# COMPLETE STREETS NEEDS ASSESSMENT AND PRIORITIZATION PLAN

TOWN OF DALTON, MA
Summer 2016

PREPARED BY:
Berkshire Regional Planning Commission (BRPC)
& the Town of Dalton Traffic Commission

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# INTRODUCTION

The Town of Dalton 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 Dalton 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 Dalton 's Complete Streets Policy, adopted by the Board of Selectmen on May 23, 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.

As of 2016 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 Dalton with the opportunity to look at existing conditions, potential improvements, and implementation strategies that support Complete Streets in Dalton.

## MassDOT Complete Streets Funding Program

Technical assistance to the Town of Dalton 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 Dalton Traffic Commission 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.

### *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 Dalton, 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 Dalton developed this report with the support of their Complete Streets Committee, and technical assistance provided by the Berkshire Regional Planning Commission.

The Dalton Traffic Commission was designated as the town's Complete Streets Committee after the town adopted their Complete Streets Policy in 2016. The Traffic Commission is comprised of representatives from emergency services and public works, making it the most appropriate town committee to undertake the Complete Streets planning process. The members on the Committee at the time this report was developed were:

- Daniel D. Filiault, Chair
- Camillus B. Cachat, Jr.
- Gerald J. Cahalan, Jr. - Fire Chief
- Michael J. Cimini
- Jeffrey E. Coe – Police Chief
- Richard F. Kaley
- Adelard J. Nadeau
- William Drosehn

Other Town Staff that Participated in Meetings:

- John Roughley, Highway Department
- Kenneth Walto, Town Manager
- Lisa Peltier, Town Planner

[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 Dalton 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

# PLANNING FRAMEWORK

Implementing Dalton '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 Dalton 's Complete Streets Policy, the Town:

> *The Town of Dalton envisions a transportation system where users of all modes, users, and abilities can move safely and efficiently. The purpose of the Town's Complete Streets Policy, therefore, is to accommodate all users by creating a transportation network that meets the needs of individuals utilizing a variety of transportation modes. It is the intent of the Town to ensure the planning, design, operation, and maintenance of streets so they are safe for users of all ages and abilities and to provide a multi-modal transportation network. This Policy directs staff to consistently plan, design, construct, and maintain streets to accommodate a range of multi-modal transportation users including, but not limited to: pedestrians, cyclists, other non-motorists, transit users, motorists, emergency vehicles, and freight/commercial vehicles.*

## Goals and Objectives

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

1. **Safety** |Prioritize safety for all users of the transportation system.
2. **Livability** | Increase the livability of the town by improving the access to active mode facilities by residents and enhancing the Dalton village so it is walkable, bikeable, and can be used by all modes.
3. **Mobility** | Improve infrastructure and transit/specialized transit services to ensure those with limited mobility can move in and around Dalton.
4. **Traffic Calming** | Promote traffic calming measures in Dalton to encourage access for all modes, reduce speeds in activity hubs, and promote attractive streetscapes.
5. **Public Health** | Promote the health and wellbeing of residents and visitors of all ages across Dalton by providing active mode infrastructure that is safe and accessible.
6. **Context Sensitivity** | Develop a multimodal transportation system that is sensitive to the historic districts and rural/scenic character of Dalton.
7. **Economic Vitality** | Enhance urban area so it is walkable, bikeable, and can be used by all modes

## Performance Measures

### *Mode-Share Goal*

Out of a workforce of 3,170, the current commute mode-share of workers is heavily dominated by automobile travel (81% of commuters). The existing mode-share is described in **Table 1**. The Town would like to increase the number of residents who walk and/or bicycle more often for both utility trips and recreation, focusing on improving safety measures for both trip types.

The most achievable goal would be to encourage residents who drive short distances to for utility (work, school, shopping, etc.) and recreation within Dalton or into Pittsfield to shift to active modes. The Town would like to see an increase in the percent of residents utilizing active modes for safe travel within and around Dalton.

**Table 1: Dalton Mode-Share for Commuters**

| Mode | Number of Workers | Percent of Commuters |
|---|---|---|
| **Car, drove alone** | 3,170 | 81% |
| **Carpooled** | 295 | 9% |
| **Transit or Bus** | 0 | 0% |
| **Bicycle** | 0 | 0% |
| **Walk** | 100 | 3% |
| **Taxi or Motorcycle** | 40 | 1% |
| **Work from Home** | 160 | 5% |

*Source: 2006-2010 CTPP data*

In Dalton 's Complete Streets Policy, the town committed to measuring the following performance measures:

- Linear Feet of Pedestrian Accommodation
- Number of New Curb Ramps Installed
- Number of Crosswalk and Intersection Improvements
- Total Miles of Bike Lanes

During the development of their planning framework, the Dalton Traffic Commission developed system-wide performance measures for each of their seven goals (**Table 2**). The performance measures, listed by goal area are as follows:

**Table 2: Annual System Performance Measures**

| Goal | Performance Measure | Data Source |
|---|---|---|
| **Economic Vitality** | annual number of improvements in US Census designated urban area | Traffic Commission (see **Figure xx** for extent of urban area) |
| **Livability** | Number of residents within 1/4 mile of a dedicated active mode facility | MassGIS – Land Use (2005)[3] |
| **Safety** | Total crashes by severity and mode | MassDOT HSIP Crash Clusters[4] |

[3] http://www.mass.gov/anf/research-and-tech/it-serv-and-support/application-serv/office-of-geographic-information-massgis/datalayers/lus2005.html

| | | |
|---|---|---|
| **Context Sensitivity** | Annual number of projects in historic districts, in rural areas, and/or adjacent to open space areas | Town of Dalton |
| **Public Health** | Annual heart attack hospitalizations | Mass. Dept. of Public Health – Bureau of Environmental Health – Egremont Community Profile[5] |
| **Traffic Calming** | Annual number of citations for speeding | Dalton Police Department |
| **Mobility** | Number of new ADA compliant curb ramps, linear feet of ADA compliant sidewalk or pathway | Traffic Commission, Highway Dept. |

## Related Plans

The Town of Dalton has undertaken several planning initiatives to diversify and facilitate economic development in a controlled way that respects the town's historic fabric, rural character and abundant natural resources. Most recently the town worked with the Berkshire Regional Planning Commission in 2016 to develop and adopt the *Dalton Master Plan*, an effort that revealed that residents highly value the small town atmosphere, people and sense of community that exists in the town. The plan states that town residents expect a system of well-maintained roads, yet the town faces a challenge of maintaining the roads while minimizing the impact on taxpayers. During the public process residents stated their desire for a variety of transportation alternatives within town, with improving walking conditions and bicycling options through the town as major transportation objectives. In addition, creating walking loops and bicycle routes were cited as objectives in both the transportation and the open space sections of the plan.

Two narrowly focused transportation studies were conducted in areas where vehicular and pedestrian safety are of concern: *Dalton, MA Main Street (Rts 8/9) Traffic Analysis Between Glennon Ave. & Maple Street and the Road Safety Evaluation for Dalton Division Road, Williams Street and Washington Mountain Road Intersection* technical memorandum. These studies are discussed in more detail later in this report.

[4] http://geo.massdot.opendata.arcgis.com/datasets/cc323741010d4b17b71ca664e2050457_1

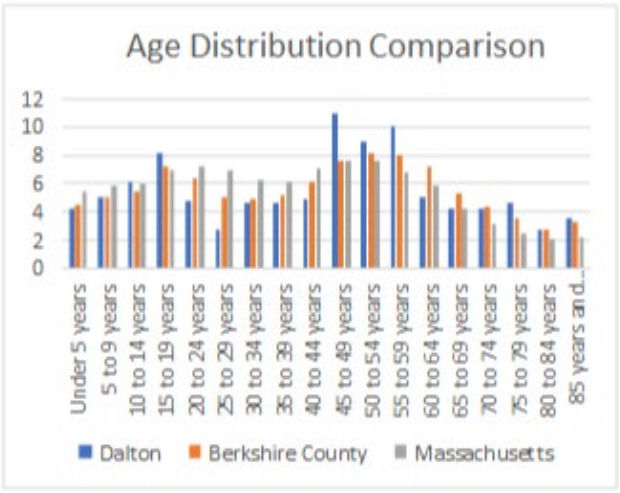
[5] https://matracking.ehs.state.ma.us/?utm_source=Outreach&utm_medium=behlandingpage&utm_campaign=community-profiles

# EXISTING CONDITIONS

## Sociodemographic Profile

Dalton is a town in the Berkshires with a relatively large year-round population of 6,744 residents, making it the 6th most populated town in the Berkshires. However, like many towns in Berkshire County the population since 1990 has decreased and is projects to continue to decrease for the next two decades. The population is predominantly white (96.9%) and is generally aging (see **Figure 2**). The median age of the population in 2013 was 46.9 years, up from 40.1 in 2000[6]. By 2030 the percentage of the population that is over 50 years of age will be 40-50%[7]. The aging of the population will be important to consider when planning to meet the needs for walkability, accessibility, and safety.

**Figure 2: Age Distribution Comparison**




Median household income in Dalton was $49,597, which was higher than the neighboring city of Pittsfield but lower than the other surrounding towns of Cheshire, Hinsdale, Lanesborough, Washington and Windsor. Median household income has gone up by just over $1,700 between 2000 and 2013, but after adjusting for inflation, there has been a decrease in median household income of over $15,000[8].

The average income of a Dalton resident is just over $50,000, which is higher than the average income of residents in surrounding communities. While manufacturing has historically been the predominant employer in the town, manufacturing jobs declined by 46.3% between 2000-2013, with resident occupations becoming more diverse. Dalton's unemployment rate in 2014 was 5.6%, lower than the county average. However, poverty within Dalton has increased from 1.2% of families in 2000 to 9.1% of families in 2013. Children in poverty have seen a dramatic increase, rising from 1.5% in 2000 to 19.5% in 2013[9].

Major employers in Dalton include Crane & Co. mills and associated facilities, the three regional schools, and in the various businesses located within the town. Residents living within the densely developed neighborhoods in the town center are within one to two miles of many of these sites. The majority of residents in Dalton commute to work in Pittsfield, home of many major employers in the region. Dalton Town Hall on Main Street is approximately 2-2.5 miles from the retail stores and businesses located in the Coltsville area of Pittsfield and is approximately 5.25 miles from the downtown business center of Pittsfield. While these distances are not severe, they are longer than residents would typically travel to work by walking. These distances are very reasonable for bicycling but the lack of bicycle lanes, and in some areas even the lack of a shoulder, deters many from commuting by bike. The Berkshire Regional Transit Authority (BRTA)

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[6], [8], [9] Dalton Master Plan Steering Committee (DMPSC) and BRPC, 2016. *Master Plan, Town of Dalton, Massachusetts*, Pittsfield MA.

[7] BRPC, 2015. *Berkshire County Age Friendly Survey Results*, Pittsfield, MA.

oversees bus service to the town, with a single route winding through the town center that connects residents westward to the Intermodal Center in downtown Pittsfield and eastward to downtown Hinsdale. Residents in the Greenridge neighborhood are served by another route that loops through the Coltsville area and the Intermodal Center.

## Climate

There are about 185 sunny days per year, and about 128 precipitation days per year, 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. With 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.

## Land Use Characteristics

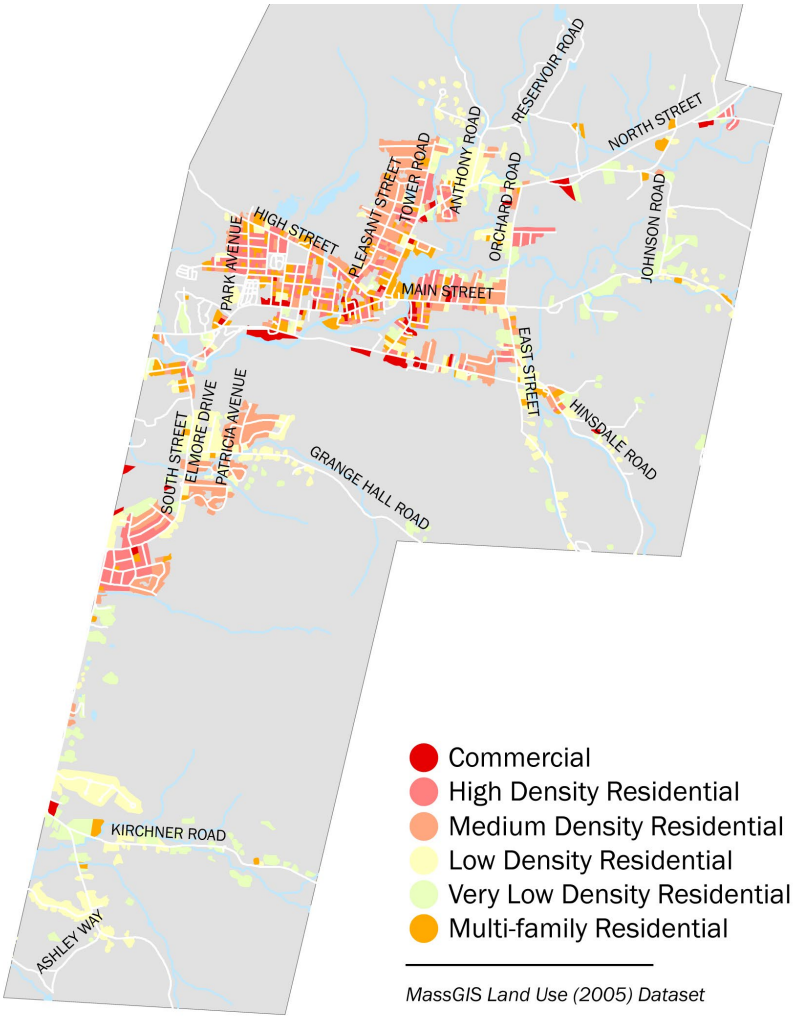
Dalton's landscape is largely undeveloped, with 76% of the town in forest cover, with a densely developed town center that developed around the mills that were located on the Housatonic River. Subdivision neighborhoods were built in the 1950-60s off of roads that radiated out of the town center, and a combination of scattered single family homes and a few subdivisions continued from the 1970s through the present. The relatively dense and concentrated development pattern of the town lends itself well to pedestrian connectivity between neighborhoods, parks and public facilities. Dense residentially developed neighborhoods are clustered in two major urbanized areas (see **Figure 1**):

1. The downtown area within the perimeters of Park Avenue to the west, Main Street/Housatonic Street to the south and west, and Pleasant Street and Tower Road to the north; these neighborhoods reflect the development of 19th and early 20th century housing for residents working in the mills and other industries, and more recently for commuters traveling outside the town for work.

2. Residential neighborhoods off South Street. These include the Greenridge section on lower South Street, a subdivision area developed in the 1950-60s, the subdivisions off of Grange Hall Road built in the late 1960s – 1970s, and the subdivisions off middle South Street developed in the 1980s-1990s.

Scattered lower density homes are located along arterial/connector roads such as upper South Street, Kirchner Road, Grange Hall Road, East Main Street, Anthony Road, Orchard Road and Johnson Road.

**Figure 1: Neighborhood Density in Dalton**



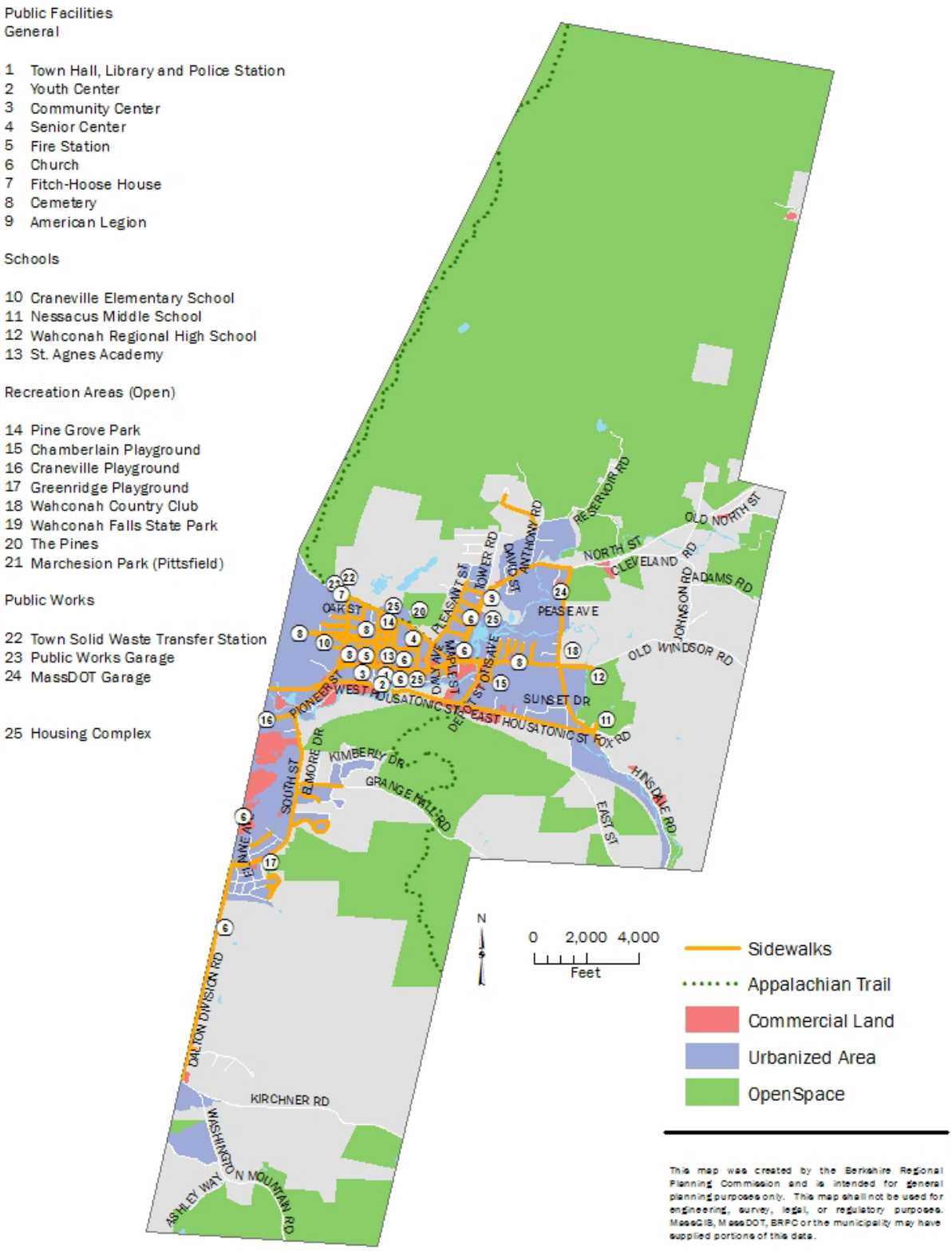

## Activity Centers and Town Features

As shown in **Figure 3**, many of the town's public facilities and private social entities (churches, community gathering sites), restaurants, banks and stores are clustered in the town center or outlying urban areas, with the exception of Berkshire Organics, which is located outside the urbanized area on the corner of Dalton Division Road and Kirchner Road. These facilities developed in the area around the major paper mills located in the downtown region. Sidewalks connect almost all of these areas within the town center, allowing people to walk from their homes to the destinations. The majority of the denser residential neighborhoods between Main and High Street are within a 1/2-mile or less to central Main Street where many destinations are located. Residential areas along eastern Main and North Streets are .5 to 1.5 miles away from central Main Street.

Nessacus Regional Middle School and Wahconah Regional High School are two activity centers that are notably located outside of the town center and census urbanized area. Sidewalks connect these schools to residential neighborhoods to the east, but there are no bike lanes or other bicycle accommodations to encourage bicycle travel. Public parks and athletic fields, both those in the town center and outside it, are also connected by sidewalks but lack dedicated bicycle accommodations.

Large public outdoor recreational lands can be accessed by most residents within a mile of their homes, although access points and trailheads are not always convenient. The town recently acquired The Pines recreational area located in the High Street/Pleasant Street area; the town is interested in creating an improved system of trails on this site. The Appalachian Trail, which travels through the center of town, is a popular long distance trail that connects residents to the large public recreational lands to the north and south of the town. Although route directions are available to hikers, the route itself is not well marked as it weaves its way along Depot Street, Main Street, and High Street.

**Figure 2: Map of Dalton Urban Area + Activity Centers**



## Road Network and Jurisdiction

According to the Dalton Master Plan there are 50 miles of roads in Dalton, with the town maintaining 39.9 miles of roads, or 76.7% of the total (See **Table 3**). The two major regional arterial roadways that serve both commercial, residential and commuter travel needs are Route 8 and Route 9, both of which are maintained by the MassDOT. Routes 8 and 9 run together along Main Street, on which town hall, the library, the Dalton Community Recreation Association and many businesses are located. South Street, East and West Housatonic Street, Dalton Division Road, Grange Hall Road, Park Street, High Street, Glennon Avenue, Depot Street and Orchard Road are the collectors throughout town.

Transportation infrastructure maintenance needs were cited in the Master Plan as a major town expense. Overall, the roads in Dalton are considered to be in fair condition, however there are areas that have issues identified that range from surface defects to stormwater runoff issues. The town does not have a long term plan for road repair and renovation, and instead plans for a cluster of roads for the following year. An action item to remedy this calls for the development of a multi-year spending plan to take full advantage of yearly Chapter 90 funding and to integrate the Complete Streets effort with larger capital improvement planning.

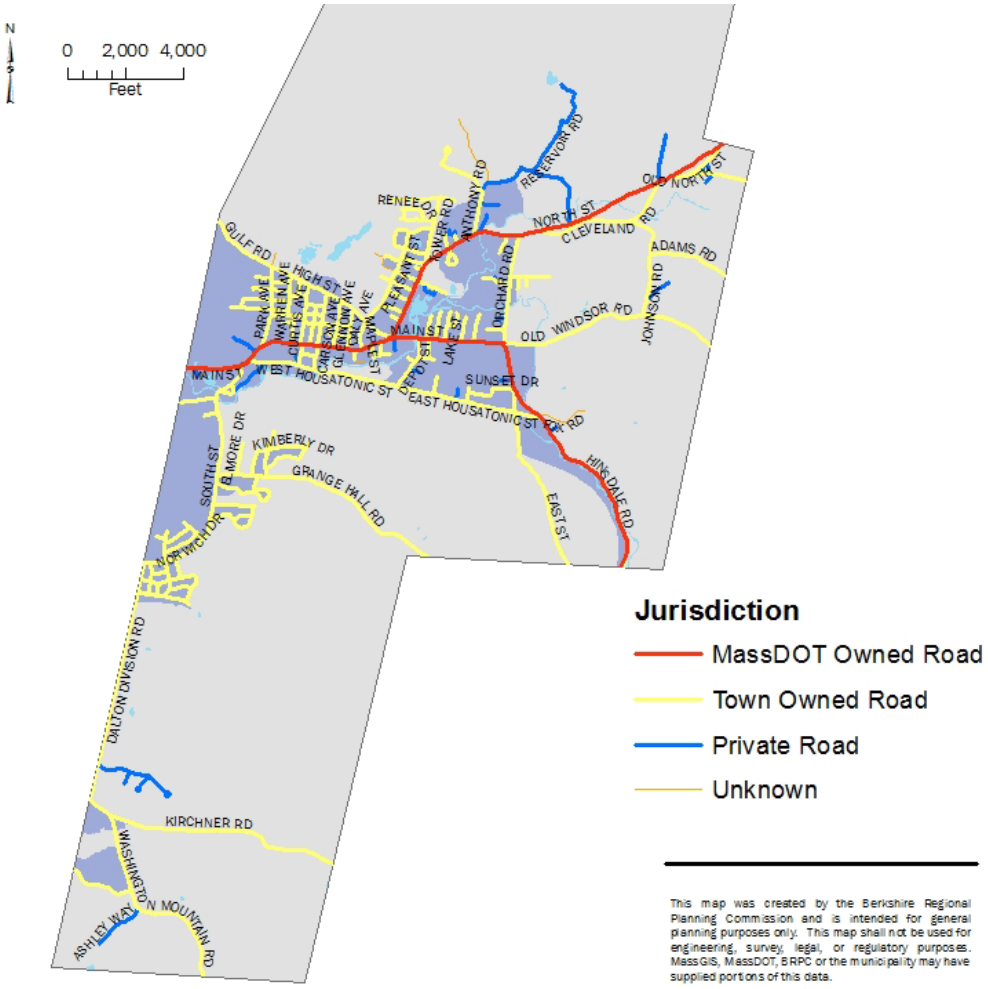
In 2016, the town plans to resurface the roads between North Street and Pleasant Street as well as see the long awaited reconstruction of Housatonic Street. In 2018, the town will likely convert Johnson Road from a dirt road to a paved road and extend sewer service to the houses on the road, which are currently on individual septic systems. The roads in the area of Frederick Drive are also in poor condition and will need to be improved, however these are relatively newer subdivision roads which were poorly built and may need more work than just resurfacing. In addition, the Dalton portion of Washington Mountain Road needs repairs.

**Table 3: Road Maintenance Demand by Entity[10]**

| Road Maintenance Demand by Entity | | |
|---|---|---|
| **Maintained by** | **Road Miles** | **% of Total** |
| State (MassDOT) | 6.6 | 12.7% |
| Town of Dalton | 39.9 | 76.7% |
| Privately Maintained | 4.2 | 8.1% |
| Unknown | 1.3 | 2.6% |
| Total | **50.0** | **100%** |

[10] Dalton Master Plan Steering Committee (DMPSC) and BRPC, 2016. *Master Plan, Town of Dalton, Massachusetts*, Pittsfield MA. Data in this table is from the MassDOT Road Inventory File and was reviewed by the Town of Dalton Highway Dept. for accuracy.

**Figure XX: Map of Roads by Jurisdiction**




## Speed Limits

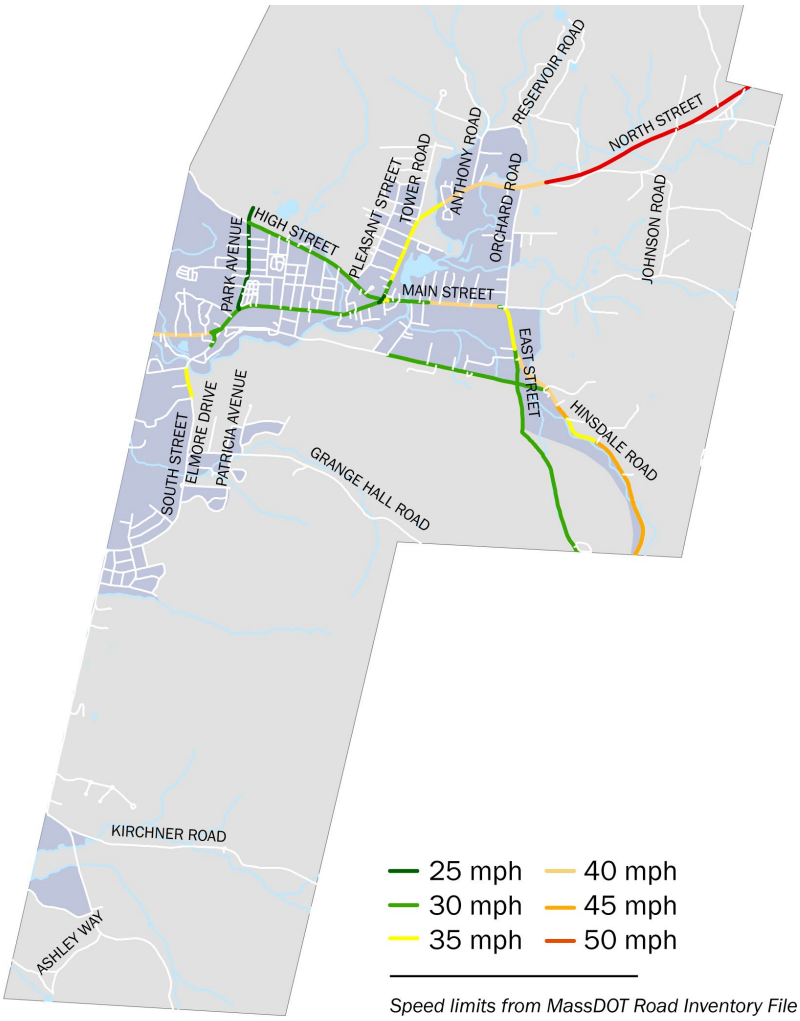
Speed limits, when combined with road configuration and surrounding land use, should be considered when planning potential bike lane facilities. For roads with speeds greater than 35 mph safety measures such as separated bike lanes or cycle tracks are preferable, which brings with them greater design considerations and wider footprints. The main thoroughfares throughout Dalton have posted speed limits, but the rest of town roads are not posted. A travel speed study conducted as part of a 2003 corridor study of Main Street that the average traffic speed was 28 mph, slightly below the 30 mph posted speed. Refer to **Figure XX** to view posted speed locations.

In the absence of posted speed limits, Massachusetts General Laws Chapter 90, Section 17 dictates statutory limits based on land use and road type. The statutory speed limits are:

- 20 mph in a school zone;
- 30 mph in a thickly settled or business district for a distance of 1/8 of a mile;
- 40 mph on an undivided highway outside of a thickly settled or business district for a distance of 1/4 of a mile; and
- 50 mph on a divided highway outside of a thickly settled or business district for a distance of 1/4 of a mile.

According to MassDOT's *Procedures for Speed Zoning on State and Municipal Roadways*, the definition for a thickly settled or business district is "the territory contiguous to any way which is built up with structures devoted to business, or the territory contiguous to any way where dwelling houses are situated at such distances as will average less than two hundred feet between them for a distance of a quarter of a mile or over."**Figure XX:**

**Map of Posted Speed Limits**



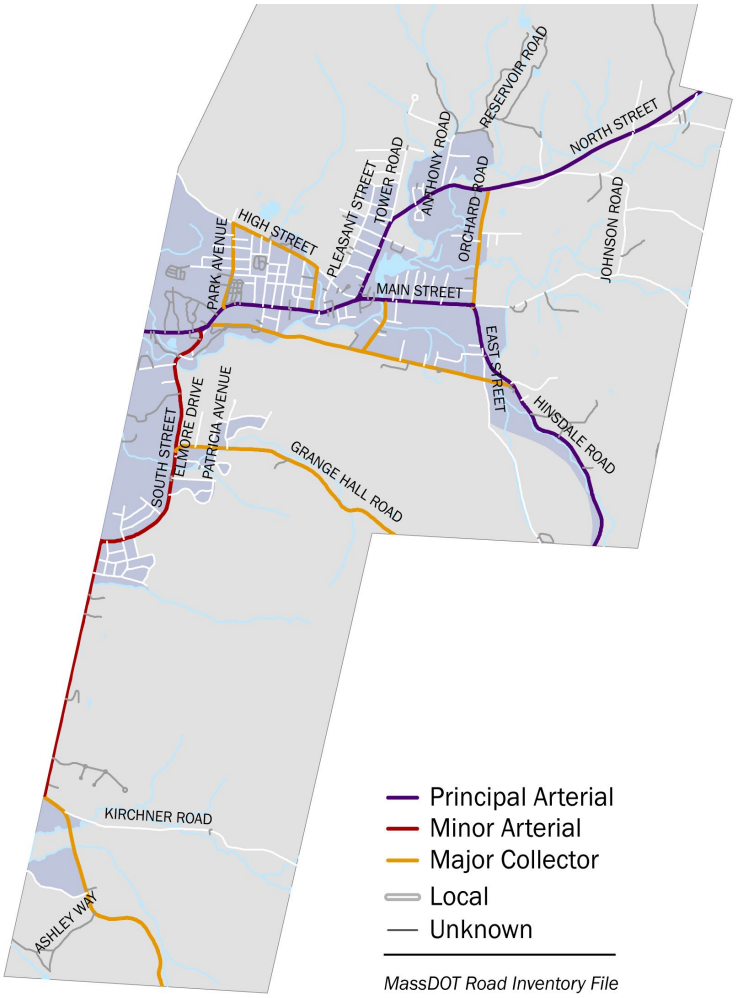

## Functional Classification and Traffic Volumes

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 XX**).

**Table XX: Functional Classification Descriptions**[11]

| 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. |

**Figure XX: Functional Classification**




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

As seen in the table below, Main Street is the most heavily traveled street in the town, serving as both a regional principal arterial route and a town business center. The most recent traffic count on Main Street, taken in the vicinity of River Road and Daly Avenue, was 11,700 average daily trips (ADT) in 2014. South Street, a local collector connecting Pittsfield to Dalton, Hinsdale, Peru and Windsor, has the second highest volume averaging between 6,500 and 8,900+ depending on the year and the location of the traffic counter. North Street (Rt. 9) and Hinsdale Road (Rt. 8) are regional arterials and East Housatonic is a local collector for that serves local and regional travelers.

**Table 4: Traffic Counts**

| Street | Location | Year | Source | ADT |
|---|---|---|---|---|
| Bradley Greylock St. | N of Center St. | 2005 | BRPC | 1,081 |
| Curtis Ave. | S of High St. | 2002 | BRPC | 616 |
| E. Housatonic St. | W of Rte. 8 | 2005 | BRPC | 3,328 |
| High St. | E of Curtis Ave. | 2005 | MassDOT | 1,800 |
| Hinsdale Rd. | N of Hinsdale T.L. | 2003 | BRPC | 4,256 |
| Main St. | E of South St. | 2006 | BRPC | 13,900 |
| Main St. / Rt. 8 | S of Main St. | 2007 | MassDOT | 3,800 |
| Main St. | Between Daly Ave & River St. | 2014 | BRPC | 11,700 |
| North St. | @ Windsor T.L. | 2015 | BRPC | 4,150 |
| Old Windsor Rd. | Near Wahconah H.S. | 2005 | BRPC | 1,538 |
| Orchard Rd. | Off Main Street near bridge | 2000 | MassDOT | 1,437 |
| Park Ave. | S of High St. | 2005 | MassDOT | 2,000 |
| South St. | N of Greenridge Plaza | 2000 | MassDOT | 8,925 |
| South St. | S of Main St. | 2007 | MassDOT | 6,500 |
| Washington Mtn. Rd. | W. of Kirchner Rd. | 2005 | BRPC | 969 |

*Source: BRPC 2016.*

## Road Surface Type

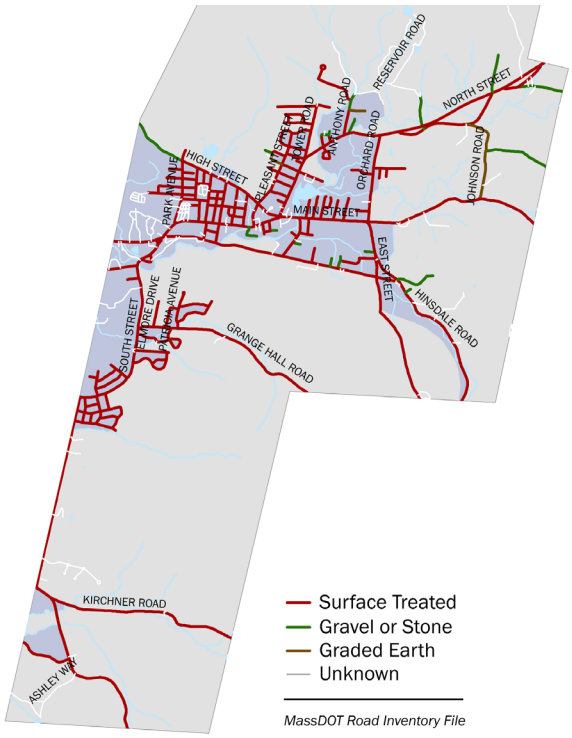
Road surface type has potential implications for Complete Streets improvements, specifically for pedestrian and bicycling facilities. Generally, unpaved (dirt or gravel) roadways are considered exempt from many potential improvements. Unpaved roadways cannot be striped, and thus rely solely on warning 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. The road surface types in Dalton can be seen in **Figure XX**.

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."[12] 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 bicycles limit their use on unpaved roadways.

The vast majority of roads in the town, 86% are paved, with most of the remaining roads gravel or stone. In 2018, the town will likely convert Johnson Road from a dirt road to a paved road and extend sewer service to the houses on the road.

**Figure XX: Road Surface Type**

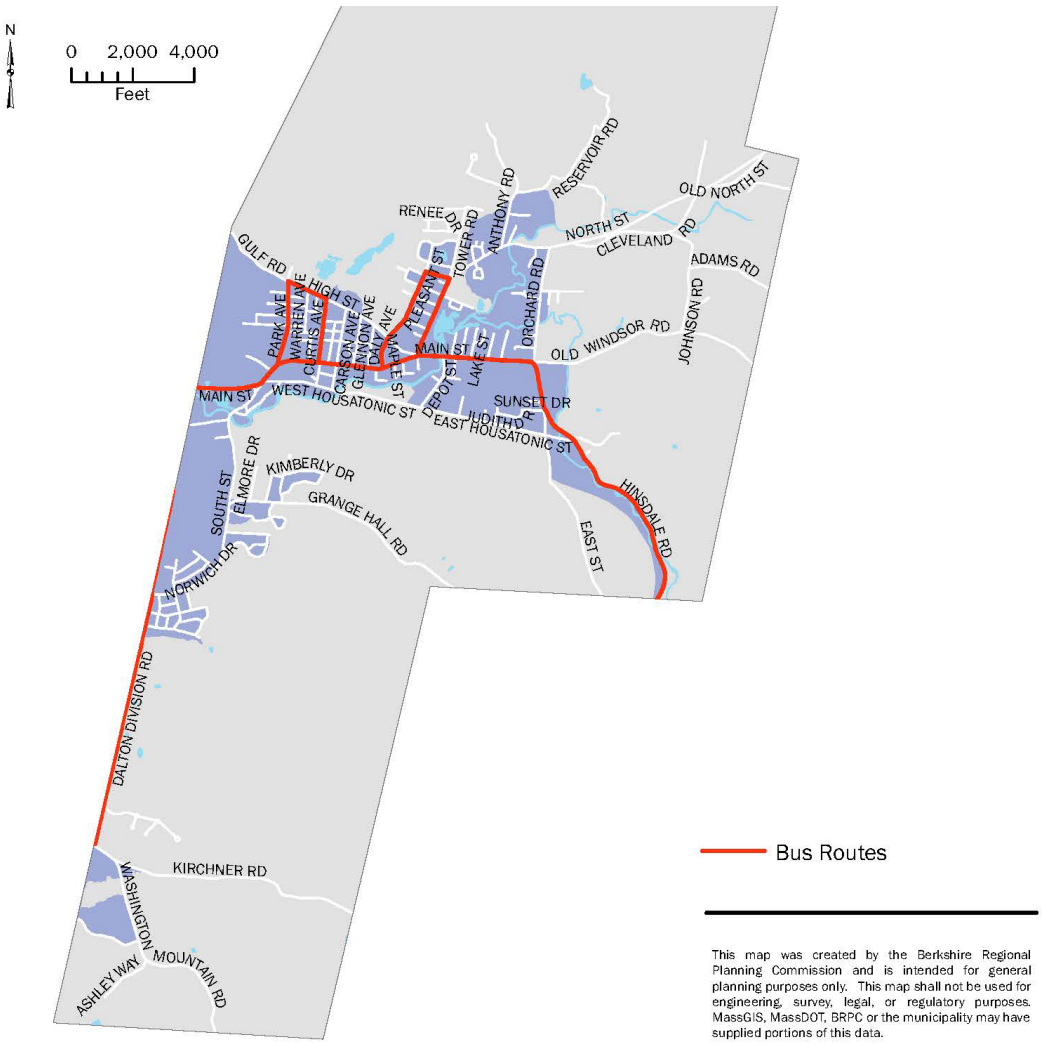



## Public Transit - BRTA Bus Route

The Berkshire Regional Transit Authority (BRTA) oversees bus service to the town, with a single route winding through the town center that connects residents westward to the Intermodal Center in downtown Pittsfield and eastward to Hinsdale. This route loops through much of the residential area north of Route 8, passing along Pleasant Ave, Curtis Ave, High St, and Park Ave. Residents in the Greenridge neighborhood are served by another route that loops through the Coltsville area and the Intermodal Center. There are no formal stops along these routes. According to the BRTA website "Persons wishing to board the bus must "wave" to the bus operator. Buses will stop to pickup or discharge passengers wherever it is safe to do so, at the nearest street corner preferably." There are no existing transit shelters in the community.

[12] 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 5: BRTA Bus Routes**




## Pedestrian Conditions

### *Sidewalks*

Most of the urbanized area of Dalton is served by existing sidewalk. Major exceptions to this include Orchard Road, Dalton Division Road and Hinsdale Road (Rt 8) southeast of the Housatonic Street intersection. Many existing sidewalks in the urban area are aging. These segments pose hazards to mobility challenged user such as seniors, families with children and the disabled. Some walkers and joggers travel in the road to avoid the uneven surface conditions. The town tries to rebuild sidewalks when they rebuild streets, but there is not always funding for this.

### *Sidewalk Assessment*

Deteriorating sidewalks are found throughout the town and can impact pedestrian activity where deterioration is severe. Most of the sidewalks in the town's inventory are made of concrete tiles; while this material is generally long lasting, the tiles can become skewed and uneven from shifting subsoils or expanding

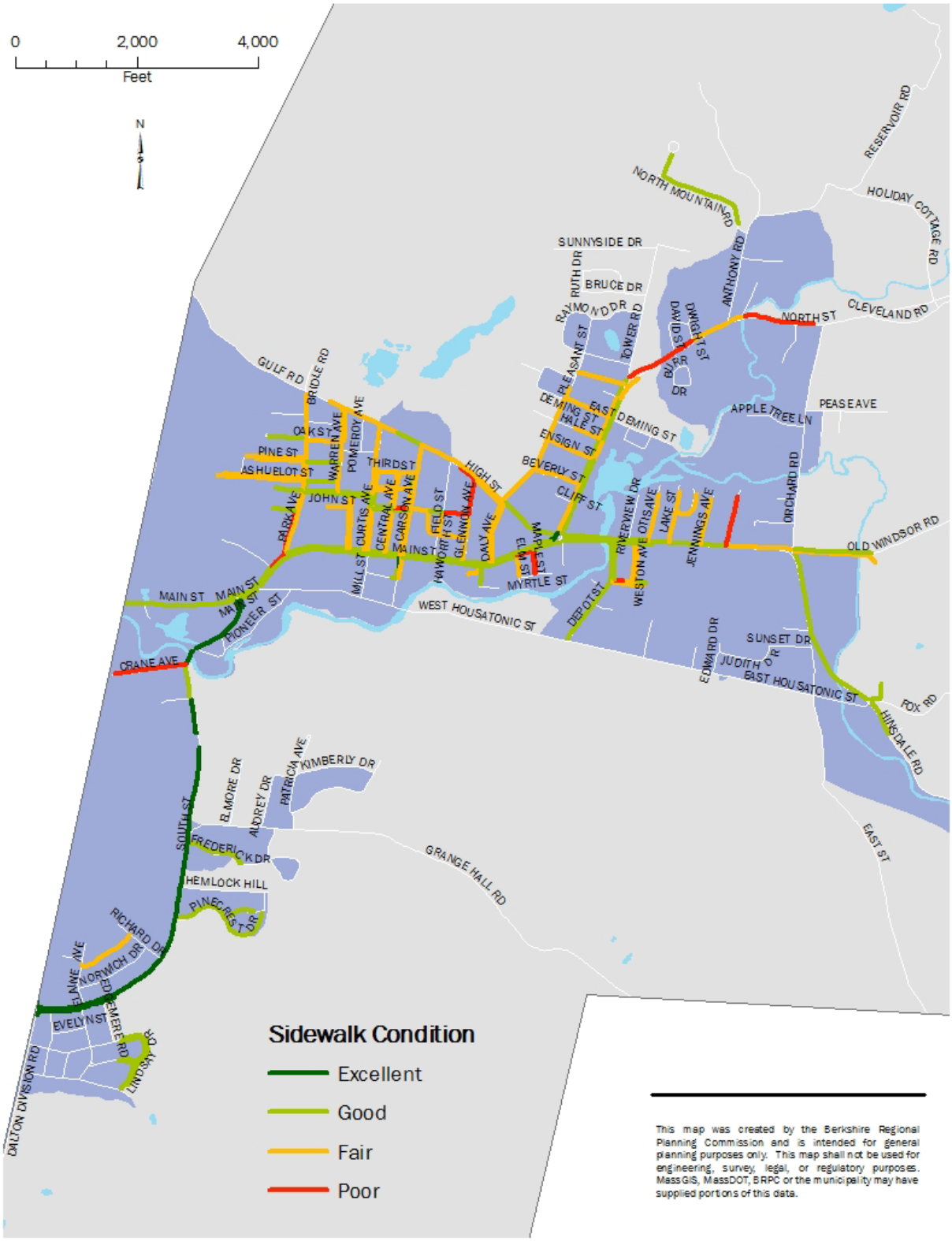
tree roots. Severely uneven sidewalk tiles can create dangerous conditions to anyone, but are especially dangerous and possibly unnavigable for people in wheelchairs or scooters, seniors and others with reduced mobility, and for those pushing baby carriages. Severely uneven sidewalks entice or force some pedestrians to avoid the sidewalk and walk in the road, and in some cases may deter them from walking in their neighborhoods.

The condition of the sidewalks was assessed during August and September 2016. The sidewalks were evaluated for the surface type, condition, width, presence of a buffer, curbs, ramps, and obstructions. The condition evaluation looked at how easy it would be for a person with mobility limitations (such as in a wheel chair) to traverse the segment. Surface condition was evaluated on a scale of Excellent (no cracks, lifts or overgrowth), Good (minor cracking, lifting or overgrowth but would not significantly impair movement), Fair (significant cracks, lifts or overgrowth that would impede movement, but not prevent movement) and Poor (extremely difficult to traverse for those with mobility limitations).

The sidewalks were evaluated over the entirety of the street segment (between two intersections) and was not broken down into smaller segments when condition changed. The condition is based on the average for the entire segment. Overall, 20.62 miles of sidewalks were assessed in town. Of these, 1.8 miles were considered in excellent condition, 8.33 were in good condition, 8.95 were in fair condition and 1.54 were in poor condition. **Figure 4** illustrates the types of ratings used and **Figure 5** shows the condition of all existing sidewalks in Dalton.

**Figure 3: Dalton Sidewalk Condition Reference Images**


**Figure 4: Dalton Sidewalk Condition**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DWIGHT ST
BURR DR
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DEMING ST
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PEASE AVE
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CLIFF ST
HIGH ST
GULF RD
BRIDLE RD
OAK ST
PINE ST
ASHUELOT ST
WARREN AVE
POMEROY AVE
THIRD ST
JOHN ST
PARK AVE
CURTIS AVE
CENTRAL AVE
CARSON AVE
FIELD ST
IVAWORTH ST
GLENNON AVE
DALY AVE
MAPLE ST
MILL ST
MAIN ST
MYRTLE ST
RIVERVIEW DR
WESTON AVE
OTIS AVE
LAKE ST
JENNINGS AVE
ORCHARD RD
OLD WINDSOR RD
DEPOT ST
WEST HOUSATONIC ST
PIONEER ST
CRANE AVE
EDWARD DR
JUDITH DR
SUNSET DR
EAST HOUSATONIC ST
FOX RD
HINSDALE RD
EAST ST
KIMBERLY DR
PATRICIA AVE
AUDREY DR
ELMORE DR
SOUTH ST
FREDERICK DR
HEMLOCK HILL
PINECREST DR
GRANGE HALL RD
RICHARD DR
NORWICH DR
LANE AVE
EDMERE RD
EVELYN ST
LINDSAY DR
DALTON DIVISION RD
Sidewalk Condition
Excellent
Good
Fair
Poor
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.

### *Crossings*

An area of high concern is pedestrian access and safety in crossing the Main Street corridor (Rtes 8 & 9) in the vicinity of River Street and Daly Avenue intersections. A traffic analysis of the corridor between Glennon Avenue and Maple Street conducted in September 2015 offered both short-term and long-term recommendations to improve traffic flow and pedestrian safety in this area. Favored recommendations included improving the visibility of existing pedestrian crosswalks through additional and higher visibility pedestrian crossing signs (including lighted or flashing light signs), pedestrian-activated if possible. Other improvements included improved roadway markings and traffic calming measures at the site[14].

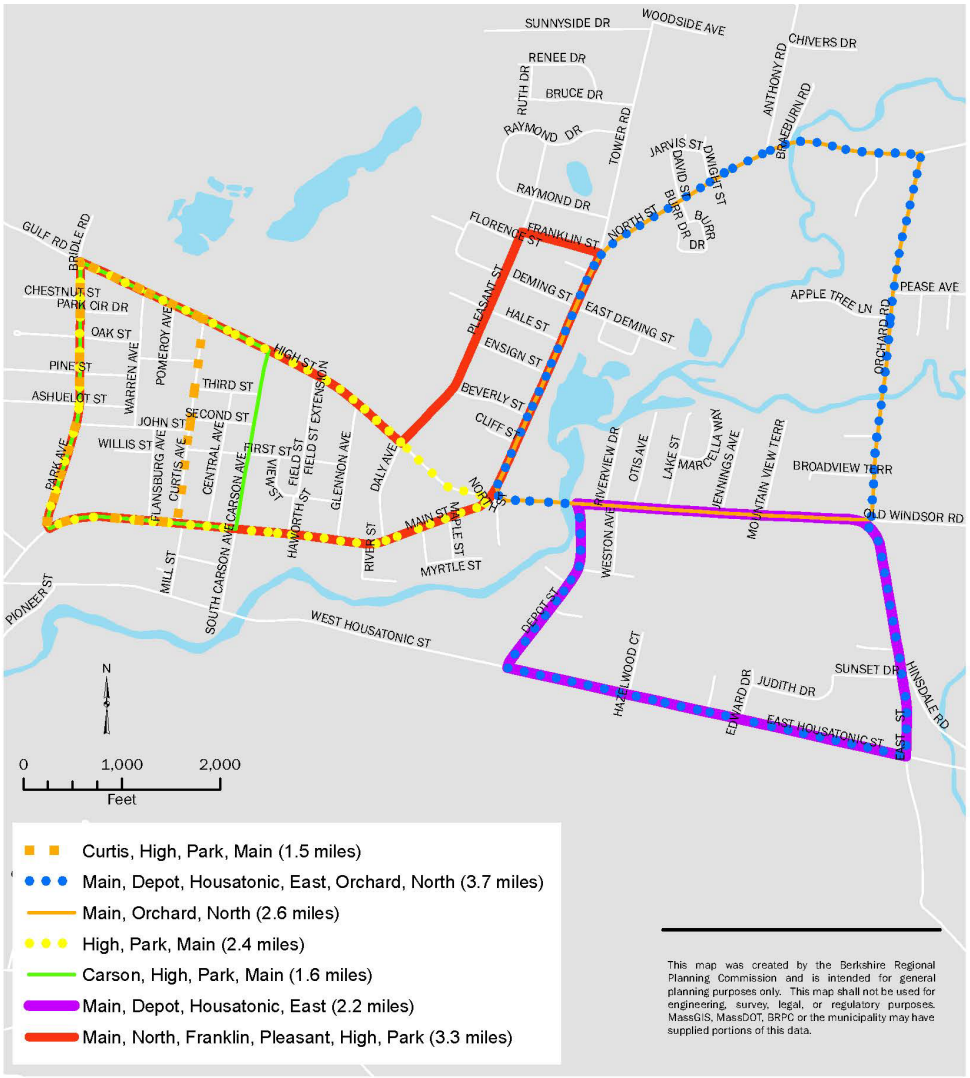
In October 2015, MassDOT District 1 responded that they are willing to issue a permit to the Town of Dalton to install some type of active pedestrian warning beacon on Main Street near River Road (MassDOT, 2015). Although the road is owned and maintained by the state, the cost of the warning beacon would be borne by the town.

### *Popular Walking Routes*

Dalton's existing sidewalk network in the downtown area includes several informal walking routes or "loops" that were identified by the Traffic Commission as being popular with residents. The distances of these loops varies from 1.5 to 5 miles in length. Popular routes can be seen in **Figure XX**.

[14] Berkshire Regional Planning Commission. 2015. *Dalton, MA Main Street (Rte 8/9) Traffic Analysis Between Glennon Ave. & Maple Street Study.* Pittsfield, MA.

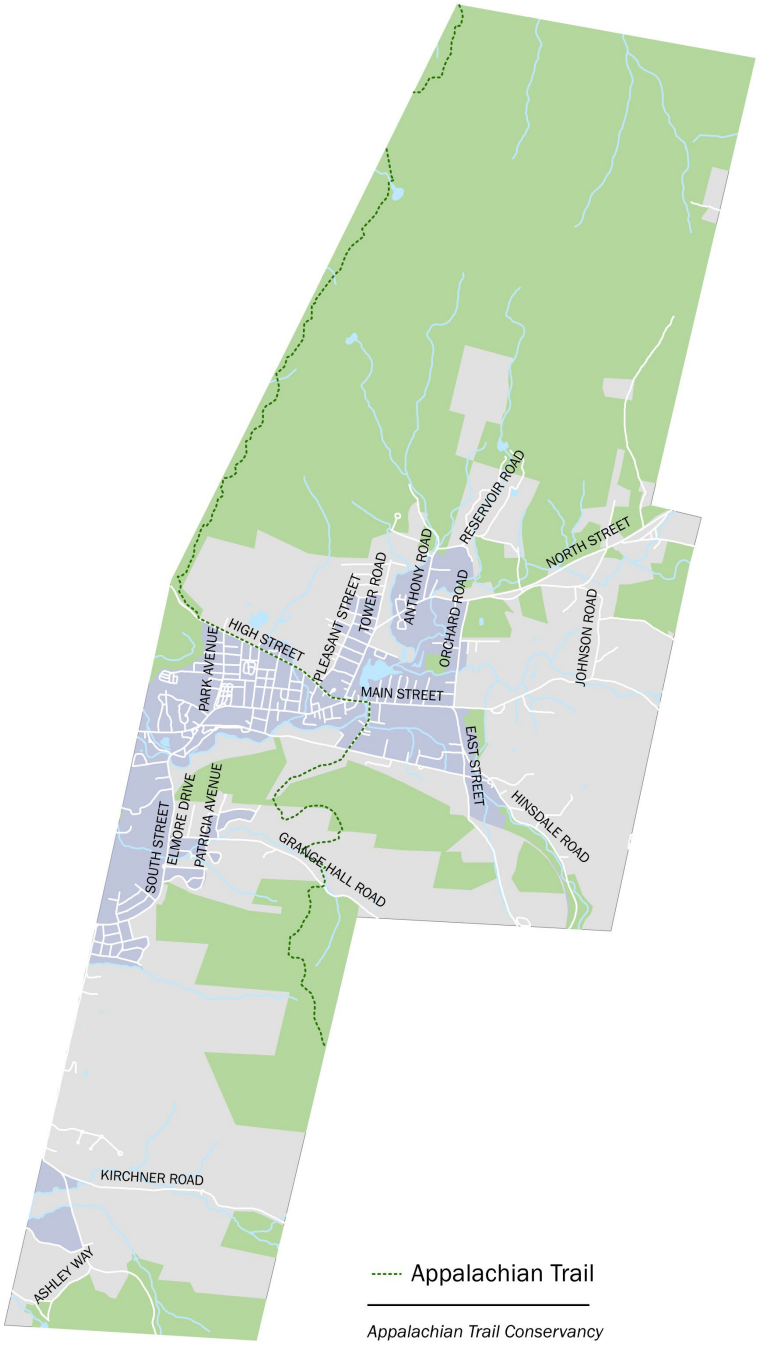
**Figure XX: Map of Popular Walking Routes**




## *Long-Distance Pedestrian Travel*

The Appalachian Trail is the longest hiking-only footpath in the world. The trail is used by day, section, and thru-hikers as it passes through the Town of Dalton. From north to south, the Appalachian Trail runs along High St. to Main St. to Depot. St and finally West Housatonic St. as it passes through the center of Dalton. The trail also crosses Grange Hall Rd further south of the center of town. Existing signage and kiosks mark the trail as it moves north and south of the town. Moreover, utility poles throughout town are marked with the white blaze symbol or circular plastic "AT" medallion that designates the Appalachian Trail. For additional discussion see **Signage / Wayfinding**.

**Figure XX: Map of Appalachian Trail**




## On-Road Bicycle Conditions

On-road bicycle road accommodations (bike lanes, marked shoulders, signage) provide residents with an alternate mode of transportation for commuting to work or school, running errands and cycling to improve their overall health. While experienced cyclists will travel on roads with limited or no accommodations for bicycling, these conditions hinder most residents from trying to travel by bike. While constructing bike lanes or wider shoulders throughout the town is not feasible, nor in some cases desirable or necessary, it is important to identify routes that would provide beneficial connections to

work and school, and popular destinations such as public facilities and businesses. Creating connections to on-road bicycle lanes and shoulders in neighboring communities should also be considered.

There are currently no streets in the town with on-road markings designating bike lanes. The roads with existing shoulder widths and conditions that could possibly serve as dedicated bicycle travel lanes are Main Street to Pittsfield via Route 8/9, South Street to Pittsfield via South Street, Route 9/North Street to Windsor and Route 8/Hinsdale Road to Hinsdale.

Although there is no data on bicycle travel, members of the Complete Streets Committee noted that South Street, North Street/Route 9, Dalton Division Road and Grange Hall Road are used by recreational bicyclists. Local bicyclists are known to ride a loop that consists of Main Street, North Street, Orchard Road and back to Main.

### *Western New England Greenway /U.S. Bike Route 7*

The Western New England Greenway and U.S. Bike Route 7 "is a multi-segment, multi-state bike route that links New York City and Montreal…[and] largely follows near U.S. Route 7 through the very western portions of Connecticut, Massachusetts, and Vermont. It links with the East Coast Greenway at the Merritt Parkway near Norwalk, CT. at the Southern terminus, and with Quebec's Route Verte at the Northern terminus (Canadian border) [16]". In Dalton, this bike route travels along Dalton Division Rd.

### *Shared Lane Markings*

There are no shared lane markings in the town of Dalton.

## Off-Road Bicycle Conditions

Off-road cyclists and mountain bikers primarily use a natural area known as the Boulders and is located between Route 8 / Cheshire Rd. in Pittsfield and south east of Gulf Rd. in Dalton. The property is owned and maintained by Berkshire Natural Resources Council[17] (BNRC) and has many trails used by bikers and hikers alike.

Additionally, the Master Plan stated the desire to improve bicycling options throughout the town, including establishing trails within the town and connecting to neighboring communities. The plan specifically calls for the creation of an accessible bicycle/pedestrian trail in the vicinity of Gulf Road and the Boulders, with the ultimate goal of connecting to the Ashuwillticook Rail Trail in Lanesborough and the Berkshire Crossing Shopping Center in Pittsfield. Connecting to the rail trail would also provide direct connection to the Berkshire Mall in Lanesborough.

## Signage/Wayfinding

There are currently no wayfinding signage programs in Dalton to encourage alternate modes of transportation. As noted previously there are existing walking loops that are popular with residents, and as sidewalks are updated it may be worth considering establishing formal walking loops with signs marking distances to encourage use.

The Town of Dalton is considering taking steps to become an Appalachian Trail Community, a program that recognized communities along the AT that promote and protect the trail as a cultural asset. Designation into the program serves to benefit both the community and those who hike the Trail. Dalton's location on the AT is well positioned in within a string of Berkshire County communities, being approximately 20 miles north of downtown Lee and 23 miles south of Route 2 near the North Adams/Williamstown borders. Amenities and services that Dalton offers are lodging, restaurants, banks, post office and a laundry mat. Bus

[16] http://wnegreenway.org/
[17] http://www.bnrc.org/trails-and-maps/boulders/

service is available to deliver hikers to specialized needs in Pittsfield or beyond such as hiking supplies or other services.

As part of its effort to become an AT Community, the town is interested in creating a wayfinding sign program to help direct hikers to the services and businesses they need in town. There are currently kiosks located at the north and south trailheads in the town, but these could be updated to provide more detailed information. The greatest need to guide hikers through the town is better direction at the Main Street/North Street/old High Street intersection. The AT entrance to High Street is through a grassy section where High Street dead ends. Traveling from the south it is not readily clear how to access High Street. Installing a kiosk at this site – one that is easily seen from Main Street from the south -- may help to clarify the route in this area. A kiosk in this area, so close to the downtown business area, would be perfectly located to direct hikers to the services they need.

## Bicycle Parking

Installing bicycle racks or other means of securing or storing bikes can encourage people to bicycle to specific destinations for work, recreation or to run errands. For example, providing racks at schools offer the opportunity for not only children to bike to school but also school staff; providing them at recreational sites such as parks, athletic fields or the Dalton Community Recreation Association (CRA) allows users to get a little more exercise on the way to a game or a workout. There are currently only four sites in the town that offer bicycle racks:

- Craneville Elementary School
- Nessacus Regional Middle School
- Wahconah Regional High School
- Dalton Youth Center

## Safety

Safety is a major reason many communities look at Complete Streets improvements, and though safer infrastructure is one component in improving the safety of users, there is also a behavioral component that must be supported through encouragement and education. Improving walking and bicycling conditions throughout the town was noted as major transportation objectives within the Dalton Master Plan. Recent accident data was collected and reviewed to determine what types and under what conditions accidents are occurring.

### *Accident Data and Crash Clusters*

Crash data is available for a three-year period from 2011 to 2013. Crashes are grouped into four types based on damage including, fatality, non-fatal injury, property damage only (PDO) and when information is unavailable the crash type is listed as "not reported." Accident statistics can be seen in **Figure XX**.

MassDOT uses crash data collected over a three-year time period to identify areas that have multiple crashes, these locations are called Crash Clusters. Each cluster is given a rating that measures the "equivalent property damage only" crashes. "Equivalent property damage only" is a method of combining the number of crashes with the severity of crashes based on a weighted scale where a fatal crash is worth 10, an injury crash is worth 5 and a property damage only crash is worth 1. The Massachusetts Department of Transportation identifies "crash clusters" using crash reports provided by its Registry of Motor Vehicles Division. They determine the locations of clusters by grouping crashes that occur within a certain distance of each other (25 meters for vehicle crashes and 100 meters for bike and pedestrian crashes). The clusters are ranked based on the sum of the Equivalent Property Damage Only (EPDO) values of the crashes within the clusters.

As seen in **Figure XX**, the most significant crash clusters during the 2011-13 period are found along Main Street in the town center. This is partly due to the high volume of vehicle traffic and the many turning and stopping movements to and from businesses and the densely developed residential side streets intersecting Main Street. As noted in **Figure XX** the majority of accidents result in property damage only (75%). Sixty-six percent of accidents occurred on dry roads.

The Dalton Division/Williams Street/Washington Mountain Road intersection is the site of numerous vehicle accidents. In 2014, at the request of the town, BRPC conducted a road safety evaluation of the intersection. BRPC examined crash reports obtained from the Dalton Police Department for the three most recent years and visited the intersection to examine the road appurtenances and roadway geometrics. Based on a review of the accident reports and actual observations, we believe that the offending vehicles carried too much speed into the curve to successfully navigate it. BRPC identified three levels of potential countermeasures: 1) signage improvements/upgrades on each of the three streets, 2) three-way stop and 3) construction of a roundabout. BRPC recommended exhausting potential signage upgrades before further investigating converting the intersection to a three-way stop or a roundabout. It is also stressed that the Town of Dalton coordinate with the City of Pittsfield about safety improvements at this intersection because safety improvements should be installed in both jurisdictions[19].

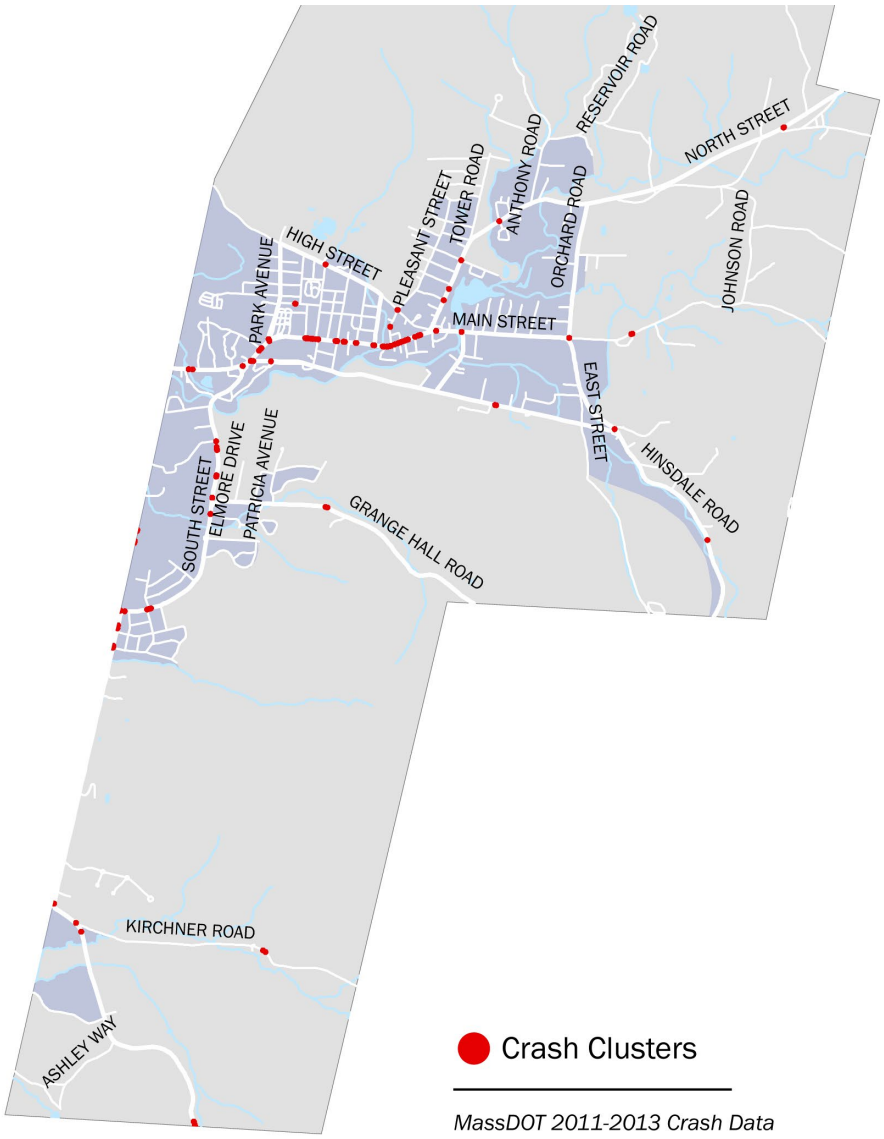
**Figure XX: Dalton Accident Statistics**

| DALTON ACCIDENT STATISTICS 2011 - 2013 | | | | | |
|---|---|---|---|---|---|
| CRASHES BY TYPE | **2011** | **2012** | **2013** | | **NOTES** |
| Total Crashes | 133 | 100 | 135 | | More than 75% of crashes are PDO* |
| Fatality | - | - | - | | No fatalities |
| Non-fatal Injury | 31 | 16 | 30 | | Non-fatal injuries in 16-23% of accidents |
| PDO | 100 | 82 | 100 | | |
| Not reported | 2 | 2 | 5 | | |
| | | | | | |
| COLLISION TYPE | **2011** | **2012** | **2013** | | **NOTES** |
| Angle | 25 | 22 | 23 | | 34% single vehicle |
| Head-on | 8 | 3 | 5 | | 30% rear end |
| Not Reported | 3 | 2 | 1 | | 19% angle |
| Rear-end | 43 | 29 | 39 | | |
| Sideswipe | 13 | 10 | 17 | | |
| Single Vehicle Crash | 41 | 34 | 50 | | |
| | | | | | |
| NONMOTORIST | **2011** | **2012** | **2013** | | **NOTES** |
| Cyclist | 1 | - | - | | **N**o pedestrian accidents involve fatalities, |
| Pedestrian | 2 | 1 | 3 | | but 5 of 6 involve injuries |
| | | | | | |
| DAY OF WEEK | **2011** | **2012** | **2013** | | **NOTES** |
| Sunday | 13 | 7 | 8 | | > 20% accidents on Friday |
| Monday | 15 | 15 | 21 | | ~ 7% accidents on Sunday |
| Tuesday | 22 | 21 | 23 | | |
| Wednesday | 17 | 15 | 15 | | |
| Thursday | 22 | 11 | 17 | | |
| Friday | 26 | 17 | 34 | | |
| Saturday | 18 | 14 | 17 | | |

[19] Berkshire Regional Planning Commission (BRPC), 2014. *Road Safety Evaluation for Dalton Division Road, Williams Street and Washington Mountain Road*, a technical memo, Pittsfield, MA.

| | | | | | |
|---|---|---|---|---|---|
| TIME OF DAY | **2011** | **2012** | **2013** | | **NOTES** |
| 4 AM - 10 AM | 32 | 17 | 25 | | > 70% accidents from 10AM-10PM |
| 10 AM -4 PM | 51 | 48 | 56 | | |
| 4 PM - 10 PM | 40 | 31 | 37 | | |
| 10 PM - 4 AM | 10 | 4 | 17 | | |
| | | | | | |
| MONTH | **2011** | **2012** | **2013** | | **NOTES** |
| January | 15 | 11 | 9 | | Jan/Feb accidents decreasing |
| February | 14 | 6 | 5 | | Dec accidents increase dramatically |
| March | 14 | 5 | 13 | | |
| April | 10 | 11 | 11 | | |
| May | 13 | 8 | 14 | | |
| June | 8 | 6 | 9 | | |
| July | 7 | 16 | 8 | | |
| August | 15 | 9 | 6 | | |
| September | 7 | 7 | 12 | | |
| October | 15 | 7 | 16 | | |
| November | 7 | 10 | 9 | | |
| December | 8 | 4 | 23 | | |
| *PDO = property damage only | | | | | |
| *Data Source: MassDOT 2011-2013 Crash Data* | | | | | |

**Figure X: Map of Crash Clusters**




### *Crashes related to Bicycles and Pedestrians - Injury versus Property Damage Only (PDO)*

During the years 2011-2013 there were six pedestrian accidents and one cyclist accident. Five of the six accidents involving pedestrians resulted in non-fatal injuries, and all but one occurred during daylight hours. The only cyclist accident, which occurred on Curtis Avenue near the High Street intersection, resulted in property damage only.. There is no discernable or repetitive patterns that emerge from the data due to the low number of accidents and the variety of the places at which they occur and the types of vehicle actions under which the accidents occurred. Basic information on the pedestrian and cyclist accidents is shown below.

**Table 5: Pedestrian & Cyclist Accident Data**

| Non-motorist Type | Severity | Roadway Intersection | Nearest Roadway Intersection or Landmark | Manner of Collision | Vehicle Action Prior to Crash | Date | Ambient Light | Rd Surface Condition |
|---|---|---|---|---|---|---|---|---|
| **Pedal cyclist (bicycle, tricycle, unicycle, pedal car)** | PDO | Curtis Ave / High St | | Head-on | V1: Turning right | 4/27/2011 | Daylight | Dry |
| **Pedestrian** | Non-fatal injury | | Park Ave., North Entrance Craneville Sch. | Single vehicle crash | V1: Travelling straight ahead | 7/3/11 | Daylight | Dry |
| **Pedestrian** | PDO | | Main St | Single vehicle crash | V1: Turning left | 10/152011 | Daylight | Dry |
| **Pedestrian** | Non-fatal injury | Main St / S. Carson Ave | | Single vehicle crash | V1: Slowing or stopped in traffic | 1/19/12 | Dark - lighted roadway | Snow |
| **Pedestrian** | Non-fatal injury | | Division Rd Near Baseball Field | Angle | V1: Travelling straight ahead / V2: Not reported | 7/1/13 | Daylight | Dry |
| **Pedestrian** | Non-fatal injury | | Main St | Angle | V1: Travelling straight ahead | 9/16/13 | Daylight | Dry |
| **Pedestrian** | Non-fatal injury | Main St/S. Carson Ave | | Angle | V1: Turning left | 9/18/13 | Daylight | Dry |

# PLANNED CONDITIONS

## Master Plan/Zoning/Environmental/Economic Development

Several local planning studies were reviewed and drawn upon as part of this Complete Streets initiative. The 2016 *Dalton Master Plan* provided an overview of the transportation needs of the residents and businesses of the Town of Dalton. Major recommendations involving Complete Streets treatments include the desire for a variety of transportation alternatives within town, with improving walking conditions and bicycling options through the town as major transportation objectives. In addition, creating walking loops and bicycle routes were cited as objectives in both the transportation and the open space sections of the plan.

The 2015 *Dalton, MA Main Street (Rte 8/9) Traffic Analysis Between Glennon Ave. & Maple Street Study*[20] and the 2003 *Main Street Corridor Study*[21] recommend several treatments within the Main Street Corridor that would be improve pedestrian safety and create a more pedestrian-friendly atmosphere. The __ report reaffirmed the need for a pedestrian-activated light or actuated beacon at the Main Street / River Street / Daly Street intersection. The corridor study recommended several option to reduce traffic and/or turning movements on Main Street, as well as streetscaping and curb extensions to reduce road crossing distances for pedestrians. It should be noted, however, that installing curb extensions could remove the large existing shoulders that could provide bike lanes along the length of Main Street.

# GAPS/NEEDS

## Physical Barriers

Quantitative and qualitative system gaps identified in this plan are 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 that are barriers or that discourage to non-motorized travel. This is a baseline to be used for the identification of potential Complete Streets Improvements in Dalton.

Shoulders from Main Street out along Routes 8 and 9 into neighboring Pittsfield, Hinsdale, and Windsor, and South Street into Pittsfield provide some on-road space for cyclists but are not dedicated facilities. High volumes, travel speeds and truck traffic along these corridors create an atmosphere that intimidates many potential cyclists . The corridor between Main Street and Pittsfield could serve as a viable commuter route except that the route requires that cyclists navigate the Allendale/Coltsville intersection, which is extremely busy intersection and lacks shoulders, and in some areas sidewalks. Several intersections in this area lack pedestrian crossings and signalization. Shoulders exist along much of South Street, which also leads into Pittsfield; the drawback to this route is having to travel along East Street in Pittsfield which has heavy vehicle traffic, is dotted with industrial and commercial driveways and shoulders of varying widths.

## Linear Gaps

Linear gaps are 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 and urban centers.

### *Bicycle Accommodations*

Bike Lanes require a minimum of 4-5' of clearance to be constructed, depending on streets design and context[23] and are constructed for exclusive use by cyclists. Bike lanes "Bike lanes enable bicyclists to ride at their preferred speed without interference from prevailing traffic conditions and facilitate predictable behavior and movements between bicyclists and motorists[24]" .

There are no bike lanes or other bicycle facilities in Dalton. Housatonic Street, currently being reconstructed to will include both sidewalk and bike lanes, will be the town's first roadway reconstruction

[20] Berkshire Regional Planning Commission. 2015. *Dalton, MA Main Street (Rte 8/9) Traffic Analysis Between Glennon Ave. & Maple Street Study*. Pittsfield, MA.

[21] Clough, Harbour & Assoc. LLP, 2003. *Main Street Corridor Study (MA Routes 8.9),* Albany NY.

[23] Curb. Guardrail, or on-street parking located along the roadway necessitates a "shy" distance - creating a bike lane min. width of 5'. See MassDOT design guidance available at: https://www.massdot.state.ma.us/Portals/8/docs/designGuide/CH_5.pdf

[24] http://nacto.org/publication/urban-bikeway-design-guide/bike-lanes/

project incorporating multi-modal accommodations for its entire length. There are several roadways that radiate outward from the town center that have shoulders wide enough to serve as bike lanes, but many have segments where the shoulder narrows to less than four feet wide. In these cases, the segments would revert to a shared lane configuration. The lack of a dedicated bike and the sudden movement of bicyclists into lane that is to be shared by motorists and bicycles could create dangerous situations for those travelers. To warn motorists of the transition and the possibility of sharing the travel lane with bicyclists warning signs should be posted ahead of the transition area. Roads that could be considered for possible bike lane / shared lane markings are listed in **Table XX**.

Except for Main Street, Route 8 / Hinsdale Road southeast of the Housatonic Street intersection, Route 9 / North Street northeast of Orchard Road and the newly reconstructed South and Housatonic Streets, roads in the town generally lack shoulders. The Routes 8 and 9 roadways, which are maintained by MassDOT, have shoulders that are generally 4-5 feet" wide.

**Table 6: Road Shoulder**[26]

| Street Name | Potential Bike Commuter Routes Where Shoulders are Less Than 4' |
|---|---|
| Main Street | Beginning ~350' west of Flansburg Ave westward to South St intersection; beginning at Cumberland Farms eastward ~325' to North St. intersection |
| South Street | Main St intersection southward to Crane Ave |
| Dalton Division Road | South St / Hubbard Ave intersection to Williams St |
| East St / Hinsdale Road | None |
| North Street | None |

It should be noted that all of these roads travel into neighboring municipalities, and the town will have to coordinate with those communities to extend dedicated bicycle facilities so that they reach meaningful destinations worth traveling to such as work, play or completing errands. The two routes that would serve the most utility travel would be Main or South Streets that travel into Pittsfield. The town is currently in discussions with the City of Pittsfield to redesign and reconstruct Dalton Division Road, which currently has little to no shoulders and no sidewalk on either side. Williams Street in Pittsfield already has wide shoulders for its entire 2.5-mile length, Dalton Division Road would provide a 6.5+ mile bicycle route that would extend from Town Hall in Dalton to High Street in Pittsfield.

On September 26, 2016 a public meeting was held in Dalton to inform residents and the general public about the potential reconstruction of Dalton Division Road. This road is already designated as part of the Western New England Greenway /U.S. Bike Route 7 which connects to the Ashuwillticook Rail Trail. Public support was generally favorable for a reconstruction design that involved bicycle and pedestrian accommodations, although some residents voiced their preference for sidewalks on one side of the road instead of both sides to minimize widening and encroachment of the road toward homes. South Street and Housatonic Street were reconstructed with new sidewalks installed on one side of the road and these were perceived as working well. A preliminary and conceptual estimate for reconstruction set project costs at $10 million. The project still requires design.

While the routes discussed herein are highlighted as those that could reasonably serve as commuter routes, it should be noted that many segments have posted speeds of more than 35 mph, with sections of North Street

[26] Other conditions which may impact bike lane design in these areas were not assessed, such as the presence of curbing, on-street parking, or guardrails.

(Rt 9) posted at 45 or 50 mph, sections of Hinsdale Road posted at 45 mph, and the eastern and western portions of Main Street at 40 mph. As noted earlier roads with posted speeds of 35 mph or less are considered safer for bicycle travel.

## Location Specific Barriers

Location specific barriers are either point-specific locations like 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 hubs.

### *Main St. / Route 8*

Physically it can be difficult for pedestrians to cross from one side of Main Street to the other. Of particular concern is the section on Main Street in the vicinity of the Post Office. This is a particularly busy pedestrian crossing site as residents from the River Run apartment complex on the south side of the road cross to access services on the north side of the road, including the post office, ATM machine, west-bound bus stop/shelter, retail shops, and restaurants. A marked crosswalk exists at this location, which currently needs to be repainted. A 2015 Main Street Traffic Analysis recommended improving advanced warning pedestrian safety signage to heighten vehicle driver awareness and installing flashing beacon pedestrian crossing signs.[27]

### *Sidewalks*

Although almost all of the streets in the densely developed neighborhoods in downtown Dalton have sidewalks, there are a few areas where sidewalks are absent. Orchard Road is often used by pedestrians and cyclists, as it provides an extended loop for those seeking longer routes for exercise. The gaps identified by the Complete Streets Committee as the most important to address are:

- High Street, Warren Ave. to Park Ave.
- Field Street Extension, First St. to High St.
- Orchard Road, Old Windsor Rd. to North St.
- Carson Avenue, Housatonic St. to Dalton Youth Center
- Dalton Division Road, South St. to Williams St.
- Grange Hall Road, South St. to Patricia Ave.
- South Street, under the railroad bridge

Location-specific Barriers are either point-specific locations like a crosswalk or lack of ADA ramps OR an entire intersection that presents a barrier to non-motorized travel and is unsafe for vulnerable users; this may be due to inadequate crossing treatments, confusing geometry, long crossing distances, lack of crosswalks or traffic control devices. The specific site cited most often by pedestrians and town officials as being a barrier or safety concern is the Main Street crossing in the vicinity of River Street and Daly Avenue.

The Dalton Complete Streets Committee noted that there are several intersections that are configured in unusual ways that make them confusing to drivers or cause them to be unsafe. The Dalton Division Road / Williams Street / Kirchner Road intersection has been the site of several vehicle accidents, and its configuration is unsafe for cyclists and pedestrians. Although the South Street / Hubbard Avenue / Dalton

[27] Berkshire Regional Planning Commission. 2015. *Dalton, MA Main Street (Rte 8/9) Traffic Analysis Between Glennon Ave. & Maple Street Study*. Pittsfield, MA.

Division Road / East Street intersection is signalized, it is unsafe for many reasons, including being the site of many turning movements (which can at times cause traffic backups), having a misalignment of Hubbard and Dalton Division, and having blocked sight lines. The North Street / Tower Road / Franklin Street intersection is a site of many turning movements which can be unsafe for bicycles and pedestrians. The Housatonic Street / Old Windsor Road / Hinsdale Road intersection is configured unusually.

### *Transit Shelters*

The greatest physical barrier to increasing bus usage by many Dalton residents is the distance between their homes and the bus route. Although the bus route winds through the densely populated neighborhoods in the town center, residents outside of this area are often ½ mile or farther from the route. The Dalton Traffic Commission noted that installing transit shelters in select areas could improve the experience of riding the bus, especially given the harsh Berkshire winter weather and tendency for sudden summer rainstorms. In particular, the committee identified the following locations where groups of people were noted that groups of people wait for the BRTA bus and where no bus shelter currently exists:

- The westbound side of the Main Street / North Street / Tower Road intersection,
- Curtis Avenue
- On Hinsdale Road (Rte 8) at the Country Corner Package & Variety Store. Although technically located in Pittsfield, a shelter at the Dalton Division Road / April Lane intersection would also be beneficial.

### *Crossings – Main St. / Route 8*

Physically it can be difficult to cross from one side of Main Street to the other. Of particular concern is the section on Main Street in the vicinity of the Post Office. This is particularly busy pedestrian crossing site as residents from the River Run apartment complex on the south side of the road cross to access services on the north side of the road, including the post office, ATM machine, west-bound bus stop & shelter, retail shops and restaurants. An on-road painted crosswalk exists at this site, which currently needs to be repainted. A 2015 Main Street Traffic Analysis recommended improving advanced warning pedestrian safety signage to heighten vehicle driver awareness and installing flashing beacon pedestrian crossing signs[28].

# 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 Dalton 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 recommendations regarding engineering and design, see **Complete Streets Improvements** section.

## Education

Education is an important component of implementing any new traffic pattern or pedestrian/bike accommodations, particularly where pedestrians or bicyclists will be sharing or intersecting the same travel

[28] Berkshire Regional Planning Commission. 2015. *Dalton, MA Main Street (Rte 8/9) Traffic Analysis Between Glennon Ave. & Maple Street Study.* Pittsfield, MA.

lanes. This will be most important where new pedestrian/bike accommodations are located on curves or blind turns in the road. The town could partner with the Community Recreation Association to:

- Publicize and alert motor vehicle drivers of any new pedestrian or bicycle accommodations where pedestrian and/or bicyclists may share or intersect with existing travel lanes.
- Promote increased visibility for those walking or biking in grey or dark conditions, such as carrying lights or wearing bright or reflective clothing. Inform pedestrians and cyclists that in rural areas dawn and dusk are the times of day when the greatest number of vehicle/ped/bike accidents occur; this may increase the likelihood that they will be more attentive and dress accordingly.
- Publication/promotion of new accommodations could fairly easily be done by inserting a notice to residents in tax bills, through newsletters and during televised Select Board meetings.

## 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.

- Work with the Dalton CRA and the Senior Center to create and map a series of walking loops within Dalton. Getting residents walking on a regular basis will increase overall health and possibly encourage them to try other types of exercise. Increasing overall fitness may encourage residents to walk or bike to the store or run errands rather than driving. Marking mileage at key intersections will help people keep track of their progress and encourage them to increase the distances they travel.
- Publicize implementation of Complete Streets programs such as replacing deteriorating sidewalks and adding new sidewalk connections. Those residents who in the past were hesitant or unable to walk in some areas of town because sidewalks were uneven, broken or missing may expand their walking routes to include the new, safer sidewalks once they are installed. Partners to publicize improvements could include the CRA and Council on Aging.

## Enforcement

Ensuring the rules of the road are enforced across all modes of transportation is an important component of ensuring safe travel for all. Sharing the road safely means that all users of the road show curtesy for each other and follow key rules of the road. Massachusetts General Law (M.G.L.) addresses some of the key rules for motorists, cyclists and pedestrians across the Commonwealth (ex. everyone obeying traffic signals and crosswalk designations) but is silent on other rules. One example of where M.G.L. is silent is the requirement to stop when approaching and before proceeding through a T-configured intersection. Although vehicle drivers are taught that Massachusetts Rules of the Road require a full stop when approaching T-intersections that do not have stop signs, there are no accompanying state laws or regulations directing police to issue tickets or fines for drivers who do not come to a full stop. Tickets that are issued will not stand if challenged in court, which hampers local police in their efforts to enforce this particular Rule of the Road.

The lack of stop signs is an issue throughout Dalton but is of greatest concern at the side streets that intersect with Main Street in the town center, as there are few stop signs posted on these streets. Installing stop signs at key intersections, such as those with high volume, high speeds or with busy traffic movements, will provide clear instructions to motorists (and cyclists) and will enable local police to enforce the those not complying.

Signs will need to comply with the FHWA Manual of Uniform Traffic Control Devices (MUTCD) requirements.

The Dalton Traffic Commission should work with the Police Department and Public Works Department to install stop signs at key sites within the town to improve vehicular, bicycle and pedestrian safety.

Priority locations include many of the streets which intersect Main St / Route 8 which lack stop signsAs bicycle travel becomes more popular it will be important that motorists understand the Rules of the Road and the M.G.Ls that outline their responsibility[29] towards bicyclists, including:

- 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 not 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 reasonably safe to do so without interfering with the movement of other traffic, including cyclists and pedestrians.

Likewise it is important that cyclists are aware of the M.G.L.[30] that guide their 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 two 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.
- 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.

[29] https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter90/Section14
[30] [30] https://malegislature.gov/Laws/GeneralLaws/PartI/TitleXIV/Chapter85/Section11b

- 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 operators 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.

Pedestrians also have responsibilities towards motorists and cyclists and must obey traffic signals and rules of the road like everyone else. The Massachusetts Driver's Manual lists these pedestrian responsibilities.

- State law requires you to use a crosswalk when one is available. If an intersection has a traffic signal, press the button and wait for the **WALK** signal. Intersections with no push buttons automatically give **WALK** signals. Be patient!
- Do not cross if the signal says **DON'T WALK**.
- Before you cross a roadway, stop at the curb, look left, look right, and look left again for traffic. Do this even on a one-way street.
- Be alert while crossing. Be especially alert at intersections that allow vehicles to turn right on red.
- If you must enter the street from between parked cars, stop and look before crossing.
- You must use a sidewalk when one is available. When no sidewalk is available, you should walk on the shoulder **facing** traffic.
- Never walk along or across expressways, interstate highways, or turnpikes.
- Wear clothing with bright colors or reflective strips, especially at night.[31]

### *Motor Vehicle Violations*

The Town of Dalton has relatively few road miles, so the Dalton Police Department staff are intimately aware of the road network and where motor vehicle violations tend to occur. Vehicle violations in the town typically include speeding, running red lights or not coming to a complete stop at a stop sign. Specific sections of roads are prone to speeding vehicles for a variety of reasons, including openness and straightness of the roadway or a sudden decrease in the speed limit.

When police stop a vehicle driver one of the details that they log is the road on which the stop occurred. According to police logs for 2014-15, Main Street is overwhelmingly the stretch of road where the most

[31] https://www.massrmv.com/Portals/30/docs/dmanual/chapter4.pdf

vehicle stops occur, with 1,044 vehicle stops during the two-year period. This is due to the complex nature of the road, where the traffic volumes are the greatest, the speed limits are low, where the town's streetlights are located and onto which a high number of side streets intersect. Two other prominent sites for vehicle stops are North Street (389 stops over 2-yrs) and South Street (269 stops over 2-yrs), while Dalton Division Road Housatonic Street and High Street are also notable. Notable sites where drivers tend to roll through stop signs are Park Street entering Main Street and the Daly/High/Pleasant Street intersection. The number of vehicle stops at any given period in time vary, according to need. Police offers monitor or patrol road sections based on where historic violation trends continue to persist and where local residents complain about speeding or running stop signs.

- Continue to monitor and stop motor vehicles where speeding or other violations increase the risk of pedestrians and/or cyclists. Proactively increase monitoring specific areas where pedestrian or bicycle accommodations are being planned to install a habit of safety in drivers who regularly travel those roads.
- When stops do occur, police could take the opportunity to inform drivers of the potential increase in pedestrians or cyclists due to the planned ped/bike improvements.

### *Snow and Ice Removal*

In Massachusetts, the recent (2010) Supreme Court ruling (*Papadopoulos v. Target Corp*[32]) 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.[33]

## Evaluation

Per the Town of Dalton '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 non-motorized 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 non-motorized travelers?

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

- Is there a difficult crossing or intersection for non-motorized 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
- 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
- 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.

## 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 non-motorized 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.

- The Dalton Complete Streets Committee considered these measures but where not able at this time to identify specific sites that would benefit from them.

## 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 Dalton, the recommendation is to consider lighting strategically, such as at intersections were pedestrian traffic may increase. While residents value existing lighting, many are not eager to expand lighting into new areas, becoming sensitive to light pollution and the fact that street lights diminish the solitude of dark skies. However, one area where lighting can be improved is at the railroad bridge underpass along South St. A gap in sidewalk along South St. at the underpass requires that pedestrians utilize the road shoulder as they walk here. This makes the potential for conflicts among vehicles, pedestrians and cyclists greater at this narrow constriction. While no accident has yet occurred here, increased lighting could help increase actual and perceived safety among all roadway users at this point.

## Street Furniture

Incorporating street furniture (benches, transit shelters, kiosks, etc.) into a streetscape project enhances the attractiveness and walkability of the pedestrian network, particularly for residents who need to rest periodically such as seniors or the disabled. Benches have been placed at key locations along Main Street, each with a plaque recognizing those who contributed to the cost of placing them.

- If the town establishes walking loops in the downtown area, it would be prudent to place benches at key sites along the loop to provide resting sites for those who need them. Benches also encourage residents to gather and visit, fostering a great sense of community.

## Bicycling Improvements and Accommodations

### *Shared Lane Markings*

Shared Lane Markings (sharrows) allow vehicles and cyclists to share the road. Massachusetts General Law states that cyclists "shall have the right to use all public ways in the commonwealth except limited access or express state highways where signs specifically prohibiting bicycles have been posted, and shall be subject to the traffic laws and regulations."[34] Shared lane markings provide awareness to drivers that there may be cyclists along the roadway and that they should use caution when turning or passing a cyclist. They also help position cyclists properly in the roadway, such as keeping them an safe distance from doors on cars parked along a street.

Where volumes and speeds are lower, shared lane markings may provide adequate accommodation for cyclists. Shared lanes are also an option where the existing right of way is lacking and congestion is not an issue. Signage and pavement markings provide guidance to users, and where the lane is adjacent to on-street parking, guardrails, and/or a curb, pavement markings should be adjusted accordingly. When implementing sharrows, it is important to provide consideration for cyclists and pedestrians at congested or complicated intersections.

In the Town of Dalton, the recommendation is to include shared lane markings on several popular roads utilized by cyclists, including South St., Orchard Rd and Grange Hall Rd. The town is currently planning for the eventual reconstruction of Dalton Division Road to include better accommodations for pedestrians and cyclists. The town should consider installing sharrows as a temporary accommodation for cyclists until major reconstruction can occur, which is at least 5-7 years away.

### *Bike Lanes*

Bike lanes are dedicated, delineated lanes for bicycle travel. Bike lanes are generally used on collectors and minor arterials, and are encouraged where speed limits are 35 mph or less. Bike lanes enhance safety for cyclists, and provide comfort and mobility improvements by providing a dedicated lane to ride in, which

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

reduces the potential conflict points between motorized and non-motorized travelers. There are both conventional, and buffered bike lanes, the difference being a designated buffer space via pavement marking.

An important consideration when designing and implementing bike lanes, is attention to where bike lanes and on-street parking are adjacent is critical. When a bike lane passes by on-street parking, additional width is suggested to provide extra room for bicycle maneuverability. Parking which requires vehicle drivers to back out should be evaluated to ensure safety for cyclists. Similarly, when speeds on roadways are higher, or the facility is located along a heavy truck route, extra space is necessary to better separate motorists and nonmotorists.

It is important on these dedicated facilities to ensure drainage infrastructure doesn't impact the cyclists, and in some cases removal or replacement of grates, or additional signage is necessary to ensure safety for the cyclist.

In the Town of Dalton, the recommendation is to include bike lanes on major roadways in town, such as Routes 8 and 9, which are under MassDOT jurisdiction. The town should work closely with MassDOT to ensure bike lanes are considered in future state roadway projects. More analysis will be needed to determine if existing pavement width on Routes 8 and 9 could accommodate addition of bike lanes (such as through simple restriping), or if road widening in specific areas will need to occur. The town should also conduct a study examining the possibility of bike lanes on other collectors and arterials under its jurisdiction. Creating bike lanes along South Street is the most likely to serve as an alternate commuter route.

### *Bicycle Parking*

Bicycle parking is a key element to the usability of bicycles for transportation, but 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. Within Dalton the destinations most likely to targeted by bicyclists include governmental facilities that serve the public and are places of employment (schools and the town hall), public parks and athletic complexes, medium/large employers, and the downtown business district (shops, restaurants, banks, etc). There are many options for bicycle parking, and for reference see the Association of Pedestrian and Bicycle Professionals' *Essentials of Bike Parking.*[35]

- Provide bike racks at all key public facilities, including schools (to benefit both students and employees), town hall, town parks. Specific locations for bicycle parking identified by the Traffic Commission included:

- Partner with key private owners that serve the public, such as the CRA and American Legion, as well as with private businesses who employ local residents.

Specific locations for bicycle parking identified by the Traffic Commission include:

- Pinegrove Park
- Town Hall
- Chamberlain Park
- Greenridge Park
- Dalton CRA
- American Legion athletic fields

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

### *Cycle Tracks (Protected Bike Lanes)*

When speeds on the roadway are above 35 mph, the safety risks for cyclists and pedestrians sharply increases. For roadways with higher speeds it is desirable to implement a cycle track (also called Protected Bike Lanes). Cycle tracks are exclusive bike facilities that are a combination of a bike lane and a shared use path. There are many different kinds of cycle tracks, they can be one-way or two-way, at street level or sidewalk level, they are often separated from traffic by grade, raised medians, on street parking, or bollards. The roadways that carry heavy truck traffic and/or where speed limits are higher than 35 mph create a greater safety demand for protected/separated bike lanes or cycle tracks, and in Dalton these would include the main thoroughfares of Main Street / North Street / Hinsdale Road.

### *Shared Use Path*

A shared use path (also referred to as a multi-use trail) is the safest facility type for both bicyclists and pedestrians, as they provide physical separation from the roadway. Additionally, separated facilities encourage users of all ages and abilities to utilize active modes. Generally, shared use paths are at least 8' wide, and can be paved or unpaved.

In the Town of Dalton, the recommendation is to consider shared use paths when planning off-road facilities, so that a greater number of residents and visitors can utilize them for transportation and recreation. However, no specific opportunities to implement these types of accommodation were identified.

## Pedestrian Improvements and Accommodations

### *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 Dalton, the recommendation is to invest significantly in sidewalk maintenance and replacement. As one of the larger towns in the Berkshires, Dalton has an extensive network of sidewalks that serve its town center and residential areas and is the primary non-motorized transportation facility type in town. Sidewalks serve many of the residential areas in Dalton and will help the community's aging population to remain active while providing non-motorized connections to amenities and destinations in town.

The Town of Dalton should:

- Install sidewalks where they are currently lacking and where there is existing pedestrian traffic. Gaps in downtown Dalton and along Orchard Road are higher priorities.
- Review the sidewalk assessment conducted by BRPC and prioritize other sidewalk projects not identified in the Town's Tier 2 prioritization plan (**Table XX**). Update the Tier 2 plan and resubmit to MassDOT accordingly.
- Consider sidewalk needs as part of all repaving or reclamation projects on roadways that include adjacent sidewalks.
- Consider winter maintenance needs for sidewalks. Ensure that sidewalks are walkable year-round.

- Coordinate with MassDOT to ensure sidewalks along state roadways are adequately maintained and included in future projects.

- As sidewalks are the primary non-motorized accommodation in Dalton, consider creation of sidewalk maintenance fund or general "Complete Streets" fund. This fund could be created as a stabilization fund or similar "rainy day fund". The fund could be used to match or supplement other anticipated transportation funding sources such as Chapter 90 or MassDOT Complete Streets funding. As an example, if TIP funding falls short for the reconstruction of Dalton Division Road, funding from the Complete Streets Program or a newly established town fund could provide additional funds to ensure bike and pedestrian accommodations.

## Pedestrian/Bicycle Detection and Signals

Detection devices and related technology is improving each year, and the use of such devices at signalized intersections improves the safety of non-motorized travelers. These devices are used to determine if a non-motorized traveler is waiting for a signal. There are detectors for bicyclists and for pedestrians and there are a range of options available.

Signals are used to help regulate all modes of traffic and play a key role in reducing conflict points between users of different modes. These can include bicycle signals and pedestrian signals (with/without timers).

- The greatest need for a signalized or actuated pedestrian crossing is at the River Street / Main Street intersection. Although the Complete Streets Program will not fund improvements on MassDOT roadways, the Dalton Complete Streets Committee strongly believes that this is the greatest pedestrian safety measure that is needed in the town and have thus included it in this study.

### *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). The Dalton Traffic Commission has a history of supporting new crosswalks where warranted.

- Consider adding new crosswalk sites during road improvement projects where resident interest is shown and where warranted. The reconstruction of Dalton Division Road will likely be a site where strategically spaced crosswalks will be needed.

### *Curb Extensions / Bump-outs / Bulbouts*

Curb extensions (sometimes called bump-outs or bulb-outs) are an extension of the curb into the street, which reduces the roadway width and acts as a traffic calming measure, decreases the pedestrian crossing distance, and improves the visibility of pedestrians crossing.

- The Town of Dalton should work with MassDOT to investigate curb extensions on future state roadway projects, such as along Main Street (Route 8/9) as recommended in the 2003 *Main Street Corridor Study*[36]. However, it should be noted that curb extensions would interfere with potential bicycle lanes along this stretch of roadway.

[36] Clough, Harbour & Assoc. LLP, 2003. *Main Street Corridor Study (MA Routes 8.9),* Albany NY.

## Landscaping

Landscaping and street trees can provide benefits to motorists, pedestrians, and cyclists. Landscaping can be used as a feature in traffic calming, slowing automobiles down and enhancing the safety for non-motorized travelers. Additionally, landscaping can be used to separate vehicles and non-motorists, whether downtown or along a rural roadway. Additional pervious areas also contribute to a reduction in stormwater runoff and provide air quality benefits. Dalton is a Tree City USA designated community and has planted trees in public ways and parks. As these trees mature some of them are having to be trimmed to avoid spreading into sidewalks and utility corridors. Gateway landscaping were recommended in a 2003 *Main Street Corridor Study*[37] as treatments to create an improved downtown streetscape which would also provide traffic calming and pedestrian crossing benefits.

- During repaving or road reclamation projects, the town could invest in strategically placing tree or shrub plantings to beautify the roadside (and at minimal additional cost to projects). Larger projects aimed at Dalton's town center should also include significant landscaping, and will likely need to be coordinated with MassDOT.

## Wayfinding

Wayfinding is an important element that supports all modes of transportation. Ensuring all users of the transportation system can easily navigate the network is critical to the use of alternate modes. 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. The town should consult a designer who will assist the town in developing a wayfinding system and 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 before visiting the community.

While wayfinding can be an important aspect of the town's transportation system that addresses basic issues of navigation and orientation, it can also work to brand the town, creating a unified, consistent, and distinct system that conveys the town's story and personality to visitors. Typically, wayfinding systems include simple directional signage as well as more detailed nodes that convey more in-depth information, such as through interpretive signage or kiosks. These two signage systems are unified through design elements such as fonts and typography, imagery, and color scheme. The Town of Dalton should:

- Work with the Berkshire Appalachian Mountain Club to aid the town in determining if it should pursue becoming AT Community. This program will not heighten the town's profile with the hiking community, but increase local resident's interest in the AT, possibly encouraging residents to hike sections within Dalton and beyond. As of August 2016, Andrea Lessor and Steve Sears of Grow Dalton were coordinating these efforts within the town.

- Establish a wayfinding system for AT hikers to navigate through the town and to direct them to local businesses and services. The AT logo could be posted more clearly along the route through town and a new kiosk at the Main Street / North Street / High Street intersection could help direct hikers to services and amenities that the town offers. This task could be implemented whether or not the town becomes an AT community. Updating the existing kiosks at the north and south trailheads to match the new kiosk to create consistency may be desirable if resources become available.

- Create a wayfinding system for walking routes that are established, including a map and discrete directional signage with mileage if possible. A simple example to consider is what Pittsfield has

[37] Clough, Harbour & Assoc. LLP, 2003. *Main Street Corridor Study (MA Routes 8.9),* Albany NY.

installed in the city center (green sign), while another example to consider is what San Jose has installed to direct people to destination sites (purple sign) (see **Figure XX**).

**Figure XX: Example Pedestrian Wayfinding**



### *Street Furniture*

Incorporating street furniture (benches, transit shelters, kiosks, etc.) into a streetscape project enhances the attractiveness and walkability of the pedestrian network, particularly for residents who need to rest periodically such as seniors or the disabled. Benches have been placed at key locations along Main Street, each with a plaque recognizing those who contributed to the cost of placing them.

- If the town establishes walking loops in the downtown area, it would be prudent to place benches at key sites along the loop to provide resting sites for those who need them. Benches also encourage residents to gather and visit, fostering a great sense of community.

# IMPLEMENTATION/PRIORITIZATION PLAN

## Methodology

In an effort to develop a data-driven process to guide the prioritization of Complete Streets projects in Dalton, the Traffic Commission 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. Commission members and other participating town staff were 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 traffic calming and economic vitality goal areas received the greatest weight. Projects related to the goal areas of public health and livability were weighted the lowest.

Each potential project was scored using the criteria below, and the weights were applied to the project scores in each category. The results of this scoring exercise can be found in **Table B-1 in Appendix B**. For a graphic that locates all potential projects see **Figure B-1 in Appendix B**.

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

**Table X: Planning Framework Matrix**

| SYSTEM | | | PROJECT-SPECIFIC | |
|---|---|---|---|---|
| Goal Area /Theme | Goal | System Performance Measure | Project Scoring | Weight |

| | | | | |
|---|---|---|---|---|
| **Economic Vitality** | Enhance urban area so it is walkable, bikeable, and can be used by all modes. | annual number of improvements in US Census designated urban area | 0 - not in US Census designated urban area<br>1 - project connects to urban area<br>3 - project is located within urban area | **0.76** |
| **Livability** | Increase the livability of the town by improving the access to active mode facilities by residents and enhancing the Dalton 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, | 0 - not in a residential or urban area<br>1 - in/adjacent to a low-density residential area<br>2 - in/adjacent to a medium-density residential area<br>3- in/adjacent to a high-density residential area | **1.72** |
| **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<br>1 - project addresses safety concern for vulnerable user (cyclist, pedestrian, etc.)<br>2 - project addresses safety concern for all users (drivers, vulnerable users, etc.)<br>3 - project addresses safety concern for all users and is in a Crash Cluster (2011-2013) | **2.61** |
| **Context Sensitivity** | Develop a multimodal transportation system that is sensitive to the historic districts and rural/scenic character of Dalton | 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<br>1 - project has no impact on the existing character of the project area<br>2 - project protects the existing character of the project area<br>3 - project protects and enhances the character of the project area | **0.94** |
| **Public Health** | Promote the health and wellbeing of residents and visitors of all ages across Dalton by providing active mode infrastructure that is safe and accessible. | annual heart attack hospitalizations | 0 - project has no active mode component<br>1 - project has an active mode component but does not link to green space<br>2 - project has an active mode component and connects to green space<br>3 - project has an active mode component and improves green space | **1.13** |
| **Traffic Calming** | Promote traffic calming measures in Dalton 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<br>1 - project has traffic calming component that impacts ONE of the following: speed reduction, streetscape improvement, encourages access for all modes<br>2 - project has traffic calming component that impacts TWO of the following: speed reduction, streetscape improvement, encourages access for all modes<br>3 - project has traffic calming component that impacts ALL of the following: speed reduction, streetscape improvement, encourages access for all modes | **1.28** |
| **Mobility** | Improve infrastructure and transit/specialized transit services to ensure those with limited mobility can move in and around Dalton. | 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<br>1- project addresses ONE of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit<br>2 -project addresses TWO of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit<br>3 - project addresses ALL of the following: ADA compliant sidewalk or pathway, curb ramps, or public/specialized transit | **1.57** |

## Project Selection and Final List

Using the final scores (weighted and unweighted), the Commission 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. For the final Tier 2 list, see **Table 8** below**.**

Those projects in the Town of Dalton jurisdiction are prioritized and listed below. For the spreadsheet that was submitted to MassDOT, please see **Appendix C**.

**Table XX: Final Complete Streets Project Prioritization (Tier 2) List**

| Rank | Project | Description |
|---|---|---|
| 1 | New Sidewalk - Field St. Extension | Installation of approx. 820' of new sidewalk along Field St. Ext. to serve residents as well as users of the Dalton Senior Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 2 | Sidewalk Replacement and Extension - High St. | Replacement and extension of approx. 4900' of deteriorating sidewalk along High St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 3 | Sidewalk Extension - Hale St. | Installation of approx. 220' of new sidewalk along Hale to fill a gap in existing sidewalk network. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 4 | Sidewalk Replacement and extension - Park Ave. | Replacement and extension of approx. 5200' of deteriorating sidewalk along Park Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 5 | Sidewalk Replacement - Franklin St. | Replacement of approx. 800' of deteriorating sidewalk along Franklin St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 6 | New Sidewalk - South Carson Ave. | Installation of approx. 625' of new sidewalk along South Carson Ave. to serve residents as well as users of the Dalton Youth Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 7 | Sidewalk Extension - Pleasant St - Deming to Raymond | Installation of approx. 625' of new sidewalk along Pleasant St. to extend sidewalk from the intersection of Deming St. to Raymond St. Construction will include ADA compliant curb ramps and crosswalks at all intersections. |
| 8 | New Sidewalk - Orchard Rd. | Installation of approx. 3750' of new sidewalk along Orchard Rd. Construction will include ADA compliant curb ramps and crosswalks at all intersections. |
| 9 | Sidewalk Replacement - Flansburg St. | Replacement of 900' of sidewalk along both sides of Flansburg St. Construction will include ADA compliant curb ramps and crosswalks at all intersections. |
| 10 | Sidewalk Replacement - Pleasant St. - High to Deming | Replacement of approx. 2000' of deteriorating sidewalk along Pleasant St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 11 | Sidewalk Replacement - Daly Ave. | Replacement of approx. 1000' of sidewalk along both sides of Daly Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |

| | | |
|---|---|---|
| 12 | New Sidewalk - Grange Hall Rd. - South St. to Patricia Ave. | Installation of approx. 1600' of new sidewalk along Grange Hall Rd. from South St. to Patricia Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 13 | Sidewalk Replacement - Old Windsor Rd. | Replacement of approx. 1250' of sidewalk along both sides of Old Windsor Rd. to serve students of Wahconah High School. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. |
| 14 | Bike Parking- Pine Grove Park | Installation of a bike rack at Pine Grove Park on High St. |
| 15 | Bike Parking- Green Ridge Park | Installation of a bike rack at Green Ridge Park on South St. |
| 16 | Bike Parking -American Legion Park | Installation of a bike rack at American Legion Park on North St. |
| 17 | Pedestrian Lighting - South St. Rail Bridge Underpass | Installation of pedestrian lighting near the South St. Rail Bridge underpass to enhance safety for all users. |
| 18 | Sharrow Installation - South St. | Installation of shared lane markings on approx. 2 miles of South St. |
| 19 | Chamberlain Park - Bike Parking | Installation of a bike rack at Chamberlain Park on Chamberlain Ave. |
| 20 | Sharrow Installation - Dalton Division Rd. | Installation of shared lane markings on approx. 1 mile of Dalton Division Rd. |
| 21 | Sharrow Installation - Orchard Rd. | Installation of shared lane markings on approx. 1 mile of Orchard Rd. |
| 22 | CRA- Bike Parking | Installation of a bike rack at the Dalton Community Recreation Assoc. (CRA) facility on Main St. |
| 23 | Pedestrian Wayfinding - Appalachian Trail | Installation of pedestrian wayfinding signs for hikers along the Appalachian Trail, which passes through the middle of Dalton. |
| 24 | Pedestrian Wayfinding - Walking Loops | Installation of a pedestrian wayfinding signs to direct pedestrians to popular walking loops throughout town. |
| 25 | Sharrow Installation - Grange Hall Rd. | Installation of shared lane markings on approx. 2 miles of Grange Hall Rd. |
| 26 | Transit Shelter - Curtis Ave. | Installation of a transit shelter on Curtis Ave. Work will include minor sidewalk repairs associated with the installation. |
| 27 | Nessacus Middle School - Bike Parking | Installation of a bike rack at Nessacus Middle School on Fox Rd. |
| 28 | Wahconah High School Bike Parking | Installation of a bike rack at Wahconah High School on Old Windsor Rd. |

It should be noted that although Complete Streets funding cannot be used for improvements on MassDOT-owned or maintained roadways, the Dalton Complete Streets Committee feels it is important to include them in this plan. If the town is to improve the safety of pedestrians and bicyclists, and increase the use of these modes of transportation, then it is critical and improvements on Main Street, North Street and Hinsdale Road be pursued jointly by the town and MassDOT.

## Implementation

In an effort to ensure the Town of Dalton is able to successfully implement their Complete Streets Policy, the Traffic Commission 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 Dalton. Immediate implementation steps can be seen in **Table 9** and annual steps in **Table 10**.

**Table 9: Immediate Implementation Tasks**

| Action | Responsible Party | Timeline | Others Interested |
|---|---|---|---|
| Complete Streets Committee Meeting – Follow up to MassDOT project selection response | Traffic Commission | Following feedback on prioritization plan; for FY 2017 projects, if accepted MassDOT will alert Town by September 30 and Town will respond with necessary paperwork by October 15 | Board of Selectmen, Finance Committee |
| Determine budget for design and engineering work for potential FY 2018 and FY 2019 projects | Highway Dept. | Fall 2016 | Board of Selectmen, Finance Committee, Traffic Commission |
| Contract with engineering firm to begin design of other projects on prioritization plan | Highway Dept. | Winter 2016/Spring 2017 | Board of Selectmen, Finance Committee, Traffic Commission |
| Review BRPC sidewalk assessment (See Figure | Traffic Commission, Highway Dept. | Spring 2017 | |

**Table XX: Annual Implementation Tasks**

| Action | Responsible Party | Timeline (annual) | Others Interested |
|---|---|---|---|
| Project Identification | Traffic Commission, Highway Dept. | Late Spring | Board of Selectmen, Residents |
| Score and rank new projects, Revise Tier 2 List | Traffic Commission | Late Spring | Board of Selectmen, Highway Dept., Residents |
| Project Budgeting | Highway Dept. | Summer or Fall | Board of Selectmen, Finance Committee |
| Prepare RFP for design needs on identified projects requiring | Highway Dept. | Fall | Board of Selectmen, Finance Committee, |

| | | | |
|---|---|---|---|
| engineering or design | | | Traffic Commission |
| Construction | Highway Dept. | Following Spring | Board of Selectmen, Traffic Commission |
| Evaluate and document performance (See Performance Measures section) | Traffic Commission, Highway Dept. | Following Summer or Fall | Board of Selectmen, Residents |

### *Funding Schedule*

In FY 2017, Dalton applied for $400,000 in construction funding for two projects. These projects include sidewalk replacement and extension along High St. and new sidewalk along Field St. Extension. These projects were selected as they are heavily used by pedestrians. Senior housing is located along High St. and the Dalton Senior Center is located along Field St. Ext. Sidewalk installation and replacement along these sections of roadway will help to provide valuable non-motorized access to this vulnerable population. Additionally, there is a trailhead for the Appalachian Trail located near the intersection of High St. and Gulf Rd. Hikers often use High St. as they pass through Dalton and improved Sidewalk will benefit them as well as the many residents in the area. See **Table XX** for a 7-year schedule for implementation of the Town of Dalton Tier 2 Prioritization Plan (**Table XX**). 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 Dalton 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 XX: 7-Year Funding Schedule**

| Project | FY 2017 | FY 2018 | FY 2019 | FY 2020 | FY 2021 | FY 2022 | FY 2023 |
|---|---|---|---|---|---|---|---|
| *Amount Available* | *$400,000* | *$400,000* | *$400,000* | *$400,000* | *$400,000* | *$400,000* | *$400,000* |
| New Sidewalk - Field St. Ext. | $102,612 | | | | | | |
| High St. - Sidewalk replacement and extension to Gulf/Park Int. | $299,562 | | | | | | |
| | | | | | | | |
| Sidewalk Ext. - Hale St. | | $29,065 | | | | | |
| Sidewalk Replacement - Franklin St. | | $78,636 | | | | | |
| New Sidewalk Grange Hall Rd. to Patricia Ave. | | $238,883 | | | | | |
| Bike Racks - Pine Grove | | $4,313 | | | | | |
| Bike Racks - Green Ridge | | $4,313 | | | | | |
| Bike Racks - American Legion | | $4,313 | | | | | |
| Sharrows - South St. | | $21,450 | | | | | |
| Bike Racks - Chamberlain | | $4,313 | | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Park | | | | | | | |
| Sharrows - Dalton Division Rd. | | $14,550 | | | | | |
| | | | | | | | |
| New Sidewalk - South Carson Ave. | | | $141,667 | | | | |
| Sidewalk Ext. Pleasant St. - Deming to to Raymond | | | $128,787 | | | | |
| Sidewalk Replacement - Flansburg | | | $167,461 | | | | |
| | | | | | | | |
| New Sidewalk - Orchard Rd. | | | | $373,988 | | | |
| Sharrows - Orchard Rd. | | | | $14,550 | | | |
| Bike Racks - CRA | | | | $4,313 | | | |
| Bike Racks - Nessacus | | | | $4,313 | | | |
| Transit Shelter - Curtis Ave. | | | | $28,127 | | | |
| | | | | | | | |
| Sidewalk Replacement - Daly Ave | | | | | $184,941 | | |
| Sidewalk Replacement - Pleasant St. High to Deming | | | | | $188,416 | | |
| Sharrows- Grange Hall | | | | | $21,450 | | |
| Bike Racks - Wahconah | | | | | $4,313 | | |
| | | | | | | | |
| Sidewalk Replacement - Old Windsor Rd. | | | | | | $299,494 | |
| Pedestrian Lighting - South St. Rail Bridge Underpass | | | | | | $45,900 | |
| Pedestrian Wayfinding - App. Trail | | | | | | $31,750 | |
| Pedestrian Wayfinding - Walking Loops | | | | | | $34,000 | |
| | | | | | | | |
| Sidewalk Replacement - Park Ave. | | | | | | | $591,158 |
| | | | | | | | |
| ***Amount Proposed*** | $402,174 | $399,833 | $437,916 | $425,290 | $399,120 | $411,144 | $591,158 |
| ***Amount Remaining*** *(**Red** text indicates total project cost > $400K, black text indicates total project cost < $400k* | $2,174 | ($167) | $37,916 | $25,290 | ($880) | $11,144 | $191,158 |

# APPENDIX A: PUBLIC OUTREACH AND ENGAGEMENT

The Dalton Traffic Commission is serving as the Complete Streets Committee, receiving active guidance and input from the Town Manager, the Highway Department, Town Planner and William Drosehn

Note: For complete meeting minutes including meeting attendance records, please contact the Town of Dalto n or at the town's online repository for meeting information at: http://www.mytowngovernment.org/01226[38]

## Complete Streets Committee Meeting #1: August 3, 2016, Dalton Town Hall

The goal of this meeting was to kick-off the project and provide committee members an outline of the process. The committee was provided sample goals that could be considered and tailored to meet the town's needs. A series of draft maps was provided to aid committee members in understand the town's existing land use and transportation network.

## Complete Streets Committee #2: August 10, 2016

The Committee established evaluation criteria ranking and weighting. A preliminary list of potential complete streets projects was presented and discussed. BRPC was tasked with establishing a ranking criteria for the preliminary project list.

## Complete Streets Committee #3: August 17, 2016

BRPC presented the draft ranked and weighted preliminary list of complete streets project to the Committee. Members absent from the previous meeting voted on the evaluation criteria, which would refine the potential list to reflect the views of everyone on the Committee. BRPC was tasked with revising the preliminary project list to reflect the new votes. BRPC was also tasked with drafting cost estimates for the complete streets projects list.

## Complete Streets Committee #4: August 24, 2016

This meeting reviewed revised ranking and weighting of complete streets goals by Committee members. The Appalachian trail and Dalton Division Road were also discussed.

## Complete Streets Committee #5: August 31, 2016

BRPC presented the draft complete streets list to the Committee, with cost estimates for all the projects listed in the draft complete streets project list. Committee members discussed the merits of the various complete streets projects and selected three that were believed to be the highest immediate priorities for FY17 complete streets application. BRPC was tasked with refining the cost estimates according to information provided by the Committee about each project.

## Complete Streets Committee #6: September 6, 2016

This meeting reviewed final project selections and next steps in the plan submittal process. Revised cost estimates were also discussed.

## Complete Streets Committee #7: October 5, 2016

This meeting reviewed the draft plan document for factual errors and missing elements. Next steps in the funding approval process were also discussed.

[38] See Traffic Commission section of this website.

# 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 Dalton Traffic Commission. Projects in this list were further refined into a final list for submittal to MassDOT (see **Table XX**). **Figure B-1** shows the location of all potential complete streets improvements.

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.

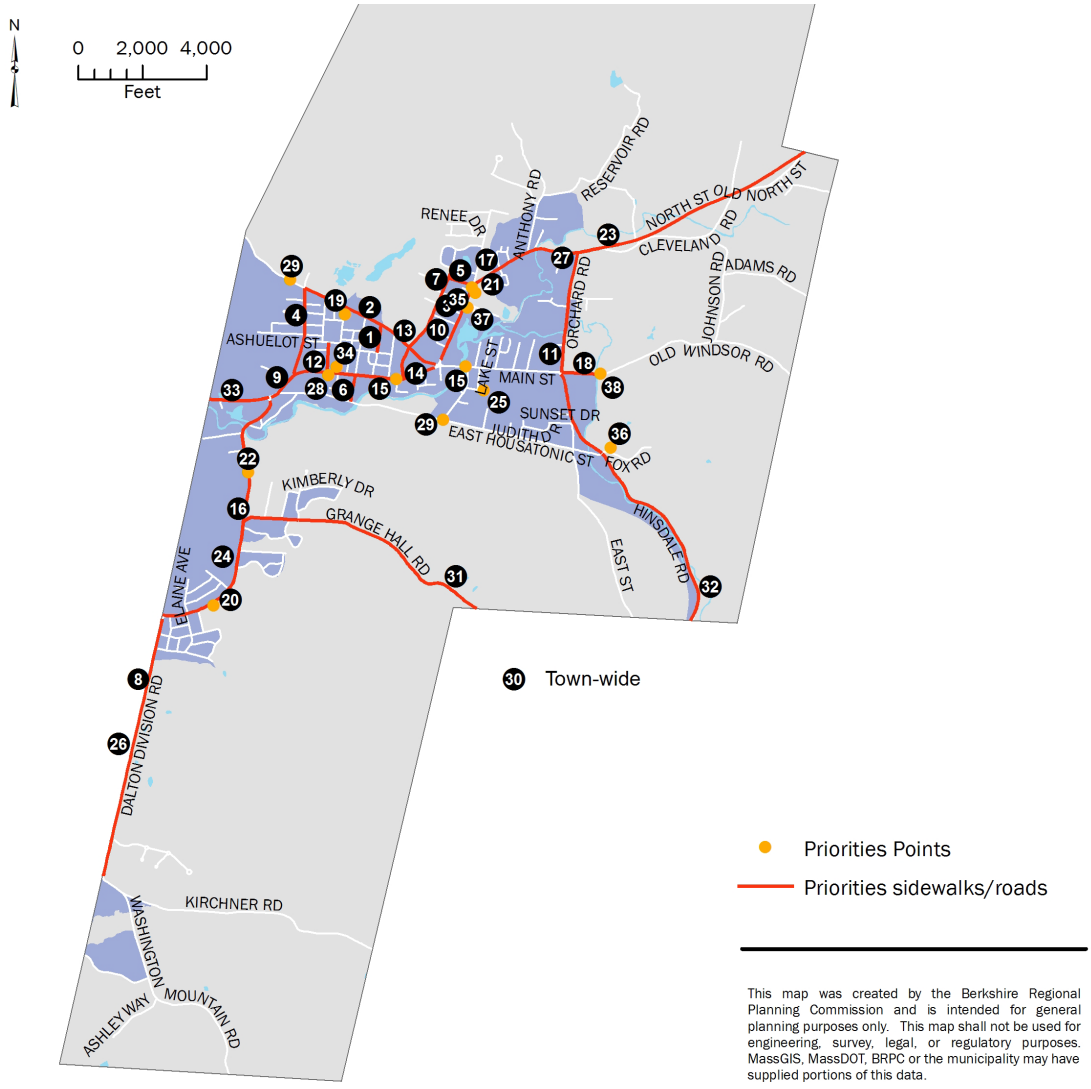
**Table B-1: Complete List of Potential Improvements**

| | | GOAL | Economic Vitality | Livability | Safety | Context Sensitivity | Public Health | Traffic Calming | Mobility | Score Unweighted | Score Weighted |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Project | Type/Location | WEIGHT | 0.88 | 1.57 | 2.47 | 0.97 | 1.26 | 1.24 | 1.62 | - | - |
| PROJECT 1 | New Sidewalk | Field St Extension | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 16 | 22.2 |
| PROJECT 2 | Sidewalk Extension and replacement | High St. - End of sidewalk to Gulf/Park Int. | 3 | 3 | 2 | 3 | 2 | 1 | 2 | 16 | 22.2 |
| PROJECT 3 | Sidewalk Extension | Hale St. | 3 | 3 | 2 | 1 | 1 | 1 | 2 | 13 | 19 |
| PROJECT 4 | Sidewalk Replacement | Park Ave | 3 | 3 | 1 | 2 | 2 | 1 | 2 | 14 | 18.76 |
| PROJECT 5 | Sidewalk Replacement | Franklin Street | 3 | 3 | 1 | 2 | 1 | 1 | 2 | 13 | 17.5 |
| PROJECT 6 | New Sidewalk | South Carson Ave | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 12 | 17.43 |
| PROJECT 7 | Sidewalk Extension | Pleasant St - Deming to Raymond | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 12 | 17.43 |
| PROJECT 8 | Pedestrian and Bicycle Accomodations / Major Reconstruction | Dalton Division Rd. | 1 | 2 | 2 | 0 | 2 | 2 | 2 | 11 | 17.2 |
| PROJECT 9 | Sidewalk Replacement | Main St. (south side) | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 13 | 17.19 |
| PROJECT 10 | Sidewalk Replacement | North St (Route 9) | 3 | 2 | 1 | 2 | 2 | 1 | 2 | 13 | 17.19 |
| PROJECT 11 | New Sidewalk | Orchard Road | 3 | 1 | 2 | 0 | 2 | 1 | 2 | 11 | 16.15 |
| PROJECT 12 | Sidewalk Replacement | Flansburg St. | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 12 | 15.93 |
| PROJECT 13 | Sidewalk Replacement | Pleasant St - High St. to Deming St. | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 12 | 15.93 |
| PROJECT 14 | Sidewalk Replacement | Daly Ave | 3 | 2 | 1 | 2 | 1 | 1 | 2 | 12 | 15.93 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT 15 | Pedestrian Crossing Light | Main St. @ River St. and Depot St. Int's | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 11 | 14.91 |
| PROJECT 16 | New Sidewalk | Grange Hall Rd. from South St. to Patricia Ave | 3 | 1 | 2 | 0 | 1 | 1 | 2 | 10 | 14.89 |
| PROJECT 17 | New Sidewalk | North St - Tower Road to sidewalk end (Carwash) | 0 | 1 | 2 | 1 | 2 | 1 | 2 | 9 | 14.48 |
| PROJECT 18 | Sidewalk Replacement | Old Windsor Rd | 3 | 0 | 1 | 2 | 2 | 1 | 2 | 11 | 14.05 |
| PROJECT 19 | Bike Racks | Pine Grove Park | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 12 | 14.02 |
| PROJECT 20 | Bike Racks | Green Ridge Park | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 12 | 14.02 |
| PROJECT 21 | Bike Racks | American Legion | 3 | 3 | 0 | 3 | 2 | 1 | 0 | 12 | 14.02 |
| PROJECT 22 | Pedestrian Lighting | South St Railroad Bridge Underpass | 3 | 1 | 2 | 2 | 1 | 1 | 0 | 10 | 13.59 |
| PROJECT 23 | Bike Lanes | North St. (Route 9) | 3 | 2 | 1 | 1 | 2 | 1 | 0 | 10 | 12.98 |
| PROJECT 24 | Sharrow Installation | South St. | 3 | 2 | 1 | 1 | 2 | 1 | 0 | 10 | 12.98 |
| PROJECT 25 | Bike Racks | Chamberlain Park | 3 | 2 | 0 | 3 | 2 | 1 | 0 | 11 | 12.45 |
| PROJECT 26 | Sharrow Installation | Dalton Division Rd. (temporary accommodation until major reconstruction) | 3 | 1 | 1 | 1 | 2 | 1 | 0 | 9 | 11.41 |
| PROJECT 27 | Sharrow Installation | Orchard Road | 3 | 1 | 1 | 1 | 2 | 1 | 0 | 9 | 11.41 |
| PROJECT 28 | Bike Racks | CRA | 3 | 2 | 0 | 3 | 1 | 1 | 0 | 10 | 11.19 |
| PROJECT 29 | Pedestrian Wayfinding | Appalachian Trail | 3 | 3 | 0 | 1 | 2 | 0 | 0 | 9 | 10.84 |
| PROJECT 30 | Pedestrian Wayfinding | Walking Loops | 3 | 3 | 0 | 1 | 2 | 0 | 0 | 9 | 10.84 |
| PROJECT 31 | Sharrow Installation | Grange Hall Rd. | 3 | 1 | 1 | 1 | 1 | 1 | 0 | 8 | 10.15 |
| PROJECT 32 | Bike Lanes | Hinsdale Rd | 3 | 0 | 1 | 1 | 2 | 1 | 0 | 8 | 9.84 |
| PROJECT 33 | Bike Lanes | Main St to Coltsville (Dalton Town Line) | 3 | 0 | 1 | 1 | 2 | 1 | 0 | 8 | 9.84 |

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PROJECT 34 | Transit Shelter | Curtis Ave. | 3 | 2 | 0 | 1 | 0 | 0 | 1 | 7 | 8.37 |
| PROJECT 35 | Transit Shelter | Tower Rd. | 3 | 2 | 0 | 1 | 0 | 0 | 1 | 7 | 8.37 |
| PROJECT 36 | Bike Racks | Nessacus Middle School | 0 | 1 | 0 | 3 | 2 | 1 | 0 | 7 | 8.24 |
| PROJECT 37 | Transit Shelter | Hinsdale Road near Country Corner Package & Variety Store | 3 | 1 | 0 | 1 | 0 | 0 | 1 | 6 | 6.8 |
| PROJECT 38 | Bike Racks | Wahconah High School | 0 | 0 | 0 | 3 | 2 | 1 | 0 | 6 | 6.67 |
| Red text denotes improvements on state highways that are ineligible for funding through the MassDOT complete streets program | | | | | | | | | | | |

**Figure B-1 – Map of Potential Improvements**




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

The following are project descriptions for each project described in **Table B-1**. Projects from Table B-1 that were also included in Dalton's Tier 2 project list (**Table XX**) have an associated cost estimate that was developed by BRPC. Additionally, some projects from Table B-1 were combined to create projects in Table 8, and are noted in the descriptions.

### *Cost Estimates*

Cost estimates were prepared by BRPC for the Town of Dalton. 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.[39] All projects costs were estimated with a 15% contingency added to the total.

### *Project 1: New Sidewalk – Field St. Extension*

This project includes installation of approx. 820' of new sidewalk along Field St. Ext. to serve residents as well as users of the Dalton Senior Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| **New Sidewalk - Field St. Extension** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Concrete Curb | | | |
| **Side** | East (Senior Center) | | | |
| **Lengths** | | | | |
| **East** | 820 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering - Included as part of Project 8** | Allowance | $0 | 0 | $ - |
| **Permitting - Included as part of Project 8** | Allowance | $0 | 0 | $ - |
| **Erosion Control** | Allowance | $5,000 | 1 | $ 5,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 175 | $ 5,687.50 |
| **Gravel Borrow** | CY | $50.00 | 85 | $ 4,250.00 |
| **Concrete Sidewalk** | SY | $55.00 | 451 | $ 24,805.00 |
| **Concrete Curb** | LF | $45.00 | 820 | $ 36,900.00 |
| **Asphalt Patching** | Tons | $185.00 | 41 | $ 7,585.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| **Subtotal** | | | | $ 89,228 |
| **15% Contingency** | | | | $ 13,384 |
| | | | | |
| **Total** | | | | **$ 102,612** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 102,612** |

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

### *Project 2: Sidewalk Extension and Replacement – High St.*

This project includes replacement and extension of approx. 4900' of deteriorating sidewalk along High St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| Sidewalk Replacement - High St. and Extension to Park Ave/Gulf Rd. Intersection | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | North | | | |
| **Lengths** | | | | |
| **North** | | | | |
| **Rte 8 to Pleasant** | 1050 | | | |
| **Pleasant to Glennon** | 585 | | | |
| **Pleasant to Field St. Ext.** | 550 | | | |
| **Field St. Ext. to Carson** | 525 | | | |
| **Carson to Curtis** | 750 | | | |
| **Curtis to Warren** | 680 | | | |
| **Warren to end** | 300 | | | |
| **total** | 4440 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $15,000 | 1 | $ 15,000 |
| **Permitting** | Allowance | $5,000 | 1 | $ 5,000 |
| **Erosion Control** | Allowance | $13,000 | 1 | $ 13,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Tree and shrub removal** | Allowance | 7,000.00 | 1 | $ 7,000.00 |
| | | | | |
| **Replace Ex. Sidewalk (4440 LF)** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Remove ex. Sidewalk** | CY | 52.50 | 300 | $ 15,750.00 |
| **Excavation** | CY | 32.50 | 850 | $ 27,625.00 |
| **Gravel Borrow** | CY | $50.00 | 410 | $ 20,500.00 |
| **Concrete Sidewalk** | SY | 55 | 2445 | $ 134,475.00 |
| | | | | |
| **Extend Sidewalk to Park/Gulf Int. (430 LF)** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 150 | $ 4,875.00 |
| **Gravel Borrow** | CY | $50.00 | 40 | $ 2,000.00 |
| **Concrete Sidewalk** | SY | $55.00 | 236 | $ 12,980.00 |
| **New Concrete Curb - assume 50% of Length will require curbing** | LF | $45.00 | 215 | $ 9,675.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |

| | | | | |
|---|---|---|---|---|
| **New Curb Ramps** | Each | $1,250 | 8 | $ 10,000.00 |
| | | | | |
| **Subtotal** | | | | $ 277,880 |
| **15% Contingency** | | | | $ 41,682 |
| | | | | |
| **Total** | | | | **$ 319,562** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 299,562** |

### *Project 3: Sidewalk Extension – Hale St.*

This project includes installation of approx. 220' of new sidewalk along Hale to fill a gap in existing sidewalk network. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| **Sidewalk Extension-Hale St.** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ no curb | | | |
| **Side** | North | | | |
| **Lengths** | | | | |
| **North** | 320 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $5,000 | 1 | $ 5,000 |
| **Permitting** | Allowance | $3,000 | 1 | $ 3,000 |
| **Erosion Control** | Allowance | $2,500 | 1 | $ 2,500 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| | | | | |
| **Extend Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 60 | $ 1,950.00 |
| **Gravel Borrow** | CY | $54.00 | 30 | $ 1,620.00 |
| **Concrete Sidewalk** | SY | $87.00 | 180 | $ 15,660.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 2 | $ 2,500.00 |
| | | | | |
| **Subtotal** | | | | $ 32,230 |
| **15% Contingency** | | | | $ 4,835 |
| | | | | |
| **Total** | | | | **$ 37,065** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 29,065** |

### *Project 4: Sidewalk Replacement – Park Ave.*

This project includes replacement and extension of approx. 5200' of deteriorating sidewalk along Park Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| **Sidewalk Repairs and Extension - Park Ave** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite Curb | | | |
| **Side** | Both | | | |
| **Lengths** | | | | |
| **West** | Length (ft) | Sidewalk | Curb | |
| **High to Chestnut** | 435 | None | none | |
| **Chestnut to Oak Ext.** | 345 | None | none | |
| **Oak Ext. to Pine** | 340 | None | none | |
| **Pine to Ashuelot** | 283 | Concrete | none | |
| **Ashuelot to Route 8** | 1285 | Concrete | Granite | |
| | | | | |
| **East** | | | | |
| **High to Park Cir Dr** | 435 | Asphalt | Asphalt | |
| **Park Cir to Oak** | 245 | Asphalt | Asphalt | |
| **Oak to Pine** | 327 | Concrete | None | |
| **Pine to Ashuelot** | 287 | Concrete | Granite | |
| **Ashuelot to John** | 174 | Concrete | Asphalt | |
| **John to Rte 8** | 1065 | Concrete | Asphalt and Granite | |
| | | | | |
| **total to be extended (west side)** | 1120 | | | |
| **total to be replaced** | 4101 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $8,000 | 1 | $ 8,000 |
| **Permitting** | Allowance | $4,000 | 1 | $ 4,000 |
| **Erosion Control** | Allowance | $10,000 | 1 | $ 10,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Utility Pole Relocation** | Each | 10,000.00 | 3 | $ 30,000.00 |
| **Drainage allowance** | Allowance | 30,000.00 | 1 | $ 30,000.00 |
| **Remove and Reset Mailbox** | Each | 240.00 | 10 | $ 2,400.00 |
| **Relocate Ex. Fence** | Allowance | 10,000.00 | 1 | $ 10,000.00 |

| | | | | |
|---|---|---|---|---|
| **Tree and Hedge Removal** | Allowance | 5,000.00 | 1 | $ 5,000.00 |
| | | | | |
| **Replace Ex. Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavate Ex. Asphalt Sidewalk** | SY | 22.50 | 340 | $ 7,650.00 |
| **Excavate Ex. Concrete Sidewalk** | CY | 52.50 | 210 | $ 11,025.00 |
| **Remaining Excavation** | CY | 32.50 | 760 | $ 24,700.00 |
| **Gravel Borrow** | CY | $54.00 | 380 | $ 20,520.00 |
| **Reset Granite Curb** | LF | $45.00 | 1400 | $ 63,000.00 |
| **Concrete Sidewalk** | SY | $76.00 | 2255 | $ 171,380.00 |
| **Asphalt Patching** | Ton | $203.00 | 125 | $ 25,375.00 |
| | | | | |
| **Extend Sidewalk to High St.** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 210 | $ 6,825.00 |
| **Gravel Borrow** | CY | $54.00 | 105 | $ 5,670.00 |
| **Concrete Sidewalk** | SY | $87.00 | 620 | $ 53,940.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 20 | $ 25,000.00 |
| **For sidewalk Extension** | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| **Landscaping** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Tree and Shrub Replacement** | Each | $5,000.00 | 1 | $ 5,000 |
| | | | | |
| **Subtotal** | | | | $ 524,485 |
| **15% Contingency** | | | | $ 78,673 |
| | | | | |
| **Total** | | | | **$ 603,158** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 591,158** |

*Project 5: Sidewalk Replacement – Franklin St.*

This project includes replacement of approx. 800' of deteriorating sidewalk along Franklin St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| Sidewalk Replacement - Franklin St | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ no curb | | | |
| **Side** | North | | | |
| **Lengths** | | | | |
| **North** | 800 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $6,000 | 1 | $ 6,000 |
| **Permitting** | Allowance | $3,000 | 1 | $ 3,000 |
| **Erosion Control** | Allowance | $5,000 | 1 | $ 5,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 150 | $ 4,875.00 |
| **Gravel Borrow** | CY | $54.00 | 75 | $ 4,050.00 |
| **Concrete Sidewalk** | SY | $87.00 | 440 | $ 38,280.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| **Subtotal** | | | | $ 76,205 |
| **15% Contingency** | | | | $ 11,431 |
| | | | | |
| **Total** | | | | **$ 87,636** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 78,636** |

### *Project 6: New Sidewalk – South Carson Ave.*

This project includes installation of approx. 625' of new sidewalk along South Carson Ave. to serve residents as well as users of the Dalton Youth Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| New Sidewalk - South Carson Ave. | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | West | | | |
| **Lengths** | | | | |
| **West** | 625 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |

| | | | | |
|---|---|---|---|---|
| **Design & Engineering** | Allowance | $6,000 | 1 | $ 6,000 |
| **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** |
| **Drainage allowance** | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| **Relocate Utility pole** | Allowance | 10,000.00 | 2 | $ 20,000.00 |
| **Relocate ex. Fence** | Allowance | 7,000.00 | 1 | $ 7,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 150 | $ 4,875.00 |
| **Gravel Borrow** | CY | $54.00 | 60 | $ 3,240.00 |
| **Concrete Sidewalk** | SY | $87.00 | 350 | $ 30,450.00 |
| **Concrete Curb** | LF | $50.00 | 625 | $ 31,250.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| **Subtotal** | | | | $ 131,015 |
| **15% Contingency** | | | | $ 19,652 |
| | | | | |
| **Total** | | | | **$ 150,667** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 141,667** |

### *Project 7: Sidewalk Extension – Pleasant St. – Deming to Raymond*

This project includes installation of approx. 625' of new sidewalk along Pleasant St. to extend sidewalk from the intersection of Deming St. to Raymond St. Construction will include ADA compliant curb ramps and crosswalks at all intersections.

| **Sidewalk Extension - Pleasant St - Deming St. Int. to Raymond Int.** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | West | | | |
| **Lengths** | | | | |
| **West** | 625 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |

| | | | | |
|---|---|---|---|---|
| **Design & Engineering** | Allowance | $6,000 | 1 | $ 6,000 |
| **Permitting** | Allowance | $3,000 | 1 | $ 3,000 |
| **Erosion Control** | Allowance | $5,000 | 1 | $ 5,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| **Relocate Utility pole** | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| **Tree and shrub removal** | Allowance | 7,000.00 | 1 | $ 7,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 150 | $ 4,875.00 |
| **Gravel Borrow** | CY | $54.00 | 60 | $ 3,240.00 |
| **Concrete Sidewalk** | SY | $87.00 | 350 | $ 30,450.00 |
| **Concrete Curb** | LF | $50.00 | 625 | $ 31,250.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 6 | $ 7,500.00 |
| | | | | |
| **Landscaping** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Replace trees and shrubs** | Allowance | $1,500.00 | 1 | $ 1,500 |
| | | | | |
| **Subtotal** | | | | $ 119,815 |
| **15% Contingency** | | | | $ 17,972 |
| | | | | |
| **Total** | | | | **$ 137,787** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 128,787** |

### *Project 8: Major Reconstruction w/ Pedestrian and Cycling Accommodations – Dalton Division Road*

This project proposes a major reconstruction of Dalton Division Rd to include pedestrian and cycling accommodations in addition to other roadway work.

### *Project 9: Sidewalk Replacement – Main St. (South Side)*

This project would replace the sidewalk along the south side of Main St. As this sidewalk is located along a state highway it is not eligible for funding through the complete streets program. The town will need to advocate for this project and coordinate with MassDOT to advance it.

### *Project 10: Sidewalk Replacement – North St (Rte 9)*

This project would replace the existing sidewalk along North St. (Rte 9). As this sidewalk is located along a state highway it is not eligible for funding through the complete streets program. The town will need to advocate for this project and coordinate with MassDOT to advance it.

### *Project 11: New Sidewalk – Orchard Rd.*

This project includes installation of approx. 3750' of new sidewalk along Orchard Rd. Construction will include ADA compliant curb ramps and crosswalks at all intersections.

| New Sidewalk - Orchard Rd. | | | | |
|---|---|---|---|---|
| **Materials** | Asphalt with Asphalt Curb | | | |
| **Side** | North | | | |
| **Lengths** | | | | |
| **West** | | | | |
| | 3750 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $10,000 | 1 | $ 10,000 |
| **Permitting** | Allowance | $5,000 | 1 | $ 5,000 |
| **Erosion Control** | Allowance | $15,000 | 1 | $ 15,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 40,000.00 | 1 | $ 40,000.00 |
| **Relocate Utility pole** | Allowance | 10,000.00 | 4 | $ 40,000.00 |
| **Tree and shrub removal** | Allowance | 15,000.00 | 1 | $ 15,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation** | CY | 32.50 | 850 | $ 27,625.00 |
| **Gravel Borrow** | CY | $54.00 | 375 | $ 20,250.00 |
| **Asphalt Sidewalk** | SY | $210.00 | 475 | $ 99,750.00 |
| **Asphalt Curb** | LF | $13.50 | 3750 | $ 50,625.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 8 | $ 10,000.00 |
| | | | | |
| **Landscaping** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Replace trees and shrubs** | Allowance | $5,000.00 | 1 | $ 5,000 |
| | | | | |
| **Subtotal** | | | | $ 338,250 |
| **15% Contingency** | | | | $ 50,738 |
| | | | | |
| **Total** | | | | **$ 388,988** |

| | | | | |
|---|---|---|---|---|
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 373,988** |

### *Project 12: Sidewalk Replacement – Flansburg St.*

Replacement of 900' of sidewalk along both sides of Flansburg St. Construction will include ADA compliant curb ramps and crosswalks at all intersections.

| **Sidewalk Replacement - Flansburg St** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | Both | | | |
| **Lengths** | | | | |
| **East** | 900' | | | |
| **West** | 900' | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $5,000 | 1 | $ 5,000 |
| **Permitting** | Allowance | $3,000 | 1 | $ 3,000 |
| **Erosion Control** | Allowance | $5,000 | 1 | $ 5,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 15,000.00 | 1 | $ 15,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Remove ex. Sidewalk** | CY | 52.50 | 150 | $ 7,875.00 |
| **Excavation** | CY | 32.50 | 300 | $ 9,750.00 |
| **Gravel Borrow** | CY | $54.00 | 175 | $ 9,450.00 |
| **Concrete Sidewalk** | SY | $87.00 | 1000 | $ 87,000.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 6 | $ 7,500.00 |
| | | | | |
| **Landscaping** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Loam and seed disturbed areas** | Allowance | $3,000.00 | 1 | $ 3,000 |

| | | | | |
|---|---|---|---|---|
| **Subtotal** | | | | $ 152,575 |
| **15% Contingency** | | | | $ 22,886 |
| | | | | |
| **Total** | | | | **$ 175,461** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 167,461** |

*Project 13: Sidewalk Replacement – Pleasant St – High St. to Deming St.*

Replacement of approx. 2000' of deteriorating sidewalk along Pleasant St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| **Sidewalk Replacement - Pleasant St - High St to Deming st.** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | Both | | | |
| **Lengths** | | | | |
| **West** | 2000 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $8,000 | 1 | $ 8,000 |
| **Permitting** | Allowance | $4,000 | 1 | $ 4,000 |
| **Erosion Control** | Allowance | $10,000 | 1 | $ 10,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| | | | | |
| **New Sidewalk** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Remove ex. Sidewalk** | CY | 52.50 | 130 | $ 6,825.00 |
| **Excavation** | CY | 32.50 | 400 | $ 13,000.00 |
| **Gravel Borrow** | CY | $54.00 | 200 | $ 10,800.00 |
| **Concrete Sidewalk** | SY | $76.50 | 1100 | $ 84,150.00 |
| **New Curb Allowance - assume 20% of length could require curbing** | Lf | $50.00 | 400 | $ 20,000.00 |
| | | | | |

| Curb Ramps | Unit | Cost/Unit | Estimate | Cost |
|---|---|---|---|---|
| New Curb Ramps | Each | $1,250 | 6 | $ 7,500.00 |
| | | | | |
| Subtotal | | | | $ 174,275 |
| 15% Contingency | | | | $ 26,141 |
| | | | | |
| Total | | | | **$ 200,416** |
| Total Requested from MassDOT (Total minus design and permitting) | | | | **$ 188,416** |

### *Project 14: Sidewalk Replacement – Daly Ave.*

This project includes replacement of approx. 1000' of sidewalk along both sides of Daly Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| Sidewalk Replacement - Daly Ave | | | | |
|---|---|---|---|---|
| Materials | Concrete w/ Granite curb | | | |
| Side | Both | | | |
| Lengths | 1025 | | | |
| West | 975 | | | |
| | | | | |
| General | Unit | Cost | Estimate | Total Cost |
| Design & Engineering | Allowance | $5,000 | 1 | $ 5,000 |
| Permitting | Allowance | $3,000 | 1 | $ 3,000 |
| Erosion Control | Allowance | $10,000 | 1 | $ 10,000 |
| | | | | |
| Site Prep and Demolition | Units | Cost/Unit | Estimate | Cost |
| Drainage allowance | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| | | | | |
| New Sidewalk | Unit | Cost/Unit | Estimate | Cost |
| Remove ex. Sidewalk | CY | 52.50 | 130 | $ 6,825.00 |
| Excavation | CY | 32.50 | 400 | $ 13,000.00 |
| Gravel Borrow | CY | $54.00 | 200 | $ 10,800.00 |
| Concrete Sidewalk | SY | $76.50 | 1100 | $ 84,150.00 |

| | | | | |
|---|---|---|---|---|
| **New Curb Allowance - assume 20% of length could require curbing** | Lf | $50.00 | 400 | $ 20,000.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **New Curb Ramps** | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| **Subtotal** | | | | $ 167,775 |
| **15% Contingency** | | | | $ 25,166 |
| | | | | |
| **Total** | | | | **$ 192,941** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 184,941** |

### *Project 15: Pedestrian Crossing Light - Main St. @ River and Depot St. Intersections*

This project will install a pedestrian activated crossing light at two intersections along Main St.

### *Project 16: New Sidewalk – Grange Hall Rd. From South St. to Patricia Ave.*

This project includes installation of approx. 1600' of new sidewalk along Grange Hall Rd. from South St. to Patricia Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| **New Sidewalk - Grange Hall Rd from South St. to Patricia ave** | | | | |
|---|---|---|---|---|
| **Materials** | Concrete w/ Granite curb | | | |
| **Side** | North | | | |
| **Lengths** | | | | |
| **West** | 1600 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $7,000 | 1 | $ 7,000 |
| **Permitting** | Allowance | $3,000 | 1 | $ 3,000 |
| **Erosion Control** | Allowance | $10,000 | 1 | $ 10,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| **Drainage allowance** | Allowance | 20,000.00 | 1 | $ 20,000.00 |
| **Remove and reset Ex. Mailbox** | Each | 240.00 | 10 | $ 2,400.00 |
| | | | | |

| New Sidewalk | Unit | Cost/Unit | Estimate | Cost |
|---|---|---|---|---|
| Excavation | CY | 32.50 | 300 | $ 9,750.00 |
| Gravel Borrow | CY | $54.00 | 175 | $ 9,450.00 |
| Concrete Sidewalk | SY | $76.50 | 880 | $ 67,320.00 |
| Concrete Curb | LF | $50.00 | 1600 | $ 80,000.00 |
| | | | | |
| **Curb Ramps** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| New Curb Ramps | Each | $1,250 | 6 | $ 7,500.00 |
| | | | | |
| Subtotal | | | | $ 216,420 |
| 15% Contingency | | | | $ 32,463 |
| | | | | |
| **Total** | | | | **$ 248,883** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 238,883** |

### *Project 17: New Sidewalk – North St. – Tower Rd. to end*

This project would install new sidewalk along North St. (Rte. 9) beginning near the existing sidewalk's end near Tower Rd and extending northeast to provide sidewalk access to more of the neighborhood there. As this sidewalk is located along a state highway it is not eligible for funding through the complete streets program. The town will need to advocate for this project and coordinate with MassDOT to advance it.

### *Project 18: Sidewalk Replacement – Old Windsor Rd.*

This project includes replacement of approx. 1250' of sidewalk along both sides of Old Windsor Rd. to serve students of Wahconah High School. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections.

| Sidewalk Replacement - Old Windsor Rd. | | | | |
|---|---|---|---|---|
| Materials | Concrete w/ Granite curb | | | |
| Side | Both | | | |
| Lengths | | | | |
| North | 1250 | | | |
| South | 1250 | | | |
| | | | | |
| **General** | **Unit** | **Cost** | **Estimate** | **Total Cost** |
| Design & Engineering | Allowance | $7,000 | 1 | $ 7,000 |
| Permitting | Allowance | $3,000 | 1 | $ 3,000 |
| Erosion Control | Allowance | $10,000 | 1 | $ 10,000 |
| | | | | |
| **Site Prep and Demolition** | **Units** | **Cost/Unit** | **Estimate** | **Cost** |
| Drainage allowance | Allowance | 10,000.00 | 1 | $ 10,000.00 |
| | | | | |

| New Sidewalk | Unit | Cost/Unit | Estimate | Cost |
|---|---|---|---|---|
| Excavation | CY | 32.50 | 475 | $ 15,437.50 |
| Gravel Borrow | CY | $54.00 | 250 | $ 13,500.00 |
| Concrete Sidewalk | SY | $76.50 | 1375 | $ 105,187.50 |
| Concrete Curb (assume 2000 LF total) | LF | $50.00 | 2000 | $ 100,000.00 |
| | | | | |
| Curb Ramps | Unit | Cost/Unit | Estimate | Cost |
| New Curb Ramps | Each | $1,250 | 4 | $ 5,000.00 |
| | | | | |
| Subtotal | | | | $ 269,125 |
| 15% Contingency | | | | $ 40,369 |
| | | | | |
| Total | | | | **$ 309,494** |
| Total Requested from MassDOT (Total minus design and permitting) | | | | **$ 299,494** |

### *Project 19: Bike Parking - Pine Grove Park*

This project includes installation of a bike rack at Pine Grove Park on High St.

| Bike Parking - Multiple Locations | | | | |
|---|---|---|---|---|
| Materials | NA | | | |
| Side | NA | | | |
| Length Total | NA | | | |
| | | | | |
| Item | Unit | Cost | Estimate | Total Cost |
| General | | | | |
| | | | | |
| Site Prep and Demolition | Units | Cost/Unit | Estimate | Cost |
| Concrete Pad | Each | $ 2,000.00 | 1 | $ 2,000.00 |
| | | | | |
| Bike Rack | Unit | Cost/Unit | Estimate | Cost |
| Bike Rack | Each | $1,500.00 | 1 | $ 1,500.00 |
| Delivery | Each | $250.00 | 1 | $ 250.00 |
| | | | | |
| Subtotal | | | | $ 3,750 |
| 15% Contingency | | | | $ 563 |
| | | | | |
| Total | | | | **$ 4,313** |

| | | | | |
|---|---|---|---|---|
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 4,313** |

### *Project 20: Bike Parking – Green Ridge Park*

This project includes installation of a bike rack at Green Ridge Park on South St. For a cost estimate, see project 19 above.

### *Project 21: Bike Parking – American Legion Park*

This project includes installation of a bike rack at American Legion Park on North St. For a cost estimate, see project 19.

### *Project 22: Pedestrian Lighting – South St. Railroad Bridge Underpass*

This project includes installation of pedestrian lighting near the South St. Rail Bridge underpass to enhance safety for all users.

| **South St. Railroad Bridge Underpass - Pedestrian Lighting** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $5,000 | 1 | $ 5,000 |
| **Permitting** | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| **Site Prep and Demolition** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Excavation per pole location** | Allowance | 1,000 | 2 | $2,000 |
| **Utilities trenching** | Allowance | 10,000 | 1 | $10,000 |
| **Junction box** | Allowance | 7,000 | 1 | $7,000 |
| | | | | |
| **Street Lighting (2 locations)** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Pedestrian scale street light w/ concrete footing, LED fixture *or* light mounted on underpass structure** | Each | 10,000 | 2 | $20,000 |
| | | | | |
| **Subtotal** | | | | $ 46,000 |
| **15% Contingency** | | | | $ 6,900 |
| | | | | |
| **Total** | | | | **$ 52,900** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 45,900** |

### *Project 23: Bike Lanes – North St. Route 9*

This project includes installation of bike lanes along North St. As this project is located along a state highway it is not eligible for funding through the complete streets program. The town will need to advocate for this project and coordinate with MassDOT to advance it.

### *Project 24: Sharrow Installation – South St.*

This project includes installation of shared lane markings on approx. 2 miles of South St.

| **Sharrow Installation - South St.** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $3,000 | 1 | $ 3,000 |
| **Permitting** | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| **Sharrow Installation** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Estimate $12K/mile - assume 46 Sharrow markings per mile** | Mile | 12,000 | 1.5 | $18,000 |
| | | | | |
| **Subtotal** | | | | $ 23,000 |
| **15% Contingency** | | | | $ 3,450 |
| | | | | |
| **Total** | | | | **$ 26,450** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 21,450** |

### *Project 25: Bike Parking – Chamberlain Park*

This project includes installation of a bike rack at Chamberlain Park on Chamberlain Ave.

### *Project 26: Sharrow Installation – Dalton Division Rd.*

This project includes installation of shared lane markings on approx. 1 mile of Dalton Division Rd. This project should be considered a temporary accommodation until more extensive

| **Sharrow Installation - Dalton Division** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |

| General | Unit | Cost/Unit | Estimate | Total Cost |
|---|---|---|---|---|
| Design & Engineering | Allowance | $3,000 | 1 | $ 3,000 |
| Permitting | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| Sharrow Installation | Unit | Cost/Unit | Estimate | Cost |
| Estimate $12K/mile - assume 46 sharrow markings per mile | Mile | 12,000 | 1 | $12,000 |
| | | | | |
| Subtotal | | | | $ 17,000 |
| 15% Contingency | | | | $ 2,550 |
| | | | | |
| Total | | | | **$ 19,550** |
| Total Requested from MassDOT (Total minus design and permitting) | | | | **$ 14,550** |

*Project 27: Sharrow Installation – Orchard Rd.*

This project includes installation of shared lane markings on approx. 1 mile of Orchard Rd.

| Sharrow Installation - Orchard Rd. | | | | |
|---|---|---|---|---|
| Materials | NA | | | |
| Assumed Project Area (SF) | NA | | | |
| Side | NA | | | |
| | | | | |
| General | Unit | Cost/Unit | Estimate | Total Cost |
| Design & Engineering | Allowance | $3,000 | 1 | $ 3,000 |
| Permitting | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| Sharrow Installation | Unit | Cost/Unit | Estimate | Cost |
| Estimate $12K/mile - assume 46 sharrow markings per mile | Mile | 12,000 | 1 | $12,000 |
| | | | | |
| Subtotal | | | | $ 17,000 |
| 15% Contingency | | | | $ 2,550 |
| | | | | |
| Total | | | | **$ 19,550** |
| Total Requested from MassDOT (Total minus design and permitting) | | | | **$ 14,550** |

### *Project 28: Bike Parking – CRA*

This project includes installation of a bike rack at the Dalton Community Recreation Assoc. (CRA) facility on Main St.

### *Project 29: Pedestrian Wayfinding – Appalachian Trail*

This project includes installation of pedestrian wayfinding signs for hikers along the Appalachian Trail, which passes through the middle of Dalton.

| **Pedestrian Wayfinding System - Appalachian Trail** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | 15,000 | 1 | $ 15,000 |
| **Permitting** | Allowance | 5,000 | 1 | $ 5,000 |
| | | | | |
| **Wayfinding System** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Wayfinding interpretive Sign** | Allowance | 3000 | 2 | $6,000 |
| **Wayfinding directional Sign** | Allowance | 600 | 15 | $9,000 |
| **Wayfinding map** | Allowance | 5000 | 2 | $10,000 |
| | | | | |
| **Subtotal** | | | | $ 45,000 |
| **15% Contingency** | | | | $ 6,750 |
| | | | | |
| **Total** | | | | **$ 51,750** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 31,750** |

### *Project 30: Pedestrian Wayfinding – Walking Loops*

This project includes nstallation of a pedestrian wayfinding signs to direct pedestrians to popular walking loops throughout town.

| **Pedestrian Wayfinding System - Walking Loops** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |

| | | | | |
|---|---|---|---|---|
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | 7,000 | 1 | $ 7,000 |
| **Permitting** | Allowance | 5,000 | 1 | $ 5,000 |
| | | | | |
| **Wayfinding System** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Wayfinding Interpretive Sign** | Allowance | 3000 | 1 | $3,000 |
| **Wayfinding directional Sign** | Allowance | 600 | 25 | $15,000 |
| **Wayfinding map** | Allowance | 5000 | 2 | $10,000 |
| | | | | |
| **Subtotal** | | | | $ 40,000 |
| **15% Contingency** | | | | $ 6,000 |
| | | | | |
| **Total** | | | | **$ 46,000** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 34,000** |

*Project 31: Sharrow Installation – Grange Hall Rd.*

This project includes installation of shared lane markings on approx. 2 miles of Grange Hall Rd.

| **Sharrow Installation - Grange Hall Rd.** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $3,000 | 1 | $ 3,000 |
| **Permitting** | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| **Sharrow Installation** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Estimate $12K/mile - assume 46 sharrow markings per mile** | Mile | 12,000 | 1.5 | $18,000 |
| | | | | |
| **Subtotal** | | | | $ 23,000 |
| **15% Contingency** | | | | $ 3,450 |
| | | | | |

| | | | | |
|---|---|---|---|---|
| **Total** | | | | **$ 26,450** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 21,450** |

### *Project 32: Bike Lanes or Accommodations – Hinsdale Rd. (Route 8)*

This project includes installation of bike lanes or other cycling accommodations on Hinsdale Rd (Rte 8). As this project is located on a state highway, it is not eligible for complete streets funding. The town will need to advocate for this project through MassDOT.

### *Project 33: Bike Lanes – Main St to Coltsville (Dalton Town Line)*

This project includes installation of bike lanes or other cycling accommodations on Main St. and extending south toward Coltsville and the Dalton town line with Pittsfield. As this project is located on a state highway, it is not eligible for complete streets funding. The town will need to advocate for this project through MassDOT.

### *Project 34: Transit Shelter- Curtis Ave.*

This project includes installation of a transit shelter on Curtis Ave. Work will include minor sidewalk repairs associated with the installation.

| **Transit Shelter - Curtis Ave.** | | | | |
|---|---|---|---|---|
| **Materials** | NA | | | |
| **Assumed Project Area (SF)** | NA | | | |
| **Side** | NA | | | |
| | | | | |
| **General** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Design & Engineering** | Allowance | $3,000 | 1 | $ 3,000 |
| **Permitting** | Allowance | $2,000 | 1 | $ 2,000 |
| | | | | |
| **Site Prep and Demo** | **Unit** | **Cost/Unit** | **Estimate** | **Total Cost** |
| **Remove Concrete Sidewalk** | CY | $52.50 | 5 | $262.50 |
| | | | | |
| **Transit Shelter Installation** | **Unit** | **Cost/Unit** | **Estimate** | **Cost** |
| **Transit Shelter** | Each | 22,500 | 1 | $22,500 |
| **New sidewalk** | SY | 87 | 12 | $1,044 |
| | | | | |
| **Subtotal** | | | | $ 28,807 |
| **15% Contingency** | | | | $ 4,321 |
| | | | | |
| **Total** | | | | **$ 33,127** |
| **Total Requested from MassDOT (Total minus design and permitting)** | | | | **$ 28,127** |

### *Project 35: Transit Shelter – Tower Rd.*

This project includes installation of a transit shelter along Tower Rd.

### *Project 36: Bike Parking – Nessacus Middle School*

This project includes installation of a bike rack at Nessacus Middle School on Fox Rd. For a cost estimate, see project 19.

### *Project 37: Transit Shelter – Hinsdale Rd. @ Country Corner Package & Variety Store)*

This project includes installation of a transit shelter along Hinsdale Rd @ Country Corner Package and Variety Store. The town will need to coordinate with MassDOT and the property owner to determine project feasibility.

### *Project 38: Bike Parking – Wahconah High School*

This project includes installation of a bike rack at Wahconah High School on Old Windsor Rd. For a cost estimate, see project 19.

# APPENDIX C: MASSDOT COMPLETE STREETS PROJECT PRIORITIZATION PLAN

The following Appendix section is a copy of the Tier 2 Prioritization Plan that was submitted to MassDOT. Projects are identical to those found in **Table XX.** However, this table includes additional information such as estimated start and end locations, anticipated construction duration and other information that was required by MassDOT.

| 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 | New Sidewalk - Field St. Extension | Installation of approx. 820' of new sidewalk along Field St. Ext. to serve residents as well as users of the Dalton Senior Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | Yes | Field St. Extension | 62996, 915442 | 62961, 915196 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $112,612 | $102,612 | 10,000 (Town) | 2 | 04/01/17 |
| 2 | Sidewalk Replacement and Extension - High St. | Replacement and extension of approx. 4900' of deteriorating sidewalk along High St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | Yes | High St. | 63527, 915079 | 62268, 915808 | CS Needs Assessment | P1, P2, P5, P9 | X | X | X | | | | | No | $309,562 | $299,562 | 10,000 (Town) | 3 | 04/01/17 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 3 | Sidewalk Extension - Hale St. | Installation of approx. 220' of new sidewalk along Hale to fill a gap in existing sidewalk network. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Hale St. | 63622, 915618 | 63535, 915655 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $37,065 | $29,065 | 8,000 (Town) | 1 | 04/01/18 |
| 4 | Sidewalk Replacement and extension - Park Ave. | Replacement and extension of approx. 5200' of deteriorating sidewalk along Park Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Park Ave. | 62265, 915800 | 62174, 914977 | CS Needs Assessment | P1, P2, P5, P9 | X | X | X | | | | | No | $603,158 | $400,000 | 12,000 (town) | 3 | 04/01/23 |
| 5 | Sidewalk Replacement - Franklin St. | Replacement of approx. 800' of deteriorating sidewalk along Franklin St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Franklin St. | 62265, 915800 | 62174, 914977 | CS Needs Assessment | P1, P2, P9 | X | X | X | | | | | No | $87,636 | $78,636 | 9,000 (town) | 1 | 04/01/18 |
| 6 | New Sidewalk - South Carson Ave. | Installation of approx. 625' of new sidewalk along South Carson Ave. to serve residents as well as users of the Dalton Youth Center. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | Yes | South Carson Ave. | 62725, 914854 | 62701, 914725 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $150,667 | $141,667 | 9,000 (town) | 1 | 04/01/19 |

| | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 7 | Sidewalk Extension - Pleasant St - Deming to Raymond | Installation of approx. 625' of new sidewalk along Pleasant St. to extend sidewalk from the intersection of Deming St. to Raymond St. Construction will include ADA compliant curb ramps and crosswalks at all intersections. | No | Pleasant St. Between the intersection of Deming St. and Raymond St. | 63591, 915821 | 63661, 915996 | CS Needs Assessment | P1, P2, P9 | X | X | X | | | | | No | $137,787 | $128,787 | 9,000 (town) | 1 | 04/01/19 |
| 8 | New Sidewalk - Orchard Rd. | Installation of approx. 3750' of new sidewalk along Orchard Rd. Construction will include ADA compliant curb ramps and crosswalks at all intersections. | No | Orchard Rd. | 64715, 915001 | 64869, 916136 | CS Needs Assessment | P1, P2, P9 | X | X | X | | | | | No | 388,988 | 373,988 | 15,000 (town) | 3 | 04/01/20 |
| 9 | Sidewalk Replacement - Flansburg St. | Replacement of 900' of sidewalk along both sides of Flansburg St. Construction will include ADA compliant curb ramps and crosswalks at all intersections. | No | Flansburg St. | 62480, 915001 | 62493, 915282 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $175,461 | $167,641 | 8,000 (town) | 2 | 04/01/19 |
| 10 | Sidewalk Replacement - Pleasant St. - High to Deming | Replacement of approx. 2000' of deteriorating sidewalk along Pleasant St. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Pleasant St. Between the intersection of High St. and Deming St. | 63261, 915239 | 63591, 915821 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $200,416 | $188,416 | 12,000 (town) | 3 | 04/01/21 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 11 | Sidewalk Replacement - Daly Ave. | Replacement of approx. 1000' of sidewalk along both sides of Daly Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | Yes | Daly Ave. | 63204, 914940 | 63261, 915239 | CS Needs Assessment | P1, P2, P9 | X | X | X | | | | | No | $192,941 | $184,941 | 8,000 (town) | 2 | 04/01/21 |
| 12 | New Sidewalk - Grange Hall Rd. - South St. to Patricia Ave. | Installation of approx. 1600' of new sidewalk along Grange Hall Rd. from South St. to Patricia Ave. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Grange Hall Rd. between the intersection of South St. and Patricia Ave. | 61686, 913630 | 62207, 913596 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $248,883 | $238,883 | 10,000 (town) | 2 | 04/01/18 |
| 13 | Sidewalk Replacement - Old Windsor Rd. | Replacement of approx. 1250' of sidewalk along both sides of Old Windsor Rd. to serve students of Wahconah High School. Construction will include new ADA compliant curb ramps and new crosswalks at all intersections. | No | Old Windsor Rd. | 64667, 914998 | 65088, 914983 | CS Needs Assessment | P2, P5, P9 | X | X | X | | | | | No | $ 309,494 | $ 299,494 | 10,000 (town) | 2 | 04/01/22 |
| 14 | Bike Parking-Pine Grove Park | Installation of a bike rack at Pine Grove Park on High St. | Yes | Pine Grove Park, High St. | 62728, 915571 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/18 |
| 15 | Bike Parking-Green Ridge Park | Installation of a bike rack at Green Ridge Park on South St. | No | Green Ridge Park, South St. | 61329, 912754 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/18 |
| 16 | Bike Parking - American Legion Park | Installation of a bike rack at American Legion Park on North St. | No | American Legion Park, North St. | 63905, 915738 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/18 |

| | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 17 | Pedestrian Lighting - South St. Rail Bridge Underpass | Installation of pedestrian lighting near the South St. Rail Bridge underpass to enhance safety for all users. | No | South St. | 61720, 914073 | 61731, 914034 | CS Needs Assessment | S9 | X | | X | X | | | | No | $52,900 | $45,900 | | 1 | 04/01/22 |
| 18 | Sharrow Installation - South St. | Installation of shared lane markings on approx. 2 miles of South St. | No | South St. | 61926, 914750 | 60918, 912692 | CS Needs Assessment | B8 | | | | X | | | | No | $26,450 | $21,450 | 5,000 (town) | 1 | 04/01/18 |
| 19 | Chamberlain Park - Bike Parking | Installation of a bike rack at Chamberlain Park on Chamberlain Ave. | Yes | Chamberlain Park, Chamberlain Ave. | 63983, 914824 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/18 |
| 20 | Sharrow Installation - Dalton Division Rd. | Installation of shared lane markings on approx. 1 mile of Dalton Division Rd. | No | Dalton Division Rd. | 60910, 912684 | 60347, 910208 | CS Needs Assessment | B8 | | | | X | | | | No | 19,550 | 14,550 | 5,000 (town) | 1 | 04/01/18 |
| 21 | Sharrow Installation - Orchard Rd. | Installation of shared lane markings on approx. 1 mile of Orchard Rd. | No | Orchard Rd. | 64715, 915001 | 64869, 916136 | CS Needs Assessment | B8 | | | | X | | | | No | 19,550 | 14,550 | 5,000 (town) | 1 | 04/01/20 |
| 22 | CRA-Bike Parking | Installation of a bike rack at the Dalton Community Recreation Assoc. (CRA) facility on Main St. | Yes | CRA, Main St. | 62510, 914970 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/20 |
| 23 | Pedestrian Wayfinding - Appalachian Trail | Installation of pedestrian wayfinding signs for hikers along the Appalachian Trail, which passes through the middle of Dalton. | Yes | Multiple locations throughout town | 63566, 914549 62006, 915939 626600, 915226 | | CS Needs Assessment | P4 | | | X | | | | | No | 51,750 | 31,750 | 20,000 (town) | 1 | 04/01/22 |
| 24 | Pedestrian Wayfinding - Walking Loops | Installation of a pedestrian wayfinding signs to direct pedestrians to popular walking loops throughout town. | Yes | Multiple locations throughout town | 63513, 915078 62530, 914977 62269, 915802 | | CS Needs Assessment | P4 | | | X | | | | | No | 46000 | 34,000 | 12,000 (town) | 1 | 04/01/22 |
| 25 | Sharrow Installation - Grange Hall Rd. | Installation of shared lane markings on approx. 2 miles of Grange Hall Rd. | No | Grange Hall Rd. | 61689, 913628 | 63903, 912754 | CS Needs Assessment | B8 | | | | X | | | | No | 26,450 | 21450 | 5,000 (town) | 1 | 04/01/21 |

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| 26 | Transit Shelter - Curtis Ave. | Installation of a transit shelter on Curtis Ave. Work will include minor sidewalk repairs associated with the installation. | Yes | Curtis Ave. | 62565, 915001 | | CS Needs Assessment | T3 | | | | | X | | | No | 33,127 | 28,127 | 5,000 (town) | 1 | 04/01/20 |
| 27 | Nessacus Middle School - Bike Parking | Installation of a bike rack at Nessacus Middle School on Fox Rd. | No | Nessacus Middle School, Fox Rd. | 65200, 914336 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/20 |
| 28 | Wahconah High School Bike Parking | Installation of a bike rack at Wahconah High School on Old Windsor Rd. | No | Wahconah High School, Old Windsor Rd. | 65151, 914930 | | CS Needs Assessment | B3 | | | | X | | | | No | $ 4,313 | $ 4,313 | | 1 | 04/01/21 |