost Estimate for Project 8

Install New Sidewalk on Commonwealth Ave				
Materials	Cem. Conc. w/ Granite Curb			
Side	West			
Church to Goodrich	300'			
Goodrich to Last house	650'			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$4,000	1	$ 4,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000

Install New Sidewalk on Commonwealth Ave				
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	1	$ 2,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Remove and Reset Mailbox	Each	$240	10	$ 2,400
Remove and Reset Ex. Fence	Each	$10,000	1	$ 10,000
Tree removal	Each	$2,000	5	$ 10,000
Sidewalk - Church to Goodrich	Unit	Cost/Unit	Estimate	Cost
Excavation (56 CY)	CY	$ 37.50	56	$ 2,100
Gravel Borrow (28 CY)	CY	$54.00	28	$ 1,512
Concrete Sidewalk (165 SY)	SY	$87.00	165	$ 14,355
Granite Curb	LF	$60.00	300	$ 18,000
Sidewalk - Goodrich to Last House -Assume curbing not needed	Unit	Cost/Unit	Estimate	Cost
Excavation (121 CY)	CY	$ 37.50	121	$ 4,537.50
Gravel Borrow (60 CY)	CY	$54.00	60	$ 3,240
Concrete Sidewalk (360 SY)	SY	$76.50	360	$ 27,540
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$1,750	4	$ 7,000
Crosswalks	Unit	Cost/Unit	Estimate	Cost
1 per intersection	Each	$1,000	2	$ 2,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	5	$ 1,200
New Signage	Allowance	1500	1	$ 1,500
Subtotal				$ 126,585
15% Contingency				$ 18,988
Total				**$ 145,572**

Install New Sidewalk on Commonwealth Ave				
Total Requested from MassDOT (Total minus design and permitting)				**$ 138,572**

Project 9: Reconstruct the Intersection of Longview Ave, Robinson Rd, and Curtis St

This project would address the intersection of Longview Ave with Robinson Road and Curtis Street, with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. Project challenges include a traffic island with utility pole, fire hydrant, and traffic signs that will likely need to be relocated. For a cost estimate, see **Table B-10**.

Table B-10. Cost Estimate for Project 9

Reconstruct the Intersection of Longview Ave, Robinson Rd, and Curtis St				
Materials	NA			
Size (SF)	10000			
Side	NA			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$10,000	1	$ 10,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger	Week	$2,200	2	$ 4,400
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$3,000	2	$ 6,000
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (370 CY) -Assume 1' depth across ex. pavement area	CY	$ 37.50	370	$ 13,875
Utility Pole Relocation	Each	$10,000	3	$ 30,000
New Asphalt	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (162 CY) -6" Depth - Assume 20% reduction in pavement area	CY	$54.00	162	$ 8,748
Asphalt (220 tons) -Assume 20% reduction in pavement area (8000 SF total)	Tons	$247.00	220	$ 54,340
Curb Ramps	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
2 per Int.	Each	$2,500	2	$ 5,000
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**

Reconstruct the Intersection of Longview Ave, Robinson Rd, and Curtis St				
New Crosswalk	Each	$2,000	1	$ 2,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and seed disturbed areas	Allowance	$3,000	1	$ 3,000
Revegetation	Allowance	$7,000	1	$ 7,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	4	$ 960
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 159,323
15% Contingency				$ 23,898
Total				**$ 183,221**
Total Requested from MassDOT (Total minus design and permitting)				**$ 169,221**

Project 10: Replace the Sidewalk on Maple St (Rte. 143) from Rte. 8 to Old Dalton Rd

This project would repair existing sidewalks and establish curb ramps on Maple Street to meet ADA accessibility guidelines and encouraging walking in the town center. For a cost estimate, see **Table B-11**.

Table B-11. Cost Estimate for Project 10

Replace the Sidewalk on Maple St (Rte. 143) from Rte. 8 to Old Dalton Rd				
Materials	Cem. conc. w/ no curb			
Side	North			
Length Total	1800			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$8,000	1	$ 8,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	1	$ 2,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation	CY	$ 37.50	333	$ 12,487.50
Concrete Removal	CY	$ 52.50	110	$ 5,775
Sidewalk	Unit	Cost/Unit	Estimate	Cost

Replace the Sidewalk on Maple St (Rte. 143) from Rte. 8 to Old Dalton Rd				
Gravel Borrow (165 CY) -Assume 6" depth for entire length	CY	$54.00	165	$ 8,910
Concrete Sidewalk (990 SY)	SY	$87.00	990	$ 86,130
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$2,500	4	$ 10,000
Crosswalks	Unit	Cost/Unit	Estimate	Cost
1 per intersection	Each	$2,000	2	$ 4,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	7	$ 1,680
New Signage	Allowance	2500	1	$ 2,500
Subtotal				$ 157,683
15% Contingency				$ 23,652
Total				**$ 181,335**
Total Requested from MassDOT (Total minus design and permitting)				**$ 169,335**

Project 11: Install Speed Feedback Signs on Longview Ave

This project would install two permanent speed feedback signs, one in each direction, on Longview Ave as a traffic calming measure to reduce speeds on the route to and from both the public beach at Plunkett Reservoir and the town transfer station. For a cost estimate, see **Table B-12**.

Table B-12. Cost Estimate for Project 11

Replace the Sidewalk on Maple St (Rte. 143) from Rte. 8 to Old Dalton Rd				
Materials	NA			
Side	Southbound towards village			
Length Total	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Allowance for tree trimming (for solar panel)	Allowance	2,000	2	$ 4,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Concrete Footing	Each	$ 1,000.00	2	$ 2,000.00

Replace the Sidewalk on Maple St (Rte. 143) from Rte. 8 to Old Dalton Rd				
Feedback Sign	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Speed feedback sign w/ solar panel	Each	$5,000.00	2	$ 10,000
Delivery	Each	$500.00	1	$ 500
Mounting Pole	Each	$500.00	1	$ 500
Subtotal				$ 17,000
15% Contingency				$ 2,550
Total				**$ 19,550**
Total Requested from MassDOT (Total minus design and permitting)				**$ 19,550**

Project 12: Reconstruct the Intersection of Middlefield Rd (Skyline Trail) and Fassell Rd

This project would address the intersection of Middlefield Road and Fassell Road with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. For a cost estimate, see **Table B-13**.

Table B-13. Cost Estimate for Project 12

Reconstruct the Intersection of Middlefield Rd (Skyline Trail) and Fassell Rd				
Materials	NA			
Size (SF)	10000			
Side	NA			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$10,000	1	$ 10,000
Permitting	Allowance	$4,000	1	$ 4,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (370 CY) -Assume 1' depth across ex. pavement area	CY	$ 37.50	370	$ 13,875
Utility Pole Relocation	Each	$10,000	1	$ 10,000
Tree removal	Each	$2,000	3	$ 6,000

Reconstruct the Intersection of Middlefield Rd (Skyline Trail) and Fassell Rd				
New Asphalt	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (185 CY) -6" Depth - Assume 0% reduction in pavement area	CY	$54.00	185	$ 9,990
Asphalt (250 tons) -Assume 0% reduction in pavement area (10000 SF total)	Tons	$247.00	250	$ 61,750
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and seed disturbed areas	Allowance	$3,000	1	$ 3,000
Revegetation	Allowance	$7,000	1	$ 7,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	2	$ 480
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 140,495
15% Contingency				$ 21,074
Total				**$ 161,569**
Total Requested from MassDOT (Total minus design and permitting)				**$ 147,569**

Project 13: Reconstruct the Intersection of Middlefield Rd (Skyline Trail) and East Washington Rd

This project would address the intersection of Middlefield Road and East Washington Road with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible.

Project 14: Reconstruct the Intersection of Middlefield Rd (Skyline Trail) and Creamery Rd

This project would address the intersection of Middlefield Road and Creamery Road with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible.

Project 15: Reconstruct the Intersection of Old Windsor Rd and Frank Schnopp Rd

This project would address the intersection of Old Windsor Road and Frank Schnopp Road with the goal of eliminating the Y-shaped intersection and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible.

Project 16: Replace the Sidewalk on Old Dalton Road

This project would repair existing sidewalks and establish curb ramps Old Dalton Road, near the Old Mill Trail, to meet ADA accessibility guidelines and provide safe access from the informal bus stop at Route 8 and Old Dalton Road to the Old Mill Trail and the Hinsdale Trading Post.

Project 17: Replace the Sidewalk on Church St

This project would repair existing sidewalks and establish curb ramps on Church Street to meet ADA accessibility guidelines and encouraging walking in the town center. For a cost estimate, see **Table B-14**.

Table B-14. Cost Estimate for Project 17

Replace the Sidewalk on Church St				
Materials	Cem. Conc. w/ no curb			
Side	North			
Length	820'			
Item	Unit	Cost/Unit	Estimate	Total Cost
General				
Design & Engineering	Allowance	$4,000	1	$ 4,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $75/hour @ 8 hours/day = 3000/week	Week	$3,000	1	$ 3,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation	CY	$ 37.50	151	$ 5,663
Remove ex. Sidewalk (approx 820')	CY	$ 52.50	50	$ 2,625
Sidewalk	Unit	Cost/Unit	Estimate	Cost
Gravel Borrow (76 CY) - Assume 6" depth for entire length	CY	$54.00	76	$ 4,104
Concrete Sidewalk (451 SY)	SY	$76.50	451	$ 34,502
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$1,750	4	$ 7,000
Crosswalks	Unit	Cost/Unit	Estimate	Cost
1 per intersection	Each	$1,000	2	$ 2,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	7	$ 1,680
New Signage	Allowance	2500	1	$ 2,500
Subtotal				$ 82,273
15% Contingency				$ 12,341

Replace the Sidewalk on Church St				
Total				$ 94,614
Total Requested from MassDOT (Total minus design and permitting)				$ 87,614

Project 18: Replace the Sidewalk on Plunkett Ave from Bingham Rd to Taylor St

This project would repair existing sidewalks and establish curb ramps on Plunkett Ave to meet ADA accessibility guidelines and encouraging walking in the town center. For a cost estimate, see **Table B-15**.

Table B-15. Cost Estimate for Project 18

Replace the Sidewalk on Plunkett Ave from Bingham Rd to Taylor St				
Materials	Cem. conc. w/ no curb			
Side	North			
Plunkett Ave Route 8 to Bingham	325'			
Bingham to Taylor	325'			
Item	Unit	Cost/Unit	Estimate	Total Cost
General				
Design & Engineering	Allowance	$5,000	1	$ 5,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	1	$ 2,000
Sidewalk - Route 8 to Bingham	Unit	Cost/Unit	Estimate	Cost
Excavation	CY	$ 37.50	61	$ 2,288
Concrete removal	CY	$ 52.50	20	$ 1,050
Gravel Borrow (30 CY)- Assume 6" depth for entire length	CY	$54.00	30	$ 1,620
Concrete Sidewalk (180 SY)	SY	$87.00	180	$ 15,660
Sidewalk - Bingham to Taylor	Unit	Cost/Unit	Estimate	Cost
Excavation	CY	$ 37.50	61	$ 2,288
concrete removal	CY	$ 52.50	20	$ 1,050
Gravel Borrow (30 CY)	CY	$54.00	30	$ 1,620
Concrete Sidewalk (180 SY)	SY	$87.00	180	$ 5,660
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$2,500	4	$ 10,000

Replace the Sidewalk on Plunkett Ave from Bingham Rd to Taylor St				
Crosswalks	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
1 per intersection	Each	$2,000	2	$ 4,000
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	7	$ 1,680
New Signage	Allowance	2500	1	$ 2,500
Subtotal				$ 81,615
15% Contingency				$ 12,242
Total				**$ 93,857**
Total Requested from MassDOT (Total minus design and permitting)				**$ 85,857**

Project 19: Replace the Sidewalk on Goodrich St

This project would repair existing sidewalks and establish curb ramps on Goodrich Street to meet ADA accessibility guidelines and encouraging walking in the town center. This project would also extend the sidewalk to the intersection with Commonwealth Ave. For a cost estimate, see **Table B-16**.

Table B-16. Cost Estimate for Project 19

Replace the Sidewalk on Goodrich St				
Materials	Cem. conc. w/ Granite curb			
Side	North			
Length	900'			
Item	**Unit**	**Cost/Unit**	**Estimate**	**Total Cost**
General				
Design & Engineering	Allowance	$4,000	1	$ 4,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$5,000	1	$ 5,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	1	$ 2,200
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	1	$ 2,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation	CY	$ 37.50	167	$ 6,263
Remove ex. Sidewalk (approx 400')	CY	$ 52.50	24	$ 1,281

Replace the Sidewalk on Goodrich St				
Utility Pole Relocation	Each	$10,000	1	$ 10,000
Sidewalk	Unit	Cost/Unit	Estimate	Cost
Gravel Borrow (83 CY) -Assume 6" depth for entire length	CY	$54.00	83	$ 4,482
Concrete Sidewalk (500 SY)	SY	$76.50	500	$ 38,250
Granite Curb	LF	$60.00	900	$ 54,000
Curb Ramps	Unit	Cost/Unit	Estimate	Cost
2 per Intersection	Each	$1,750	4	$ 7,000
Crosswalks	Unit	Cost/Unit	Estimate	Cost
1 per intersection	Each	$1,000	2	$ 2,000
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and Seed disturbed areas	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	7	$ 1,680
New Signage	Allowance	2500	1	$ 2,500
Subtotal				$ 148,656
15% Contingency				$ 22,298
Total				**$ 170,954**
Total Requested from MassDOT (Total minus design and permitting)				**$ 163,954**

Project 20: Reconstruct the Intersection of Middlefield Rd (Skyline Trail), Rte. 8, and Buttermilk Rd

This project would address the intersection of Middlefield Road, Route 8, and Buttermilk Road with the goal of eliminating the K-shaped intersection and any resulting confusion over which vehicle has the right of way. It would also reduce the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. For a cost estimate, see **Table B-17**.

Table B-17. Cost Estimate for Project 20

Reconstruct the Intersection of Middlefield Rd (Skyline Trail), Rte. 8, and Buttermilk Rd				
Materials	NA			
Size (SF)	18000			
Side	NA			
Item	Unit	Cost	Estimate	Total Cost

Reconstruct the Intersection of Middlefield Rd (Skyline Trail), Rte. 8, and Buttermilk Rd				
General				
Design & Engineering	Allowance	$10,000	1	$ 10,000
Permitting	Allowance	$5,000	1	$ 5,000
Erosion Control	Allowance	$10,000	1	$ 10,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Excavation (666 CY) -Assume 1' depth across ex. pavement area	CY	$ 37.50	666	$ 24,975
Utility Pole Relocation	Each	$10,000	3	$ 30,000
Tree removal	Each	$2,000	5	$ 10,000
Drainage and Utilities Allowance	Allowance	$30,000	1	$ 30,000
New Asphalt	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Gravel Borrow (333 CY) -6" Depth - Assume 0% reduction in pavement area	CY	$54.00	333	$ 17,982
Asphalt (450 tons) -Assume 0% reduction in pavement area	Tons	$240.00	450	$ 108,000
Landscaping	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Loam and seed disturbed areas	Allowance	$5,000	1	$ 5,000
Revegetation	Allowance	$8,000	1	$ 8,000
Signs	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Remove and Reset Signs	Each	240	2	$ 480
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 268,837
15% Contingency				$ 40,326
Total				**$ 309,163**
Total Requested from MassDOT (Total minus design and permitting)				**$ 294,163**

Project 21: Reconstruct the Intersection of East Washington Rd and Fassell Rd

This project would address the intersection of East Washington Road and Fassell Road with the goal of eliminating the Y-shaped intersection on a curve and reducing the crossing distance and complexity for any pedestrians or cyclists. Opportunities to address sight distance issues should also be addressed in design if possible. For a cost estimate, see **Table B-18**.

Table B-18. Cost Estimate for Project 21

Reconstruct the Intersection of East Washington Rd and Fassell Rd				
Materials	NA			
Size (SF)	8000			
Side	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Design & Engineering	Allowance	$7,000	1	$ 7,000
Permitting	Allowance	$3,000	1	$ 3,000
Erosion Control	Allowance	$10,000	1	$ 10,000
Flagger - Assume $55/hour @ 8 hours/day = 2200/week	Week	$2,200	2	$ 4,400
Police Detail - Assume $50/hour @ 8 hours/day = 3000/week	Week	$2,000	2	$ 4,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost
Excavation (300 CY) -Assume 1' depth across ex. pavement area	CY	$ 37.50	300	$ 11,250
Drainage and Utilities Allowance	Allowance	$10,000	1	$ 10,000
New Asphalt	Unit	Cost/Unit	Estimate	Cost
Gravel Borrow (120 CY) -6" Depth - Assume 20% reduction in pavement area	CY	$54.00	120	$ 6,480
Asphalt (160 tons) -Assume 20% reduction in pavement area (6400 SF total)	Tons	$240.00	160	$ 38,400
Landscaping	Unit	Cost/Unit	Estimate	Cost
Loam and seed disturbed areas	Allowance	$5,000	1	$ 5,000
Revegetation	Allowance	$5,000	1	$ 5,000
Signs	Unit	Cost/Unit	Estimate	Cost
Remove and Reset Signs	Each	240	2	$ 480
New Signage	Allowance	1000	1	$ 1,000
Subtotal				$ 106,010
15% Contingency				$ 15,902
Total				**$ 121,912**
Total Requested from MassDOT (Total minus design and permitting)				**$ 111,912**

Project 22: Install Speed Feedback Sign on Robinson Rd

This project would install one permanent speed feedback sign on Robinson Road in the southbound lane as a traffic calming measure to reduce speeds heading toward the town center. For a cost estimate, see **Table B-19**.

Table B-19. Cost Estimate for Project 22

Install Speed Feedback Sign on Robinson Rd				
Materials	NA			
Side	Southbound towards village			
Length Total	NA			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Allowance for tree trimming (for solar panel)	Allowance	$ 2,000	1	$ 2,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Concrete Footing	Each	$ 1,000	1	$ 1,000
Feedback Sign	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Speed feedback sign w/ solar panel	Each	$5,000.00	1	$ 5,000
Delivery	Each	$500.00	1	$ 500
Mounting Pole	Each	$500.00	1	$ 500
Subtotal				$ 9,000
15% Contingency				$ 1,350
Total				**$ 10,350**
Total Requested from MassDOT (Total minus design and permitting)				**$ 10,350**

Project 23: Install a Crosswalk on Old Dalton Rd at Maple St (Rte. 143) Intersection

After sidewalk is replaced on Maple Street down to Old Dalton Road (Project 10) and the sidewalk is extended down to New Windsor Road (Project 2), this project would install a crosswalk across Old Dalton Road at the intersection with Maple Street, to provide save crossing across Old Dalton Road to the sidewalk continuing on Maple Street.

Project 24: Install a Crosswalk on Plunkett Ave at Maple St (Rte. 143) Intersection

After the intersection of Maple Street and Plunkett Ave. is reconstructed (Project 5) and sidewalk is replaced on Maple Street down to Old Dalton Road (Project 10), this project would install a crosswalk across Plunkett Ave. at the intersection with Maple Street, to provide save crossing across Plunkett Ave. to the sidewalk continuing on Maple Street.

Project 25: Install a Crosswalk on Route 8 At Old Dalton Rd Intersection

This project would install a crosswalk across Route 8 at the intersection with Old Dalton Road to facilitate access to the Old Mill Trail and Hinsdale Trading Company. Although not a formal stop on the BRTA bus route, riders commonly request this stop or flag the bus from the side of the road. This project is on a road under MassDOT jurisdiction.

Project 26: Pedestrian Wayfinding

Once the sidewalk gaps were filled, this project would install attractive, user-friendly wayfinding throughout the center of Hinsdale to encourage the use of walking loops for exercise/recreation, and for errands at the town's local businesses and services.

Project 27: Install a Bicycle Rack at the Hinsdale Public Library

This project would install a bicycle rack at the Hinsdale Public Library to encourage library patrons to ride a bicycle instead of drive to the library. See **Figure B-3**. For a cost estimate, see **Table B-20**.

Project 28: Install a Bicycle Rack at the Gazebo at the Corner of Main St and Maple St

This project would install a bicycle rack at the gazebo located at the corner of Main Street and Maple Street to provide a place for cyclists to park while resting at the gazebo. See **Figure B-3**. For a cost estimate, see **Table B-20**.

Project 29: Install a Bicycle Rack at the Playground on Maple St (Rte. 143)

This project would install a bicycle rack at the kid's playground on Maple Street, behind Kittredge Elementary School, to encourage families to ride bicycles to the playground instead of drive. See **Figure B-3**. For a cost estimate, see **Table B-20**.

Figure B-3. Potential Bike Rack Locations on Maple Street

Table B-20. Cost Estimate for Projects 27-29

Install a Bicycle Rack at Three Locations on Main St				
Materials	NA			
Side	NA			
Length Total	NA			
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Concrete Pad	Each	$ 2,000	3	$ 6,000

Install a Bicycle Rack at Three Locations on Main St				
Bike Rack	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Bike Rack	Each	$1,500.00	3	$ 4,500
Bike Repair Station	Each	$2,500.00	1	$ 2,500
Delivery	Each	$500.00	1	$ 500
Subtotal				$ 13,500
15% Contingency				$ 2,025
Total				**$ 15,525**
Total Requested from MassDOT (Total minus design and permitting)				**$15,525**

Project 30: Install Bicycle Rack at Old Mill Trail

This project would install a bicycle rack at the head of the Old Mill Trail on Old Dalton Rd. See **Figure B-4**. For a cost estimate, see **Table B-21**.

Figure B-4. Potential Bike Rack Location at Old Mill Trail

Table B-21. Cost Estimate for Project 30

Install a Bicycle Rack at Old Mill Trail				
Materials	NA			
Side	NA			
Length Total	NA			
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Concrete Pad	Each	$2,000	1	$ 2,000
Bike Rack	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Bike Rack	Each	$1,500	1	$ 1,500
Delivery	Each	$250	1	$ 250
Subtotal				$ 3,750

Install a Bicycle Rack at Old Mill Trail				
15% Contingency				$ 563
Total				$ 4,313
Total Requested from MassDOT (Total minus design and permitting)				$ 4,313

Project 31: Install a Crosswalk on Maple St (Rte. 143) At Creamery Rd Intersection

After sidewalk is installed on Maple Street down to New Windsor Road (Project 2), this project would install a crosswalk across Maple Street at the intersection with Creamery Road.

Project 32: Install a Crosswalk on Maple St (Rte. 143) At Buttermilk Rd Intersection

After sidewalk is installed on Maple Street down to New Windsor Road (Project 2), this project would install a crosswalk across Maple Street at the intersection with Buttermilk Road.

Project 33: Install Stop Sign with Beacon on New Windsor Rd at Peru Rd / Maple St (Rte. 143)

This project would add a beacon to the existing stop sign on New Windsor Road at the intersection with Peru Road / Maple Street (Route 143) for added visibility. See **Figure B-5**. For a cost estimate, see **Table B-22**.

Figure B-5. Example of a Stop Sign with Beacon

Table B- 22. Cost Estimate for Project 33

Install Stop Sign with Beacon on New Windsor Rd at Peru Rd / Maple St (Rte. 143)				
Materials	NA			
Side	Both			
Length Total	NA			
Item	Unit	Cost	Estimate	Total Cost
General				
Allowance for tree trimming (for solar panel)	Allowance	2,000	1	$ 2,000
Site Prep and Demolition	Units	Cost/Unit	Estimate	Cost

Install Stop Sign with Beacon on New Windsor Rd at Peru Rd / Maple St (Rte. 143)				
Concrete Footing	Each	$ 1,000	1	$ 1,000
Feedback Sign	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Stop sign w/ flashing beacon - solar powered	Each	$2,000	1	$ 2,000
Delivery	Each	$250	1	$ 250
Mounting Pole	Each	$500	1	$ 500
Subtotal				$ 5,750
15% Contingency				$ 863
Total				**$ 6,613**
Total Requested from MassDOT (Total minus design and permitting)				**$ 6,613**

Project 34: Replace Culvert on Old Dalton Rd

This project would replace a culvert on Old Dalton Road.

Project 35: Install Stop Sign with Beacon on Ashmere Dr. at Peru Rd (Rte. 143)

This project would add a beacon to the existing stop sign on Ashmere Drive at the intersection with Peru Road (Route 143) for added visibility. For a cost estimate, see **Table B-23**.

Table B- 23. Cost Estimate for Project 35

Install Stop Sign with Beacon on Ashmere Dr at Peru Rd (Rte. 143)				
Materials	NA			
Side	Both			
Length Total	NA			
Item	**Unit**	**Cost**	**Estimate**	**Total Cost**
General				
Allowance for tree trimming (for solar panel)	Allowance	$2,000	1	$ 2,000
Site Prep and Demolition	**Units**	**Cost/Unit**	**Estimate**	**Cost**
Concrete Footing	Each	$1,000	1	$ 1,000
Feedback Sign	**Unit**	**Cost/Unit**	**Estimate**	**Cost**
Stop sign w/ flashing beacon - solar powered	Each	$2,000	1	$ 2,000
Delivery	Each	$250	1	$ 250
Mounting Pole	Each	$500	1	$ 500
Subtotal				$ 5,750
15% Contingency				$ 863

Install Stop Sign with Beacon on Ashmere Dr at Peru Rd (Rte. 143)				
Total				**$ 6,613**
Total Requested from MassDOT (Total minus design and permitting)				**$ 6,613**

APPENDIX C: MASSDOT COMPLETE STREETS PROJECT PRIORITIZATION PLAN

The following Appendix section (**Table C-1**) is a copy of the Tier 2 Prioritization Plan that was submitted to MassDOT. Projects are identical to those found in Table 10 but includes additional information such as estimated start and end locations, anticipated construction duration and other information.

Table C-1. MassDOT Complete Streets Tier 2 Prioritization Plan

Project Details			EJ	Complete Streets Location			Project Origin and Type		Complete Streets Needs								Complete Streets Funding Request			Construction Schedule	
Rank	Project Name	Project Description	Environmental Justice Population	Project Limits	Project Start Location: X,Y Coordinates (MA State Plane meter)	Project End Location: X,Y Coordinates (MA State Plane meter)	Complete Streets Project Origin (planning documentation or supporting analysis)	Complete Streets Project Type (refer to the Eligible Projects Worksheet)	Safety	ADA Accessibility	Pedestrian Mobility	Bicycle Mobility	Transit Operations and Access	Vehicular Operations	Freight Operations	Will this project be in Coordination with other Communities? (list, if applicable)	Total Estimated Project Cost	Complete Streets Funding Requested	Other Funding Source(s) and Amount (if applicable)	Anticipated Construction Duration (number of months)	Desired Construction Start Date (month/year)
1	Longview Ave. Sidewalk and pedestrian walkway	Installation of approximately 5400' of new sidewalk along Longview Rd. with new ADA compliant curb ramps and new crosswalks at intersection crossings. Construction will also include installation of a metal pedestrian walkway over a causeway along Plunkett Reservoir.	No	Longview Ave from the intersection of Robinson Rd. south to a Beach area	65866, 911062	65659, 909501	CS Needs Assessment	P2, P5, P9, PO, S14	X	X	X					No	$763,522	$400,000		3	04/01/22
2	Longview Ave. Sidewalk	Installation of approx. 830' of new sidewalk along Longview Ave. from Robinson Rd. to Goodrich St. Work will also include installation of new ADA compliant curb ramps and new crosswalks at intersections.	No	Longview Ave from the intersection of Robinson Rd. south to the intersection of Goodrich St.	65866, 911062	65946, 910825	CS Needs Assessment	P2, P5, P9	X	X	X					No	$140,092	$133,092	$7,000 (Chapter 90)	1	04/01/17
3	Maple St. Sidewalk Extension	Installation of approximately 1400' of new sidewalk along Maple St. from the Intersection of this street with Old Dalton Road to the intersection of new Windsor Road. Work will also include installation of new ADA compliant curb ramps and new crosswalks at intersections.	No	Maple St. (Rte. 143)	67305, 911341	67713, 911373	CS Needs Assessment	P2, P5, P9	X	X	X					No	$210,215	$198,215	$12000 (Chapter 90)	2	04/01/19

Project Details			EJ	Complete Streets Location			Project Origin and Type		Complete Streets Needs								Complete Streets Funding Request			Construction Schedule	
4	Old Dalton Rd. and Maple St. Intersection Reconstruction	Reconstruction of the intersection of Old Dalton Rd. and Maple St. to reduce pedestrian crossing distance and complexity. New ADA compliant curb ramps and new crosswalks will be installed as part of reconstruction.	No	Intersection of Old Dalton Rd. and Maple St.	67298, 911337		CS Needs Assessment	S6, S13, P2, P9	X	X	X			X		No	$290,019	$276,019	$14,000 (Chapter 90)	2	04/01/18
5	Main St./Plunkett Ave Ext./Route 8 Intersection Reconstruction	Reconstruction of the intersection of Main St., Plunkett Ave Extension, and Route 8 to reduce pedestrian crossing distance and complexity. New ADA compliant curb ramps and new crosswalks will be installed as part of reconstruction.	No	Intersection of Main St, Plunkett Ave. Extension and Route 8	66206, 911212		CS Needs Assessment	S6, S13, P2, P9	X	X	X			X		No	$235,475	$219,475	$16,000 (Chapter 90)	3	04/01/20
6	Maple St. and Plunkett Ave. Intersection Reconstruction	Reconstruction of the intersection of Maple St. and Plunkett Ave. to reduce pedestrian crossing distance and complexity. New ADA compliant curb ramps and new crosswalks will be installed as part of reconstruction.	No	Intersection of Maple St. and Plunkett Ave.	66870, 911357		CS Needs Assessment	S6, S13, P2, P9	X	X	X			X		No	$195,302	$181,302	$14,000 (Chapter 90)	2	04/01/18
7	Taylor St. Sidewalk	Installation of approximately 600' of new sidewalk along Taylor St. Work will include installation of new ADA compliant curb ramps and new crosswalks at two intersections.	No	Taylor St.	66424, 911259	66459, 911080	CS Needs Assessment	P2, P5, P9	X	X	X					No	$117,634	$111,614	$6,000 (Chapter 90)	1	04/01/20
8	Commonwealth Ave. sidewalk Extension	Installation of approx. 950' of new sidewalk along Commonwealth ave. Construction will include new ADA compliant curb ramps and new crosswalks at intersections.	No	Commonwealth Ave.	66153, 911005	66252, 910724	CS Needs Assessment	P2, P5, P9, S14	X	X	X					No	145,722	138,722	$7000 (Chapter 90)	1	04/01/17
9	Longview Ave. and Robinson Rd Intersection Reconstruction	Reconstruction of the intersection of Longview Ave. and Robinson Rd. to reduce pedestrian crossing distance and complexity. Construction will include installation of new ADA compliant curb ramps and new crosswalks.	No	Intersection of Longview Ave. and Robinson Rd.	65859, 911060		CS Needs Assessment	S6, S13, P2, P9	X	X	X			X		No	$183,221	$169,221	$14,000 (Chapter 90)	1	04/01/21
10	Maple St. Sidewalk Replacement	Replacement of approx. 1800' of deteriorating sidewalk along Maple St. Construction will include new ADA compliant curb ramps and new crosswalks.	No	Maple St. (Rte. 143) from Intersection of Route 8 to intersection of Old Dalton Rd.	66402, 911061	67286, 911340	CS Needs Assessment	P1, P5, P9	X	X	X					No	$181,335	$169,335	$12000 (Chapter 90)	3	04/01/19
11	Longview Ave. Traffic Calming	Installation of two speed feedback "your speed" signs along Longview Ave.	No	Longview Ave.	65971, 910732	65757, 909803	CS Needs Assessment	S5, S17	X					X		No	$19,550	$19,550		1	04/01/19

Project Details			EJ	Complete Streets Location			Project Origin and Type		Complete Streets Needs								Complete Streets Funding Request			Construction Schedule	
12	Fassell Rd. and Middlefield Rd. Intersection Reconstruction	Reconstruction of the intersection of Fassell Rd. and Middlefield Rd. to reduce pedestrian crossing distance and intersection complexity.	No	Intersection of Fassell Rd. and Middlefield Rd.	68669, 909164		CS Needs Assessment	S6, S13, SO	X		X					No	$161,569	$147,569	$14,000 (Chapter 90)	2	04/01/21
13	Plunkett Ave. Sidewalk Replacement	Replacement of approx. 650' of deteriorating sidewalk along Plunkett Ave. Construction will include new ADA compliant curb ramps and new crosswalks.	No	Plunkett Ave.	66212, 911233	66419, 911275	CS Needs Assessment	P1, P5, P9	X	X	X					No	$93,857	$85,857	$8,000 (Chapter 90)	1	04/01/21
14	Goodrich St. Sidewalk Replacement	Replacement of approx. 900' of deteriorating sidewalk along Goodrich St. Construction will include new ADA compliant curb ramps and new crosswalks.	No	Goodrich St.	65946, 910836	66203, 910916	CS Needs Assessment	P1, P5, P9	X	X	X					No	$ 170,954	$163,953.83	$7000 (Chapter 90)	1	04/01/17
15	Church St. Sidewalk Replacement	Replacement of approx. 820' of deteriorating sidewalk along Church St. Construction will include new ADA compliant curb ramps and new crosswalks.	No	Church St.	65898, 910997	66155, 911004	CS Needs Assessment	P1, P5, P9	X	X	X					No	$ 94,614	$87,613.95	$7000 (Chapter 90)	1	04/01/17
16	Buttermilk Rd, Middlefield Rd, & Rte 8 Intersection Reconstruction	Reconstruction of the intersection of Buttermilk Rd, Middlefield Rd, and Route 8 to reduce pedestrian crossing distance and intersection complexity.	No	Intersection of Buttermilk Rd, Middlefield Rd., & Rte. 8	67368, 910049		CS Needs Assessment	S6, S13, SO	X		X					No	$309,163	$294,163	$15000 (Chapter 90)	2	04/01/23
17	Fassell Rd & E. Washington Rd. Intersection reconstruction	Reconstruction of the intersection of Fassell and East Washington Rd. to reduce pedestrian crossing distance and intersection complexity.	No	Intersection of Fassell Rd. and East Washington Rd.	69309, 908847		CS Needs Assessment	S6, S13, SO	X		X					No	$121,912	$111,912	$10000 (Chapter 90)	2	04/01/23
18	Robinson Rd. Traffic Calming	Installation of a speed feedback "your speed" sign along Robinson Rd. southbound lane towards Hinsdale village.	No	Robinson Rd.	65449, 911321		CS Needs Assessment	S5, S17	X					X		No	$10,350	$10,350		1	04/01/20
19	Maple St. Bike Parking	Installation of bike racks at three public facilities along Maple St. (Hinsdale Library, Public Park, and Children's Playground). Bike Rack installation at the public park will also include installation of a bicycle repair station.	No	Maple St. (three Locations)	66379, 911017 66240, 910991 66476, 911091		CS Needs Assessment	B3, BO				X				No	15,525	$15,525		1	04/01/20

Project Details			EJ	Complete Streets Location			Project Origin and Type		Complete Streets Needs								Complete Streets Funding Request			Construction Schedule	
20	Old Mill Trailhead Bike Parking	Installation of a bike rack at trailhead of the Old Mill Trail.	No	Old Dalton Rd.	65864, 912115		CS Needs Assessment	B3				X				No	4,313	4,313		1	04/01/20
21	New Windsor Rd. Traffic Calming	Installation of a solar powered stop sign w/ beacon at the intersection of New Windsor Rd. with Rte. 143	No	New Windsor Rd. and Rte 143 Intersection	69976, 911802		CS Needs Assessment	S7, S17	X							No	6,613	6,613		1	04/01/20
22	Ashmere Rd. Traffic Calming	Installation of a solar powered stop sign w/ beacon at the intersection of Ashmere Rd. with Rte. 143	No	Ashmere Rd. and Rte 143 Intersection	69976, 911802		CS Needs Assessment	S7, S17	X							No	6,613	6,613		1	04/01/20