



# COMPLETE STREETS NEEDS ASSESSMENT AND PRIORITIZATION PLAN

TOWN OF GREAT BARRINGTON, MA  
Summer 2018



PREPARED BY:  
Berkshire Regional Planning Commission (BRPC)  
& the Town of Great Barrington

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# 1. INTRODUCTION

The Town of Great Barrington completed a comprehensive Master Plan in 2013 that addresses many aspects of transportation and continues to work toward a community that is attractive, welcoming and safe for all residents of all ages through Complete Streets planning. Complete Streets can help increase and improve access to local destinations and attractions via walking, bicycling or riding public transit. As part of the pledge to these efforts, Great Barrington has also committed to create safer roadways for pedestrians and motorists alike by adopting a Complete Streets Policy.

According to the National Household Travel Survey of 2009, 50% of all household trips are less than three miles in length, and 28% are less than one mile. Nonetheless, most of these trips were completed by driving a vehicle. A 2012 study by the Centers for Disease Control and Prevention revealed that almost half of people will walk to destinations of one mile or less (**Figure 1.1**). Non-motorized travel can provide a range of benefits including improved public health, promotion of tourism and economic development, and increased connectivity and livability – particularly for children, seniors and people with disabilities. With this vision in mind, the Town of Great Barrington has begun to study in more detail the opportunities to incorporate pedestrian and bicycle-friendly design into future transportation investments.

While our current transportation system was designed primarily with cars in mind, Complete Streets represents a commitment to provide safer and more accessible means of travel between home, school, work, recreation and retail destinations which work to foster more livable, attractive and healthier communities. Complete Streets are roadways designed to safely and comfortably accommodate all users, regardless of age, ability or mode of transportation. In addition to providing safety and access for all users, Complete Street design treatments consider accommodations for disabled persons as required by the Americans with Disabilities Act (ADA). Design considerations for connectivity and access management are also accounted for 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. These criteria must be considered when thinking about Complete Streets improvements that accommodate all users of 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. This means that the appropriate level of roadway completeness depends on 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 Great Barrington’s Complete Streets Policy, adopted by the Board of Selectmen in June of 2017. The second is to evaluate existing conditions for

**Figure 1.1 Distance and Destinations**



Source: Centers for Disease and Prevention, 2010, [www.newpublichealth.org](http://www.newpublichealth.org)

nonmotorized users of the transportation system. The third is to recommend an implementation strategy for Complete Streets projects that follows a template designed by MassDOT to fulfill the requirements for a Complete Street Project Prioritization Plan.

The newest federal transportation legislation, 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 Great Barrington with the opportunity to look at existing conditions, potential improvements, and implementation strategies that support Complete Streets throughout the town.

### MassDOT Complete Streets Funding Program

Technical assistance to the Town of Great Barrington 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.”<sup>1</sup>

To participate and maintain eligibility in the funding program, communities are required to proceed through three tiers of the program. At Tier 1, a town employee was required to attend a Complete Streets training session. The town then 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 Great Barrington Complete Streets Team 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 a grant program, with no guarantee of funding from year to year. For the town’s Tier 2 list that was submitted to MassDOT, see **Table 6.2**.

#### Eligible Roadways and Project Types

The MassDOT Complete Streets funding program provides potential funding for projects of four main project types including: traffic and safety; bicycle facilities; transit facilities; and pedestrian facilities (**Table 1.1**). For a complete list of eligible project types, refer to MassDOT Complete Streets Program Guidance.<sup>2</sup> 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 Great Barrington, regardless of jurisdiction, to ensure maximum connectivity throughout the transportation network. While some projects identified may not be eligible for funding, this needs assessment will become a tool to advocate for future changes to state roadways.

**Table 1.1 Eligible Complete Streets Infrastructure**

If a project or element does not appear in this list, it may still be eligible for funding. The applicant should provide justification for the decision based upon the classification of comparable projects.

S - Traffic & Safety	B - Bicycle Facilities	P - Pedestrian Facilities	T - Transit Facilities
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<sup>1</sup> Mass. Dept. of Transportation (MassDOT). 2016. Complete Streets Flyer. Available from: <https://www.mma.org/massdot-offers-%E2%80%98complete-streets%E2%80%99-funding-opportunities>

<sup>2</sup> Available from: <http://www.massdot.state.ma.us/highway/DoingBusinessWithUs/LocalAidPrograms/CompleteStreets/FundingProgram.aspx>

<b>S1.</b> Pavement markings or signage that provides a new separate accommodation for bicycle, pedestrian, or transit modes	<b>B1.</b> Improvement of shared use paths (non-safety related)	<b>P1.</b> Sidewalk repairs (tree roots, uplifted panels, etc.)	<b>T1.</b> Improving transit connections for pedestrians, including: ramps, providing and/or moving crosswalks, signing
<b>S2.</b> Removal of protruding objects (pedestrian path of travel, bicycle, vehicular or transit facility)	<b>B2.</b> Designated bicycle lanes	<b>P2.</b> Providing ADA/AAB compliant curb ramps	<b>T2.</b> Improving transit connections for bicyclists, including: providing secure bicycle parking, signing
<b>S3.</b> Pedestrian signal & timing (minor updates)	<b>B3.</b> Bicycle parking fixtures and/or shelters at transit and other locations	<b>P3.</b> Detectable warning surfaces	<b>T3.</b> Transit shelter
<b>S4.</b> Changing pedestrian signal timing (i.e., lead pedestrian interval)	<b>B4.</b> On-street bicycle parking	<b>P4.</b> Pedestrian wayfinding signs	<b>T4.</b> Transit signal prioritization
<b>S5.</b> Radar speed feedback (“Your Speed”) signs	<b>B5.</b> Provide bicycle-safe drain grates and other hardware	<b>P5.</b> Providing new sidewalks	<b>T5.</b> Bus pull-out areas
<b>S6.</b> Reducing corner radii to lower vehicle speeds and/or decrease pedestrian crossing distances	<b>B6.</b> Bicycle boulevards	<b>P6.</b> Providing pedestrian buffer zones	<b>T6.</b> Railroad grade crossings improvements (signs, flange way fill, etc.)
<b>S7.</b> Additional regulatory signing (for existing regulations)	<b>B7.</b> Bicycle wayfinding signs	<b>P7.</b> Pedestrian Refuge Islands	<b>T7.</b> Transit contra-flow lanes
<b>S8.</b> Speed humps/speed tables	<b>B8.</b> Shared lane markings (sharrows)	<b>P8.</b> Curb extensions at pedestrian crossings	<b>T8.</b> Park-n-ride facilities
<b>S9.</b> Street lighting	<b>B9.</b> Bike route signs	<b>P9.</b> Crosswalks	<b>T9.</b> Transit-only lanes
<b>S10.</b> Road diets	<b>B10.</b> New shared use paths	<b>P10.</b> Widening existing sidewalks	<b>T0.</b> Transit Facilities - Other
<b>S11.</b> Speed attenuation devices	<b>B11.</b> Designated Separated Bicycle Lane	<b>P11.</b> Accessible pedestrian signals	
<b>S12.</b> Roadway resurfacing or micro surfacing if restriping for new bicycle lanes	<b>B12.</b> Elimination of hazardous conditions on shared use paths	<b>P12.</b> New or improved crossing treatments at intersections, midblock, etc. including RRFB's and HAWK signals	
<b>S13.</b> Intersection reconstruction – reducing complexity and crossing distance	<b>B13.</b> Intersection treatments (bicycle signals, bicycle detection, bike lane extensions, turn boxes)	<b>P13.</b> New pedestrian accommodations at existing traffic signals	
<b>S14.</b> New curbing or edging on uncurbed streets.	<b>B0.</b> Bicycle Facilities - Other	<b>P14.</b> Interim public plazas	
<b>S15.</b> Addition of or widening of shoulders		<b>P15.</b> Traffic re-routing to create pedestrian zones	
<b>S16.</b> Intersection signalization (major updates/upgrades & new Installation)		<b>P16.</b> Providing medians with ADA/AAB-compliant design	
<b>S17.</b> Traffic calming measures		<b>P0.</b> Pedestrian Facilities - Other	

### Economic Benefits of Complete Streets

Complete streets improvements and aspects of nonmotorized transportation have shown some impressive economic benefits to communities and regions. A 2012 report from Vermont estimated that biking and pedestrian related activities were associated with over \$53 million in direct economic impact and helped support over 1000 jobs<sup>3</sup>. Implementing Complete Streets policies can stimulate private investment, especially in retail districts.<sup>4</sup> Other communities have seen direct increases in retail sales following complete streets

<sup>3</sup> <https://headwaterseconomics.org/trail/84-bicycling-walking-vermont/>

<sup>4</sup> <https://smartgrowthamerica.org/resources/economic-revitalization-benefits-of-complete-streets>

investments.<sup>5</sup> Studies have shown increases in property values following the addition of bike lanes along streets, as well as higher values in walkable neighborhoods in general<sup>6</sup>. Other research has found that every dollar spent on bike infrastructure returns between four and five dollars in benefits. New York City found that construction of bicycle infrastructure resulted in fewer vacancies along those streets. Finally, investments in nonmotorized transportation reduce the economic burden placed on residents. When residents can use cheaper transportation options, such as biking and walking, they are free to use money that would otherwise go to fuel or vehicle maintenance in other ways.

### Equity Benefits of Complete Streets

Complete streets improvements can be an important component of equitable transportation systems and communities. Not all residents can afford an automobile, and in aging communities, older residents may not be able or wish to drive. Complete Streets enable and create affordable transportation that can be used by anyone.

### Public Health and Safety Benefits

Complete Streets are intended to provide safe access for all roadway users, including motor vehicles, bicyclists, and pedestrians; creating infrastructure that respects all users, improves access and safety for all. An evaluation of Complete Streets in Victoria, British Columbia, reported that reversing the planning priorities from a primary focus on automobile traffic to a focus on pedestrian and bicycle users, resulted in improved public fitness and health.<sup>7</sup> The interventions implemented to improve pedestrian safety included road diets that reduced the number of lanes, increased bicycle and pedestrian facilities, reduced speeds, and compact development types that improved pedestrian access.

In 2015, Smart Growth America (SGA) surveyed 37 different states, regions, and counties in the U. S. that have participated in Complete Street projects. Among those surveyed, 70% of the projects reported a reduction in collisions, and approximately 56% of these projects also reported a reduction in injuries resulting from collisions. These projects also reported an increase in pedestrian and bicycle traffic, with no change in motor vehicle traffic. Rates of collision and injury decreased despite the increase in pedestrian use, suggesting that the projects improved pedestrian safety.<sup>8</sup>

It is well established that physical activity promotes longevity, decreases risk of chronic conditions, and improves mental health and well-being, while relieving stress.<sup>9,10</sup> Access to an active living system can improve a community's health through the promotion of physical and recreational activity, while reducing poor health outcomes. An active living system that is used for commuting can help to reduce cardiovascular risk by 11%, increase daily steps, and increase time spent walking.<sup>11</sup> Researchers have correlated communities that report higher rates of walking and cycling to work with more daily physical activity and lower rates of obesity and

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<sup>5</sup> <https://smartgrowthamerica.org/complete-streets-pay-off/>

<sup>6</sup> [http://vibrantneo.org/wp-content/uploads/2014/03/VibrantNEO\\_EconomicBenefitsofCompleteStreets.pdf](http://vibrantneo.org/wp-content/uploads/2014/03/VibrantNEO_EconomicBenefitsofCompleteStreets.pdf)

<sup>7</sup> Litman, T. (2010). *Evaluating public transportation health benefits*. Retrieved from [http://www.vtpi.org/tran\\_health.pdf](http://www.vtpi.org/tran_health.pdf)

<sup>8</sup> Anderson, G., Searfoss, L., Cox, A., Schilling, E., Seskin, S., & Zimmerman, C. (2015). Safer streets, stronger economies: Complete streets project outcomes from across the United States. *Institute of Transportation Engineers*, 85 (6), 29-36.

<sup>9</sup> Centers for Disease Control and Prevention. (2015b) *Physical activity and health*. Retrieved from <http://www.cdc.gov/physicalactivity/basics/pa-health/index.htm>

<sup>10</sup> American Heart Association. (2015). *Physical activity improves quality of life*. Retrieved February 11, 2016, from [http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/%20StartWalking/Physical-activity-improves-quality-of-life\\_UCM\\_307977\\_Article.jsp#.WHZ9qf4zXVI](http://www.heart.org/HEARTORG/HealthyLiving/PhysicalActivity/%20StartWalking/Physical-activity-improves-quality-of-life_UCM_307977_Article.jsp#.WHZ9qf4zXVI)

<sup>11</sup> American Public Health Association. (2010). *Active transportation: Benefitting health, safety and equity*. Retrieved February 8, 2016, from [http://www.apha.org/~media/files/pdf/topics/transport/apha\\_active\\_transportation\\_fact\\_sheet\\_2010.ashx](http://www.apha.org/~media/files/pdf/topics/transport/apha_active_transportation_fact_sheet_2010.ashx)

diabetes.<sup>12</sup> Cycling and walking have been recognized as an important means to promote health since they are the most common forms of physical activity as well as active transport. An increase of one-hundred minutes of cycling per week, reduces the mortality risk by 10% when compared to non-cyclists. An increase of one-hundred and sixty-eight minutes of walking per week reduces the risk of early mortality by approximately 11%.<sup>13</sup>

## Background

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

The Town of Great Barrington's Complete Streets Team was appointed by the Town Manager in 2018, after the town adopted their Complete Streets Policy. Members of the Team include:

- Edward Abrahams, Board of Selectmen
- Jeremy Higa, Planning Board
- Rebecca Jurczyk, Health Department
- Pedro Pachano, Planning Board
- Chris Rembold, Town Planner
- Pauly Mann Salenovich, Council on Aging Director
- Sean Van Deusen, DPW Director

Complete Streets have many benefits including safety, multimodal transportation options, economic development, environmental benefits, public health, and accessibility. The Complete Streets Team discussed these benefits and more broadly, how the integration of these elements into Great Barrington's streetscape might work to better the community, for residents and visitors alike. For a summary of Complete Streets Team meetings, please see **Appendix A**.

## 2. PLANNING FRAMEWORK

Implementing Great Barrington's Complete Streets Policy will result in 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, enhanced economic vitality, environmental benefits, public health impacts, and accessibility for persons with disabilities.

### Vision and Intent

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

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<sup>12</sup> Pucher, J., Buehler, R., Bassett, D. R., & Dannenberg, A. L. (2010). Walking and cycling to health: A comparative analysis of city, state, and international data. *American Journal of Public Health, 100*(10), 1986-1992.

<sup>13</sup> Schepers, P., Fishman, E., Beelen, R., Heinen, E., Wijnen, W., & Parking, J. (2015). The mortality impact of bicycle paths and lanes related to physical activity, air pollution exposure and road safety. *Journal of Transport & Health, 2* (4), 460-473.



*The purpose of the Town of Great Barrington’s Complete Streets Policy...is to accommodate all users by creating a roadway network that meets the needs of individuals utilizing a variety of transportation modes. It is the intent of the Town of Great Barrington 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 nonmotorists, transit users, motorists, emergency vehicles, and freight/ commercial vehicles.*

## Goals and Performance Measures

The goals and objectives of this Complete Streets Project Prioritization plan, guided by the Great Barrington Complete Streets Team, were developed to provide safety, mobility/connectivity, usability, traffic calming, and accessibility for all users of the street network, including pedestrians, cyclists, other nonmotorists, transit riders, motorists, commercial vehicles, and emergency vehicles.

### Mode Share

Mode Share is a general Complete Streets performance measure that the town can track independent of any others identified. The Town of Great Barrington currently sees a commute mode-share mostly dominated by automobile travel (60.7% of commuters). The mode-share is described in **Table 2.1** The town would like to see modest increases in all modes other than automobile – ‘car, truck or van’.

**Table 2.1 Great Barrington Mode-Share for Commuters**

Mode	Percent of Commuters
Car, Truck, or Van	79.1%
Public Transit	0.0%
Bike	1.7%
Walk	3.5%
Taxi, Other (motorcycle, etc.)	3.6%
Work from Home	12.2%

*Source:* 2012-2016 American Community Survey 5-Year Estimates

In the development of their planning framework, the Great Barrington Complete Streets Team developed system-wide performance measures for each of their ten goals. The performance measures, listed by goal area, are shown in **Table 2.2**

### Methodology

To develop a data-driven process to guide the prioritization of Complete Streets projects in Great Barrington, the Complete Streets Team developed a planning framework that outlined: goals, performance measures, evaluation criteria/scoring, and weighting. This framework ensured the goals were measurable, and that scoring of the projects directly related to the plan’s goals. The Team was asked to weight and rank each goal, and that was integrated into the multi-criteria analysis used to prioritize the town’s improvements. Based on combined weighting and ranking scores from each Team member, projects related to safety and access to public/civic facilities achieved the greatest weight. Projects related to the goal of enhancing resident choice and public and process-driven projects were weighted the lowest. The planning framework matrix can be seen in **Table 2.2**.

**Table 2.2 Planning Framework**

SYSTEM			PROJECT-SPECIFIC	
Goal Area/Theme	Goal	System Performance Measure	Project Scoring	Weight
Connectivity	Provide transportation choices by improving system connectivity within and between modes.	share of non-automobile commuters (ACS)	0 – does not address connectivity within or between modes 1 – addresses existing gap (sidewalk or bike lane gap, or new extended facility) barrier (fair or poor condition sidewalk, underpass, etc.), and/or connectivity between modes 2 – addresses more than one existing gap, barrier, and/or connectivity between modes 3 addresses gap or barrier, and provides new shared use path or off-road facility <b>Note:</b> Off-road path meeting ADA requirements but not allowing bicycles will receive max of 2 points	1.11
Safety	Prioritize safety for all users of the transportation system	total crashes by severity and mode	0 - project reduces or does not impact safety for users of the transportation system 1 - project addresses safety concern for vulnerable user (cyclist, pedestrian, etc.) 2 - project addresses safety concern for all users (drivers, vulnerable users, etc.) 3 - project addresses safety concern for all users and is in a Crash Cluster	1.98
Public Health & Carbon Footprint	Promote the health and well-being of residents and visitors of all ages across Great Barrington by providing active mode infrastructure that is safe, accessible and does not contribute to carbon emissions	Annual heart-attack related hospitalizations	0 - project has no active mode component and does not reduce carbon emissions 1 - project has an active mode component but does not link to open space and/or recreational facilities 3 - project has an active mode component and connects to open space and/or recreational facilities	1.03
Traffic Calming	Promote traffic calming measures in Great Barrington to encourage access for all modes, reduce speeds in activity hubs, and promote attractive streetscapes	annual number of speeding citations	0 - project has no traffic calming component 1 - project has traffic calming component that impacts ONE of the following: speed reduction, streetscape improvement, encourages access for all modes 2 - project has traffic calming component that impacts TWO of the following: speed reduction, streetscape improvement, encourages access for all modes 3 - project has traffic calming component that address ALL of the following: speed reduction, streetscape improvement, encourages access for all modes	1.35
Access to Public/Civic Facilities	Promote connectivity to public facilities such as schools, parks, town buildings, libraries, and recreational areas	number of projects connecting to or adjacent to public facilities	0 – project is not adjacent to or does not connect to a public building/facility 1 – project is adjacent or next to ONE public building/facility 3 - project is adjacent to or connects to TWO or more public buildings/facilities	1.17
Aging in Place/Age Friendly	Ensure connectivity for residents of all ages to ensure the community is livable for anyone aged “8 to 80”	number of projects adjacent to or connecting to senior housing, COA organization(s), & schools	0 – project is not adjacent nor connects to senior housing, a school, or the community center 1 – project is adjacent &/or connects to ONE of the following senior housing, school, or community center 3 – project is adjacent to &/or connects to at least TWO of the following senior housing, school, or community center or addresses safety concern specific to seniors/children	1.11
Public & Process-Driven Projects	Prioritize projects identified through the public process or resident concerns	number of completed improvements that were identified in GB Master Plan; number of projects that address frequent resident concerns	0 – does not address resident concern, planned project, or Master Plan improvements 1 – project addresses concern identified by GB residents but not in GB planning documents 2 – addresses project identified in regional planning document or GB planning document other than Master Plan 3 – address project identified in Master Plan	0.77

SYSTEM			PROJECT-SPECIFIC	
Goal Area/Theme	Goal	System Performance Measure	Project Scoring	Weight
Connecting Housatonic Village to Great Barrington's Downtown	Prioritize projects that advance efforts to provide nonmotorized connections between GB's two village centers	number of projects advancing connection goals	0 – project does not address nonmotorized connection between GB's two village centers 1 – project addresses general safety concern or nonmotorized improvement at key areas connecting GB's village centers 2 – projects improves/provides new dedicated pedestrian or bicycle facility between GB's village centers 3 – project provides new shared use path between GB's village centers	1.06
Resident Choice	Prioritize projects that are selected by residents through opinion survey and/or public forum	number of complete projects from Tier 2 list	0 – project was not in top 10 on priority list survey 1 – project ranked 7-10 on priority list survey 2 – project ranked 4-6 on priority list survey 3 – project ranked 1-3 on priority list survey	0.56

### Related Plans and Initiatives

The Town of Great Barrington worked with the Berkshire Regional Planning Commission (BRPC) in 2018 to develop this Complete Streets Prioritization Plan, which examines needs for Complete Streets in the town and identifies potential projects for implementation. Completion of this Tier 2 plan and other project implementation by the town will help it to advance several goals, objectives, and actions of the 2013 Master Plan.

#### [Great Barrington Master Plan \(2013\)](#)

The Great Barrington Master Plan is a recently completed advisory document that sets a direction for the community and is intended to guide policy decisions, investment and decision-making for the next 10-20 years. The plan is comprehensive, exploring goals and strategies for addressing a range of public services and life in Great Barrington. There are many potential Complete Streets projects and related initiatives in the Master Plan.

#### [Lake Mansfield Area Improvements Plan](#)

The Lake Mansfield Area Improvements plan was completed by Kyle Zick Associates in 2016. The plan is an exploration of ways to address concerns about Lake Mansfield Rd. that were identified in the Master Plan. The Lake Mansfield Plan presents several conceptual design iterations to improve biking and walking along the roadway, as well as enhance access and aesthetics to the public beach and recreation area.

#### [Preliminary Feasibility Analysis: Housatonic Bike Path](#)

This feasibility study was conducted by VHB in 2016. The study looks at options for a bike path from Housatonic village south to the Great Barrington downtown. Much of the plan is focused on potential off-road routes that take advantage of the relatively flat terrain near the Housatonic River. However, North Plain Rd, Van Deusenville Rd, and Division St. are also mentioned as potential on-road bike routes. Additionally,

#### [Sidewalk Inventory and Condition Analysis](#)

Great Barrington's sidewalks were evaluated by an engineering firm using a simple four-point scale from excellent to poor. This evaluation can be seen in **Figure XX**.

### Public Process

The public process used to identify and prioritize potential projects included the following outreach.

### Public Opinion Survey

Between March and April of 2018, a public opinion survey was available online through the website surveymonkey.com. Some paper copies were available at the Senior Center. The survey received 297 responses and asked mostly open-ended responses about complete streets needs throughout the community. A summary of the results of this survey can be found in **Appendix XX**.

### Open House / Public Forum

On April 25<sup>th</sup>, 2018 the Complete Streets Team held an Open House at the Great Barrington Senior Center. The Open House was attended by approximately 30 residents. The Open House reviewed Complete Streets basics as well as a draft project list. Attendees were asked to mark their favorite potential projects using a sticker dot. Foresight Land Services also attended to discuss the potential South Main St. Reconstruction Project with residents. This is potentially federally funded TIP project that is in the initial stages of design. A summary of sticker dot responses can be found in **Appendix XX**.

### Project Prioritization Survey

During April and May of 2018, a second public survey asked respondents to mark the three projects they felt were most important to construct. The survey received 314 responses. A summary of responses to this survey can be found in **Appendix XX**.

## 3. EXISTING CONDITIONS

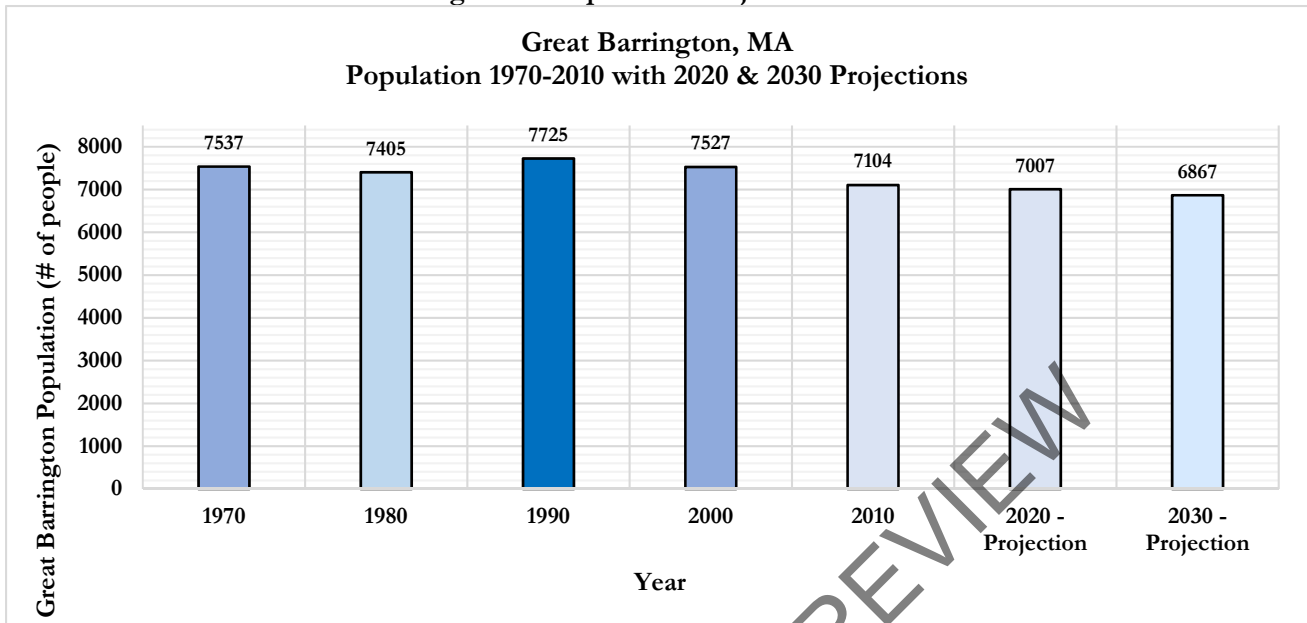
### Sociodemographic Profile

The Town of Great Barrington has around 7,104 year-round residents and has some population variability, with the overall trend indicating minor population loss since 1990. From the US Census estimate of population in 2010 (7,104), the UMass Donahue Institute<sup>14</sup> predicts that the population of the town will decline to approximately 6,867 residents by the year 2030, a decrease of 3.3% (see **Figure 3.1**). Overall population loss is common in Berkshire County, having steadily decreased in population since the 1970s. All but a few municipalities, are predicted to decline in population over the next few decades.

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<sup>14</sup> <http://www.donahue.umassp.edu/business-groups/economic-public-policy-research/expertise-services/economic-demographic-research>

Figure 3.1 Population Projections

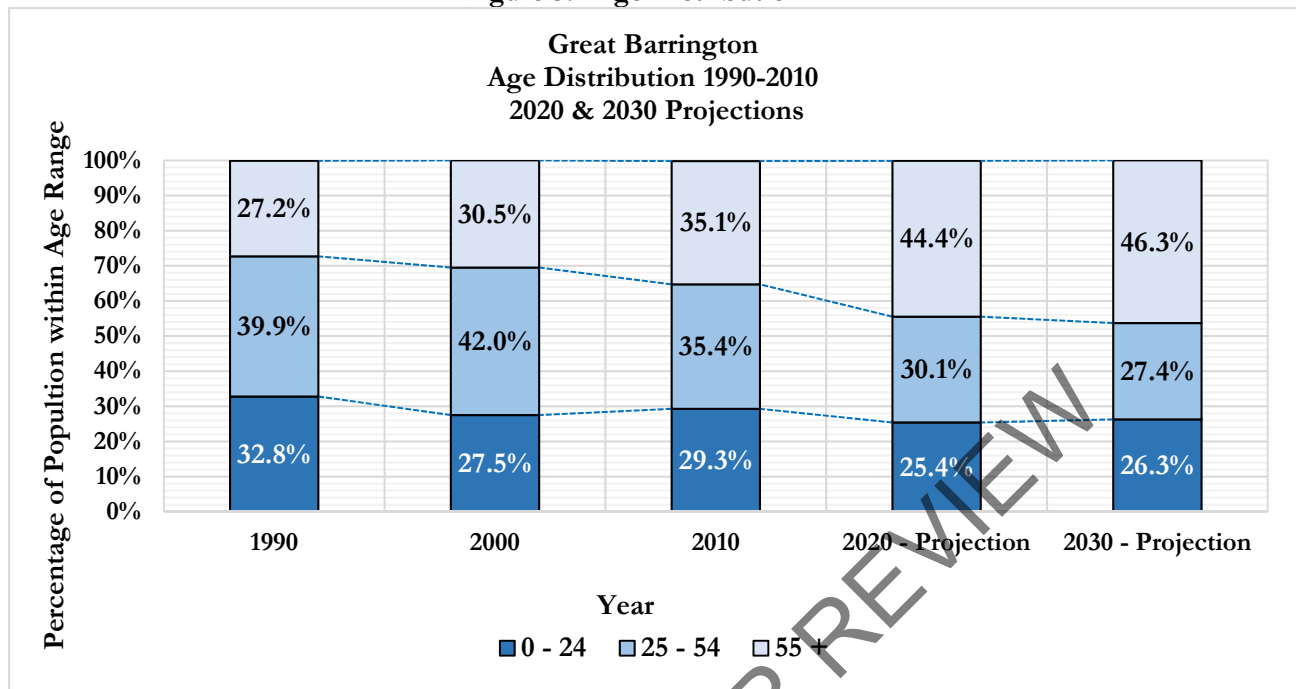


*Source:* U.S. Census: 1980, 1990, 2000 Census, 2010 Demographic Profile Data, & 2020-2030 Projections  
Courtesy of the UMass Donahue Institute

According to 2012-2016 American Community Survey 5-Year Estimates data, approximately 36% of the population is 55-years of age and older, and by 2030 it is expected that approximately 43% of the town's population will be over the age of 55 (See **Figure 3.2**). This aging trend is further reflected in Great Barrington's median age increase, moving from 34.8 years-old to 45.5 years-old from 1980-2010.<sup>15</sup> As aging in place becomes more popular among seniors, the composition of the population is an important consideration when planning and implementing various complete streets elements such as wayfinding, walkability, and roadway safety. Additionally, as a semi-rural community, Complete Streets improvements could be conceptualized as a form of public health infrastructure, enabling active transportation for older residents and creating a connected network of town amenities and recreation areas. (See **Figure 3.5**)

<sup>15</sup> Community Master Plan: Town of Great Barrington, MA. 2013. Volume 1.  
[https://www.townofgb.org/sites/greatbarringtonma/files/uploads/master\\_plan\\_volume\\_1\\_0.pdf](https://www.townofgb.org/sites/greatbarringtonma/files/uploads/master_plan_volume_1_0.pdf)

Figure 3.2 Age Distribution



*Source:* U.S. Census: 1980, 1990, 2000 Census, 2010 Demographic Profile Data, & 2020-2030 Projections  
 Courtesy of the UMass Donahue Institute

## Climate

There are on average 185 sunny days per year and about 89 precipitation days per year,<sup>16</sup> the latter of which may make travelling by bicycle or foot difficult at times throughout the year. Berkshire County receives snowfall throughout the winter months and sits at a higher elevation than most of Massachusetts. However, the summer months aren't as hot on average as the rest of the state, and many are great days to travel using active modes.

## Topography & Land Use Characteristics

Great Barrington owes much of its character to the natural landscape it inhabits. Located in the southern half of Berkshire County, Great Barrington is bordered by the Towns of West Stockbridge, Stockbridge, and Lee to the north, Monterey and Tyringham to the east, New Marlborough and Sheffield to the south, and Alford and Egremont to the West. Great Barrington is approximately a half-hour drive from Pittsfield, the region's largest city. Within the southern Berkshires, Great Barrington is the largest town, giving it a vibrant downtown surrounded by residential neighborhoods and commercial areas.

The Housatonic River flows roughly through the middle of town. In the north, Monument Mountain is a prominent landmark and popular hiking area. East Mountain defines topography to the south and is the home of Butternut ski area. Beartown State forest and steep topography form the eastern border of town. Rolling hills and agriculture are found west of downtown.

## Urban Area and Open Space

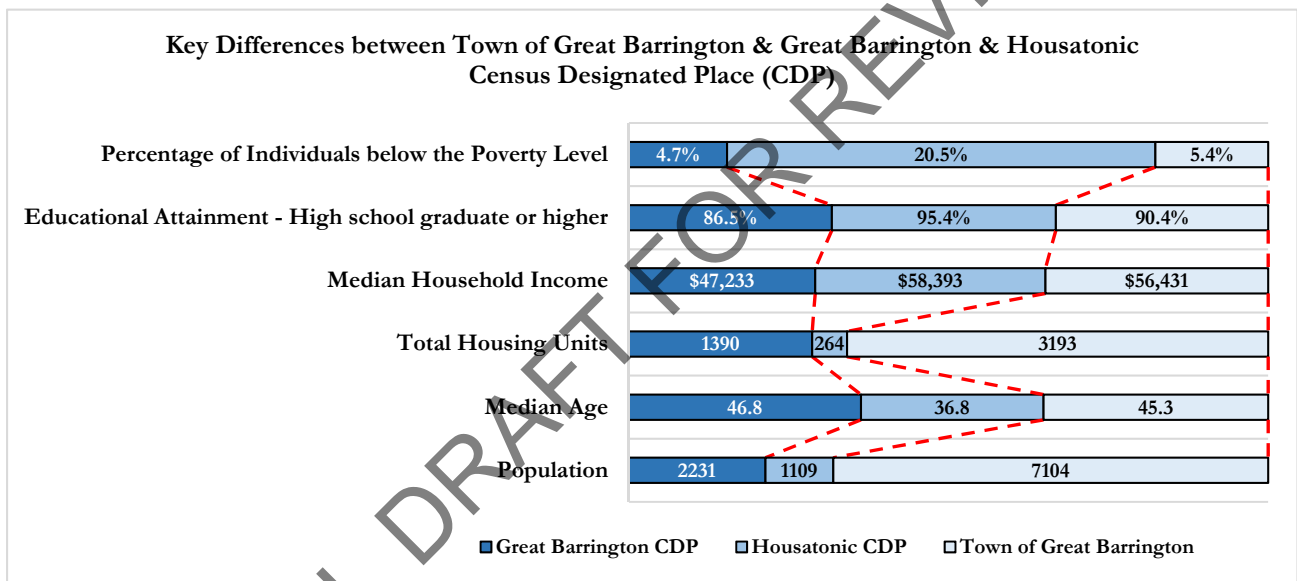
Great Barrington's varied landscape and underlying geographical beauty set the foundation for residents' quality of life. The natural surroundings offer a variety of ecosystem services – the benefits people derive from nature – for residents including clean air and water. Resulting from generations of stewardship from landowners, land trusts, advocacy groups, and town officials, one third or about 10,000 acres of the town's

<sup>16</sup> <https://www.bestplaces.net/climate/city/massachusetts/great%20barrington>

land area is protected and cannot be developed. A series of scenic and water resource laws and regulations ensure that Great Barrington’s valuable natural resources are protected for generations to come. Great Barrington as a town contains two areas defined by the U.S. Census Bureau as a ‘Census Designated Place’ (CDP). A CDP is often a village or neighborhood within a larger municipality that has been identified by the Census Bureau to allow for statistical comparisons with the larger community. Great Barrington CDP is located near the center of downtown, along the Housatonic River, and occupies 1.4 square miles of total land area. U.S. Route 7 passes through the center of the CDP and Route 23 passes through the CDP along Main Street. The Housatonic Village is the other area in town that is defined as a CDP. Located along the northern edge of town, the Housatonic CDP has a total land area of 0.97 square miles.

Great Barrington CDP has a total population of 2,231 and Housatonic CDP has a population of 1,109 residents. Notable differences are seen in median age, median household income, poverty levels, and educational attainment, (See **Figure 3.3**).<sup>17</sup>

**Figure 3.3 Differences among Town and Census Designated Places**



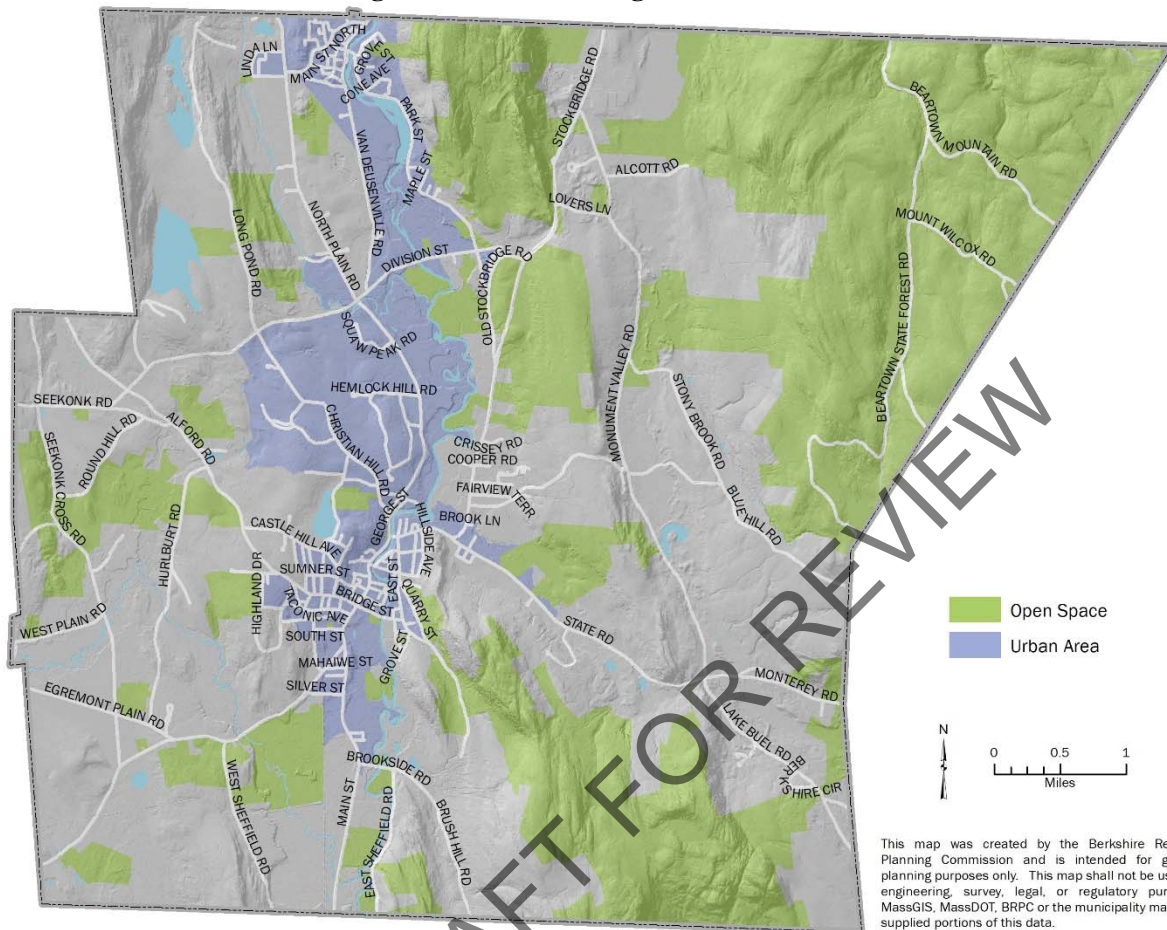
According to the U.S. Census, the Town of Great Barrington is approximately 45.8 mi<sup>2</sup> (29,312 acres) in size, with an average population density of approximately 166 residents per square mile.<sup>18</sup> There are 3,193 total housing units in town according to the 2012-2016 American Community Survey, 5-Year Estimates.<sup>19</sup>

<sup>17</sup> U.S. Census Bureau: 2012-2016 American Community Survey, 5-Year Estimates.

<sup>18</sup> <http://GreatBarrington-ma.net/about/demographics.html>

<sup>19</sup> <https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?src=CF>

Figure 3.4 Great Barrington Urban Area

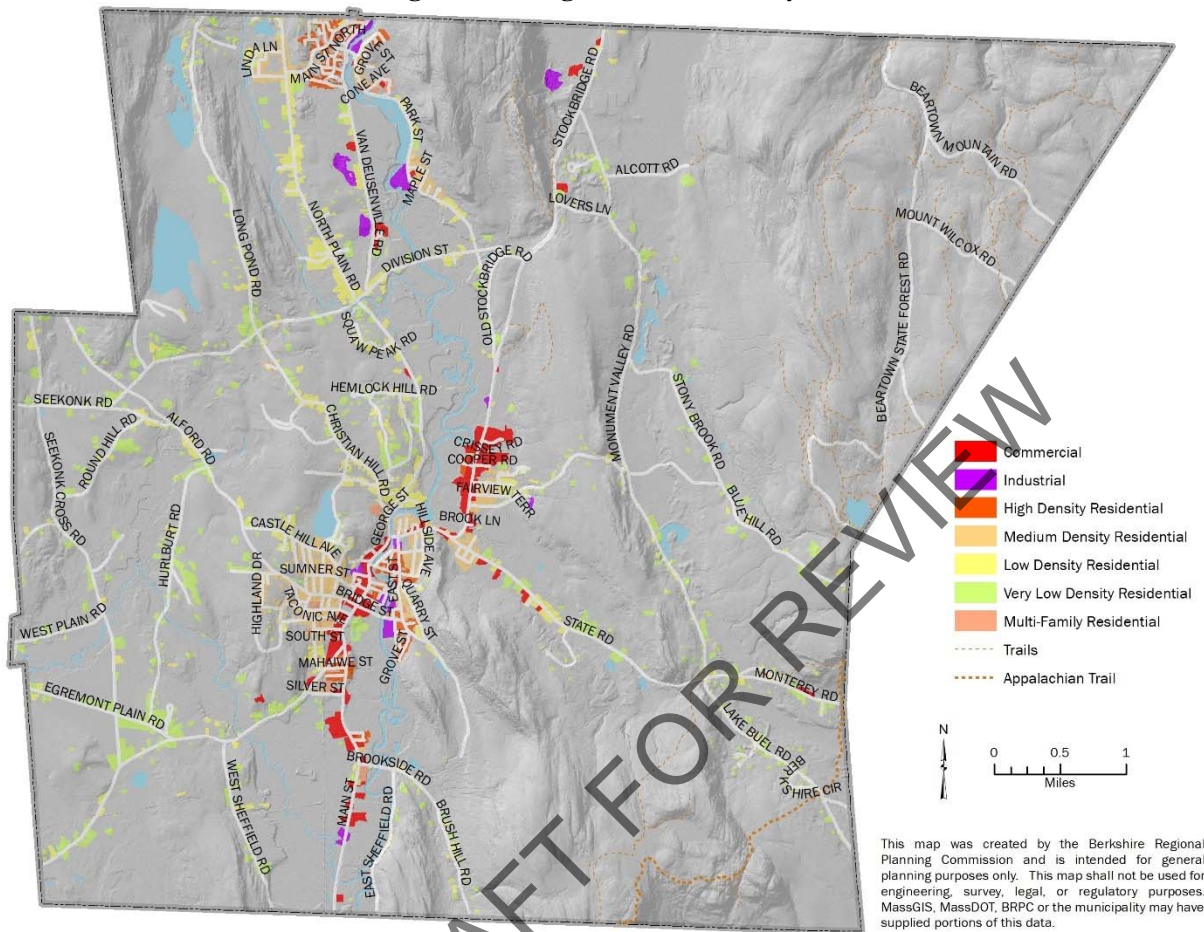


### Neighborhood Density

Neighborhood density, using MassGIS categories, can be seen in **Figure 3.5**. The densest neighborhoods in Great Barrington include those in downtown Great Barrington including the Fairview Terrace neighborhood along with neighborhoods located throughout Housatonic Village. Neighborhood density is derived from the MassGIS Land Use dataset that was last updated in 2005. High density neighborhoods are identified as areas where housing is located on lots smaller than  $\frac{1}{4}$  acre. Medium density neighborhoods are areas where housing is located on  $\frac{1}{4}$  to  $\frac{1}{2}$  acre lots. Low density neighborhoods are areas where housing is located on  $\frac{1}{2}$  to 1 acre lots. Finally, very low-density neighborhoods are areas where housing is located on lots greater than 1 acre in size and very remote rural housing. Notes from the land use dataset describe more about the residential land use interpretation process, stating: “residential densities were determined either from the parcel data, or by visually comparing the house to surrounding houses, observing the spacing between the houses as well as the relative amount of yard space between them. If housing in an area seemed to fall between two classes, the most accurate density was chosen to maintain consistency throughout blocks and subdivisions or neighborhoods.”



Figure 3.5 Neighborhood Density



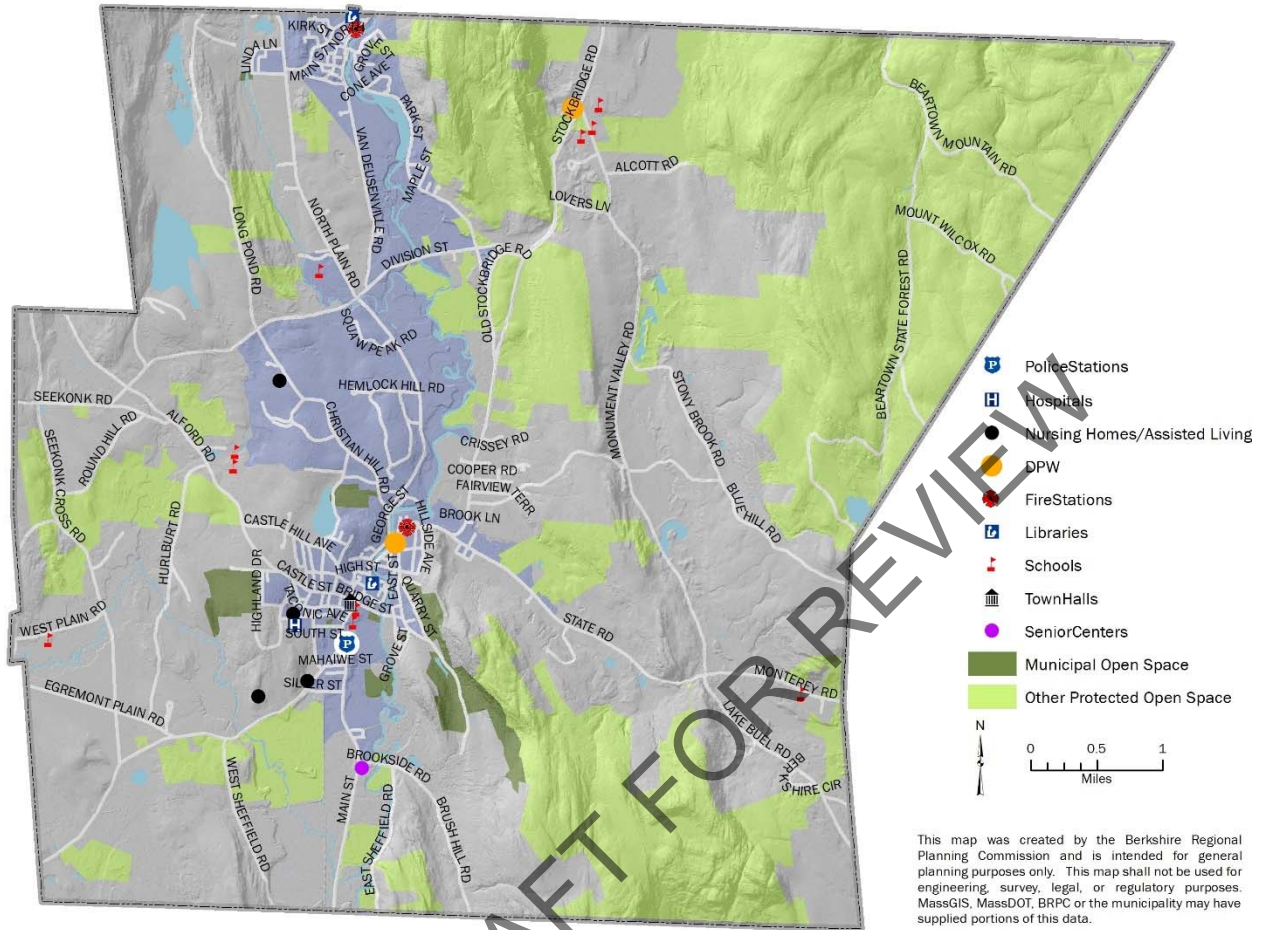
This map was created by the Berkshire Regional Planning Commission and is intended for general planning purposes only. This map shall not be used for engineering, survey, legal, or regulatory purposes. MassGIS, MassDOT, BRPC or the municipality may have supplied portions of this data.

### Public Facilities

The Town of Great Barrington is working to make the town more pedestrian- and bicyclist-friendly, with the goal of encouraging residents and visitors to walk or bike to their destinations. Whether running errands, visiting local businesses to shop or eat, or visiting one of the many cultural or natural attractions that the town has to offer – complete streets design elements will enable pedestrian mobility and access for day to day living. Providing safe routes and wayfinding to these destinations is key to getting more people out of cars and creating a pedestrian/biking environment.

An important step in creating this environment is to identify locations of key destinations throughout the town and to evaluate the condition of the routes between them. Identifying and assessing existing routes allows for targeted investments to ensure such routes are more robust and conducive to pedestrian mobility. Engaging in this exercise also helps identify areas of opportunity where new connections can be made. Destinations and attractions include businesses, institutions, cultural sites, and outdoor recreational areas that entice tourists and residents alike. The town of Great Barrington, as mentioned, contains a mix of quaint residential neighborhoods, a multitude of natural and scenic areas for recreational enjoyment, and offers a variety of boutique businesses for shopping and dining. **Figure 3.6.** illustrates areas or sites that are considered key destinations/attractions.

Figure 3.6 Town Destinations and Attractions



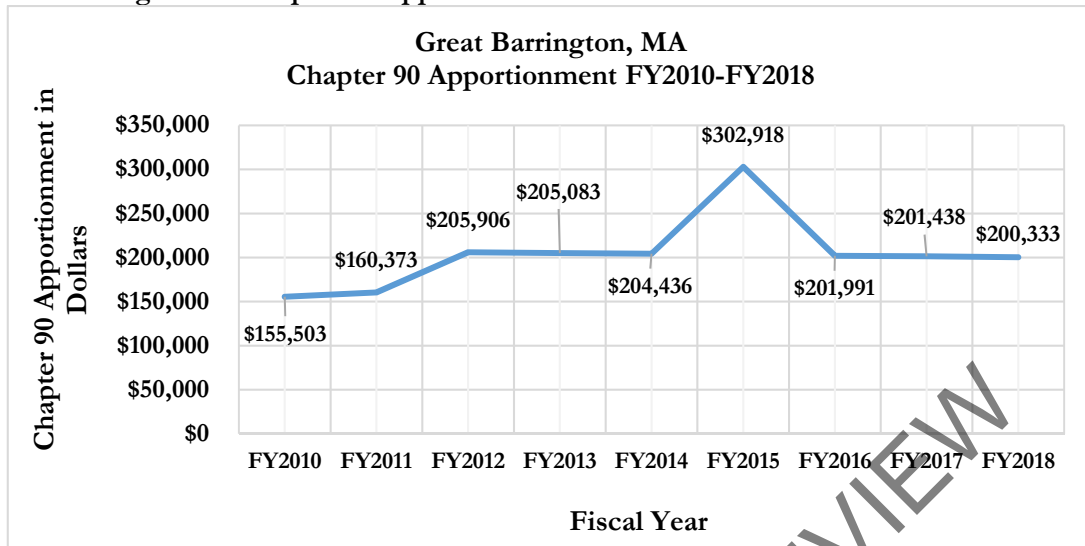
This map was created by the Berkshire Regional Planning Commission and is intended for general planning purposes only. This map shall not be used for engineering, survey, legal, or regulatory purposes. MassGIS, MassDOT, BRPC or the municipality may have supplied portions of this data.

## Fiscal Conditions

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

Chapter 90 apportionments fluctuate from year to year and are distributed based on a formula that factors in road miles (58.33%), population (20.83%) and employment (20.83%). In Great Barrington, Chapter 90 funding is generally around \$200,000 each fiscal year (FY), with a significant increase in 2015 to over \$302,000 due to additional statewide funding that fiscal year that was allocated by the Governor Baker administration (see **Figure 3.7**).

Figure 3.7 Chapter 90 Apportionment Fiscal Year 2010-Fiscal Year 2018



Source: Massachusetts Department of Transportation: Highway Division

## Transportation Conditions

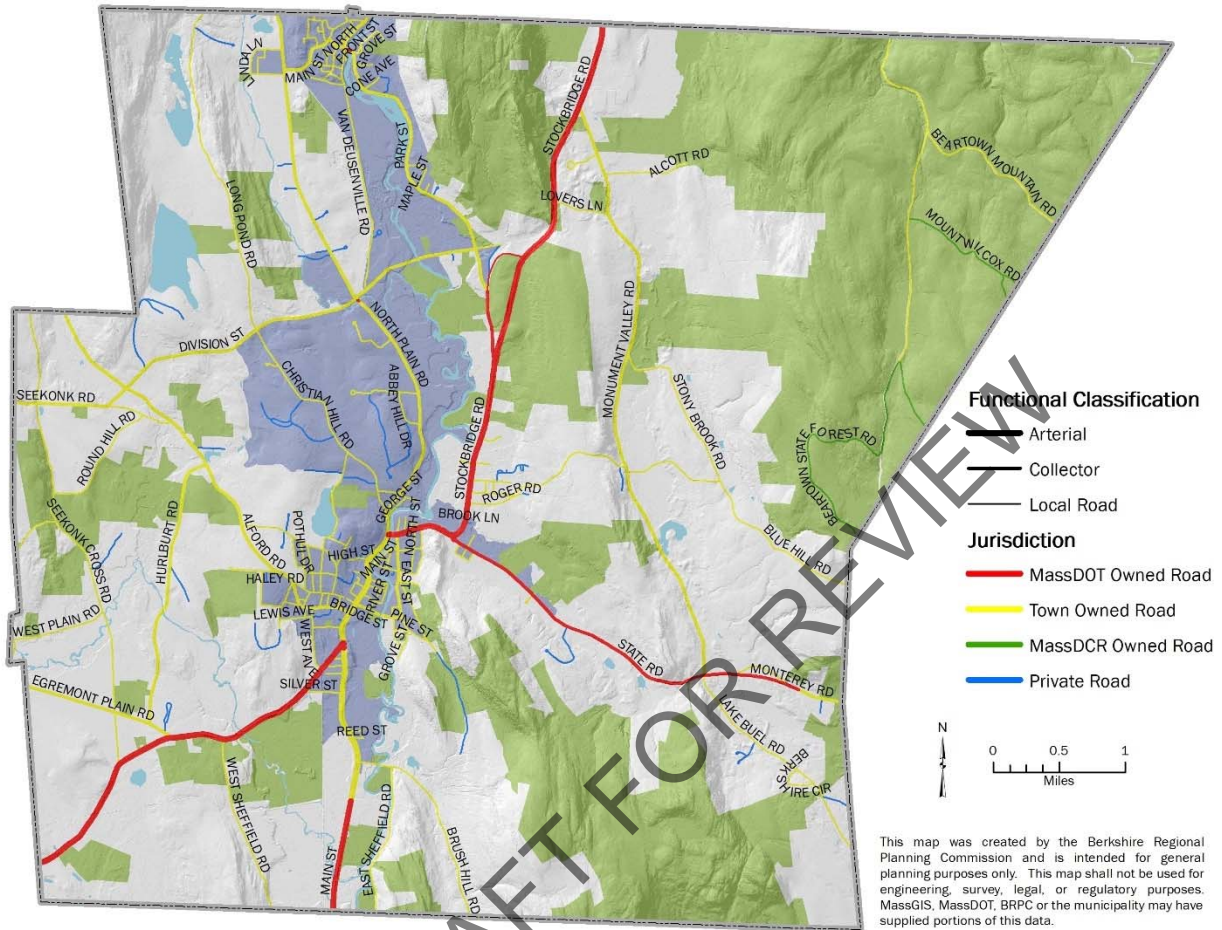
### Road Network

There are just over 108 miles of road in Great Barrington, of which about 19 miles are under MassDOT's and MassDCR's jurisdiction, 10.28 miles are privately-owned and the remaining 79.10 miles are town accepted roads (see **Table 3.1**). (See **Figure 3.8**). The major arterial roads, including Route 7, Route 41, and Route 183 are mostly in good condition. The major caveat with arterial roads in Great Barrington is most lack any type of pedestrian accommodations. In rural communities, arterial routes often provide the main connectors to other portions of a municipality, meaning that even along major routes, the creation of pedestrian facilities must be given consideration. Minor arterials including North Plain Road and major collectors including Alford Road and Division Street contain

Table 3.1 Great Barrington Road Jurisdiction

Jurisdiction	Mileage	Percent of Roads
MassDOT	13.41	12.3%
MassDCR	5.91	5.4%
Town	79.10	72.8%
Private	10.28	9.5%
<b>Total</b>	<b>108.70</b>	<b>100.0%</b>

**Figure 3.8 Roads by Jurisdiction**



*Functional Classification*

Functional classification is a way of grouping roadways into classes or systems based on character and type of traffic service they are intended to provide. All roadways are grouped into one of three classes (principle/minor arterials, major/minor collectors and local roads), 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 3.2**).

**Table 3.2 Functional Classification Descriptions<sup>20</sup>**

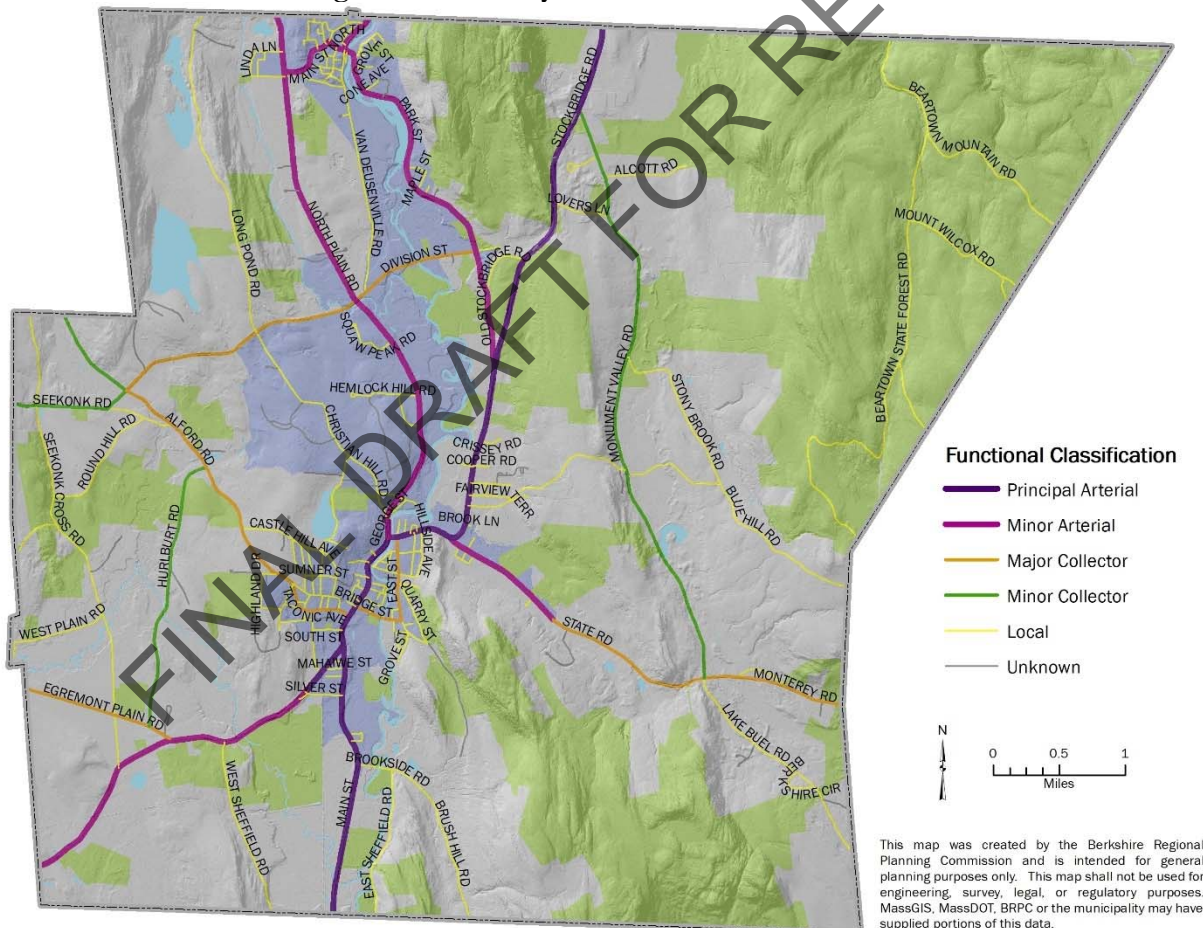
Functional System	Services Provided
Arterial	Provides the highest level of service at the greatest speed for the longest uninterrupted distance, with some degree of access control.
Collector	Provides a less highly developed level of service at a lower speed for shorter distances by collecting traffic 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.

<sup>20</sup> Table adapted from Federal Highway Administration, Flexibility in Highway Design. Available from: <http://www.fhwa.dot.gov/environment/publications/flexibility/ch03.cfm>

In Great Barrington, principal and minor arterial roads including Route 7, Route 41, and Route 183 are mostly in good condition. The major caveat with arterial roads in Great Barrington is most lack any type of pedestrian accommodations. In rural communities, arterial routes often provide the main connectors to other portions of a municipality, meaning that even along major routes, the creation of pedestrian facilities must be given consideration. Along minor arterials including North Plain Road and major collectors including Alford Road and Division Street, several locations contain dangerous curves and poorly maintained intersections that are especially dangerous for non-motorists.

Route 7 is the only road considered a principal arterial in Great Barrington. Route 41 and a portion of Route 183 are considered minor arterials. Alford Road, Division Street, Egremont Plain Road, and the other portion of Route 183 leading to Monterey Road are classified as major collectors. Monument Valley Road, Hurlburt Road, and Seekonk Road are classified as minor collectors. Arterials and collectors are eligible to receive federal funding to implement projects that for example, seek to improve non-motorized, pedestrian-centered infrastructure. This includes monies made available through the Transportation Improvement Program (TIP). The remaining roads in Great Barrington are all considered local roads. (See **Figure 3.9**). Local roads are not eligible for federal funding.

**Figure 3.9 Roads by Functional Classification**



### Speed Limits

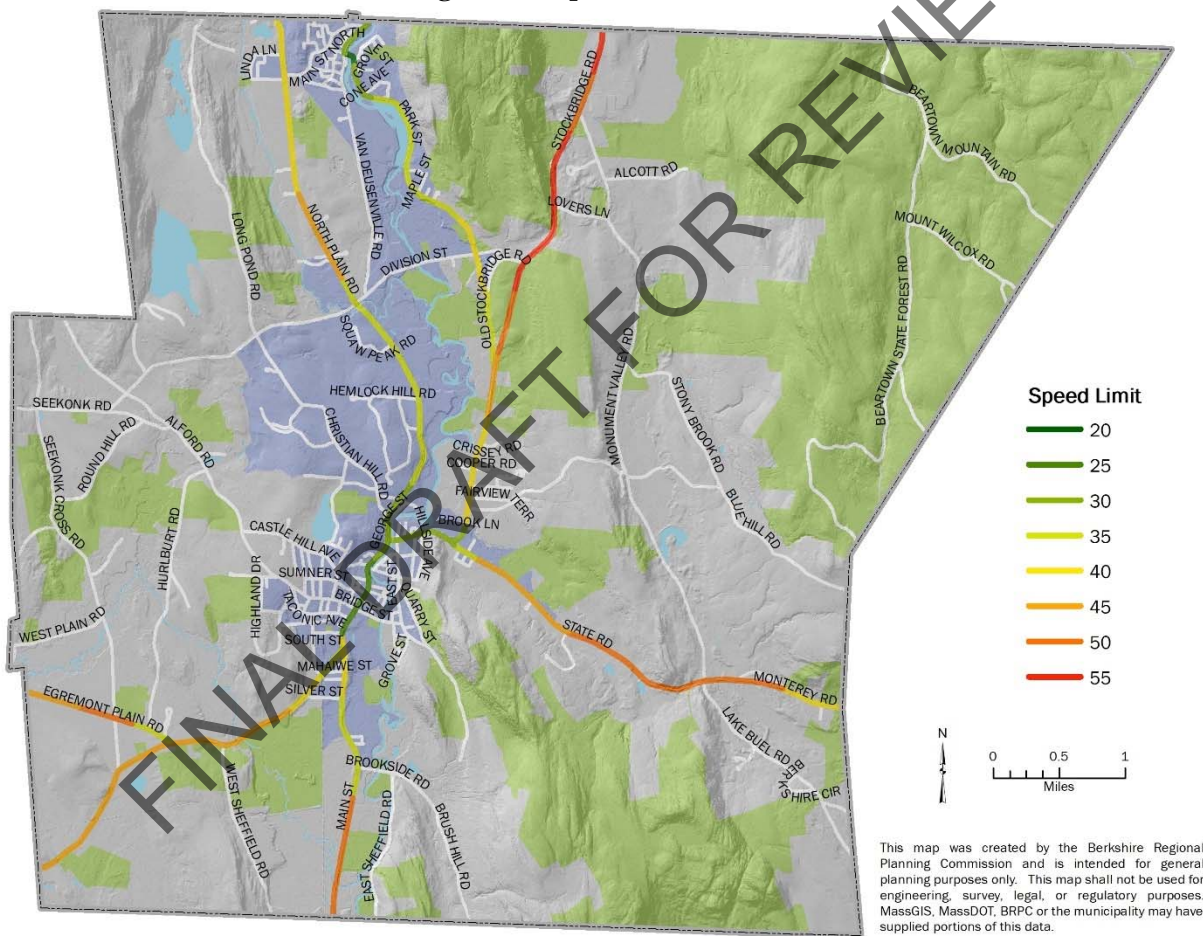
Speed limits, in conjunction with other factors like traffic volume, shoulder width, sight distance, have an impact on both the actual and perceived safety of nonmotorized travelers when they travel along a roadway

without a dedicated facility. When speeds are higher, the severity of accidents involving nonmotorists is drastically increased, and separation from fast moving vehicle traffic is preferred. On low-volume roadways with high speed limits, ensuring safety for nonmotorized travelers within the corridor is critical for safety (actual and perceived). When speeds are high and there is little room to accommodate nonmotorists, looking at parallel routes, or separate facilities is important.

Route 7 has speed limits ranging from 40 to 55. Other arterials and collectors tend to be in the 30-40 mph range. Downtown has speed limits in the 20-30 mph range. Many of the local roads in town do not have a posted speed limit. A map of speed limits is shown below in **Figure 3.10**

The 2016 Municipal Modernization Act allows communities to reduce the speed limit to 25mph on unposted roadways without the need for a traffic study. However, this can only occur on roadways within a “thickly settled” area. Much of the village center would likely qualify as thickly settled based on building density.

**Figure 3.10 Speed Limits**



### Road Surface Type

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

In general, vehicle speeds on unpaved roadways are lower due to road width and the surface type. Traffic volumes are generally lower as well. Low traffic speeds and volumes can make these roadways ideal for pedestrians, particularly recreational walkers. However, the surface type may create issues with accessibility as required by the Americans with Disabilities Act (ADA). ADA regulations requires that all accessible floor and ground surfaces be “firm, stable and slip resistant” and other ADA guidance notes that “most loose materials, including gravel will not meet these requirements unless properly treated to provide sufficient surface integrity and resilience<sup>21</sup>.” Additionally, unpaved roads are sometimes used by cyclists, particularly those who ride mountain bikes with wider tires, and may be preferred due to relatively low traffic volumes. The narrow tires of many road bikes limit their use on unpaved roadways.

The majority (82.6%) of roads in Great Barrington are surface-treated (i.e. asphalt, concrete, pavement, etc.), followed by gravel/stone and unimproved, graded dirt. Only 11.4% of the town’s roads are classified as having an ‘unknown’ surface type (See **Table 3.3** and **Figure 3.11**).

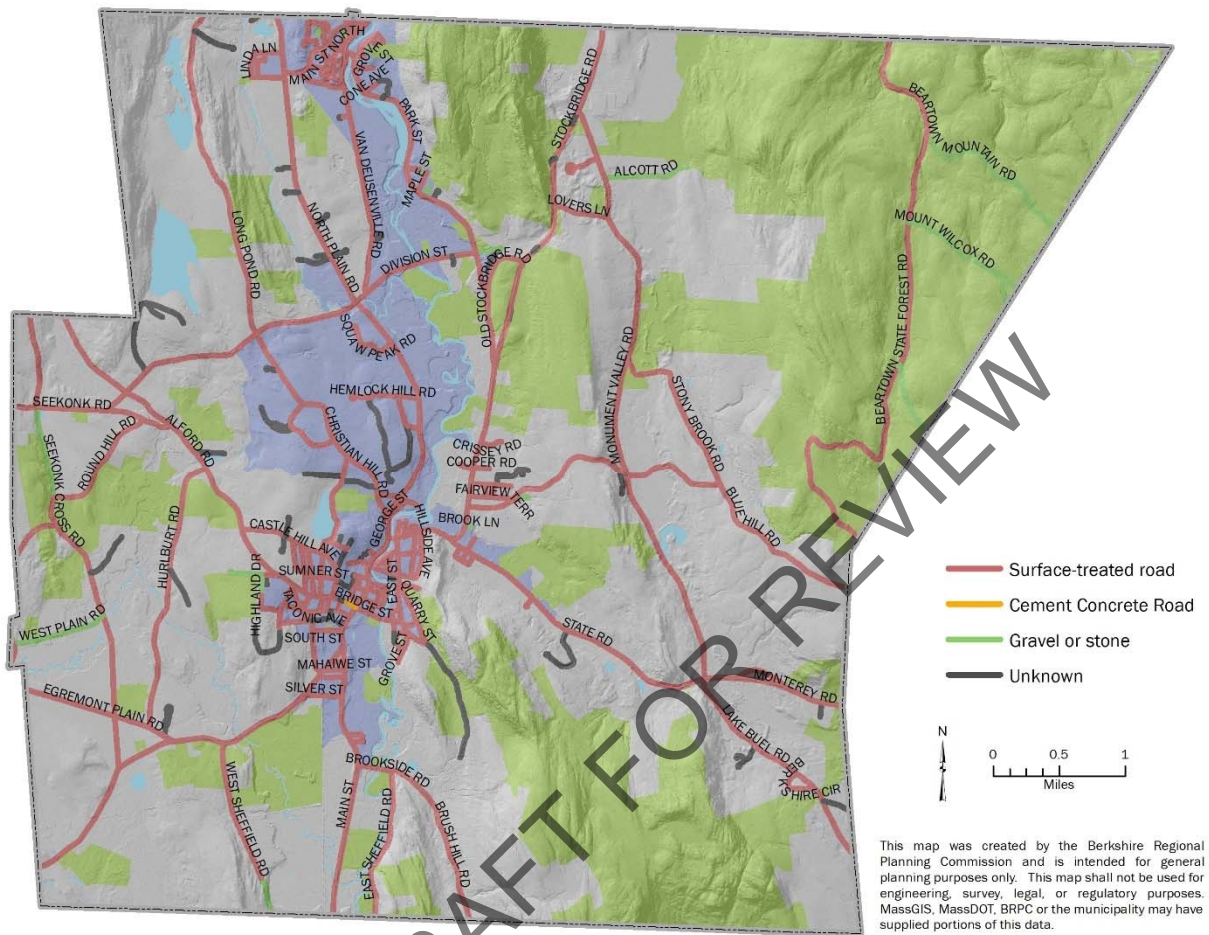
**Table 3.3 Great Barrington Road Surface**

Surface Type	Mileage	% of Roads
Surface-Treated	89.76	82.6%
Gravel/Stone	6.54	6%
Unknown	12.4	11.4%
<b>Total</b>	<b>108.70</b>	<b>100%</b>

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<sup>21</sup> <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 3.11 Roads by Surface Type



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.

## Pedestrian Conditions

### Sidewalk Network

Numerous studies show that millennials<sup>22</sup> and baby boomers<sup>23</sup> prefer walkable neighborhoods, with walkability serving as an important variable in housing and neighborhood choices. Those findings demonstrate the importance of creating walkable neighborhoods, especially for communities seeking to attract and retain young professionals while also allowing older adults to comfortably age-in-place.

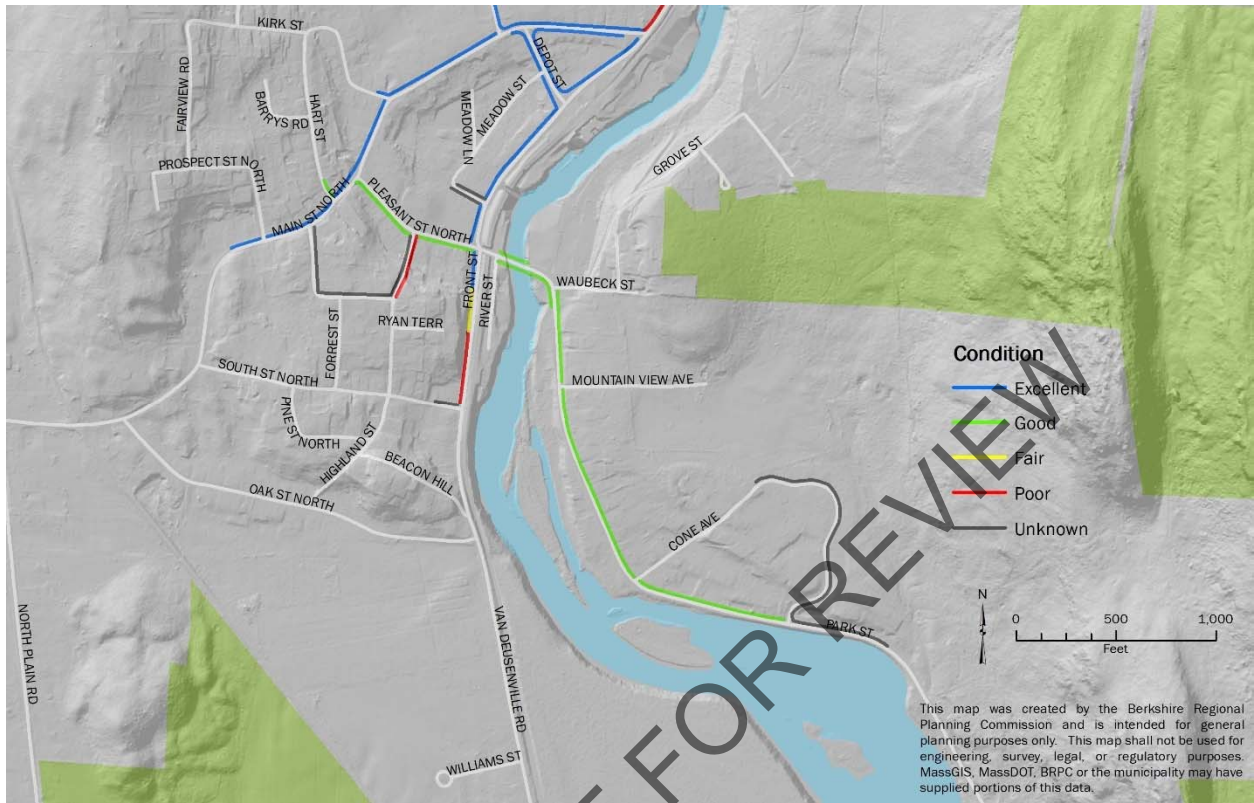
In total, Great Barrington has a little over 13 miles of sidewalk along town roads (See **Figure 3.12**). Great Barrington’s Master Plan states that 6.6 miles of sidewalk, or about half, were rated as ‘poor’ by the town’s Department of Public Works (DPW). Funding to maintain and replace sidewalks in poor condition remains extremely limited – meaning it would take another 11 years to replace all sidewalks rated as poor based on existing allocations of money for roadway projects.

<sup>22</sup> <https://www.strongtowns.org/journal/2016/2/12/americans-want-walkable-neighborhoods>

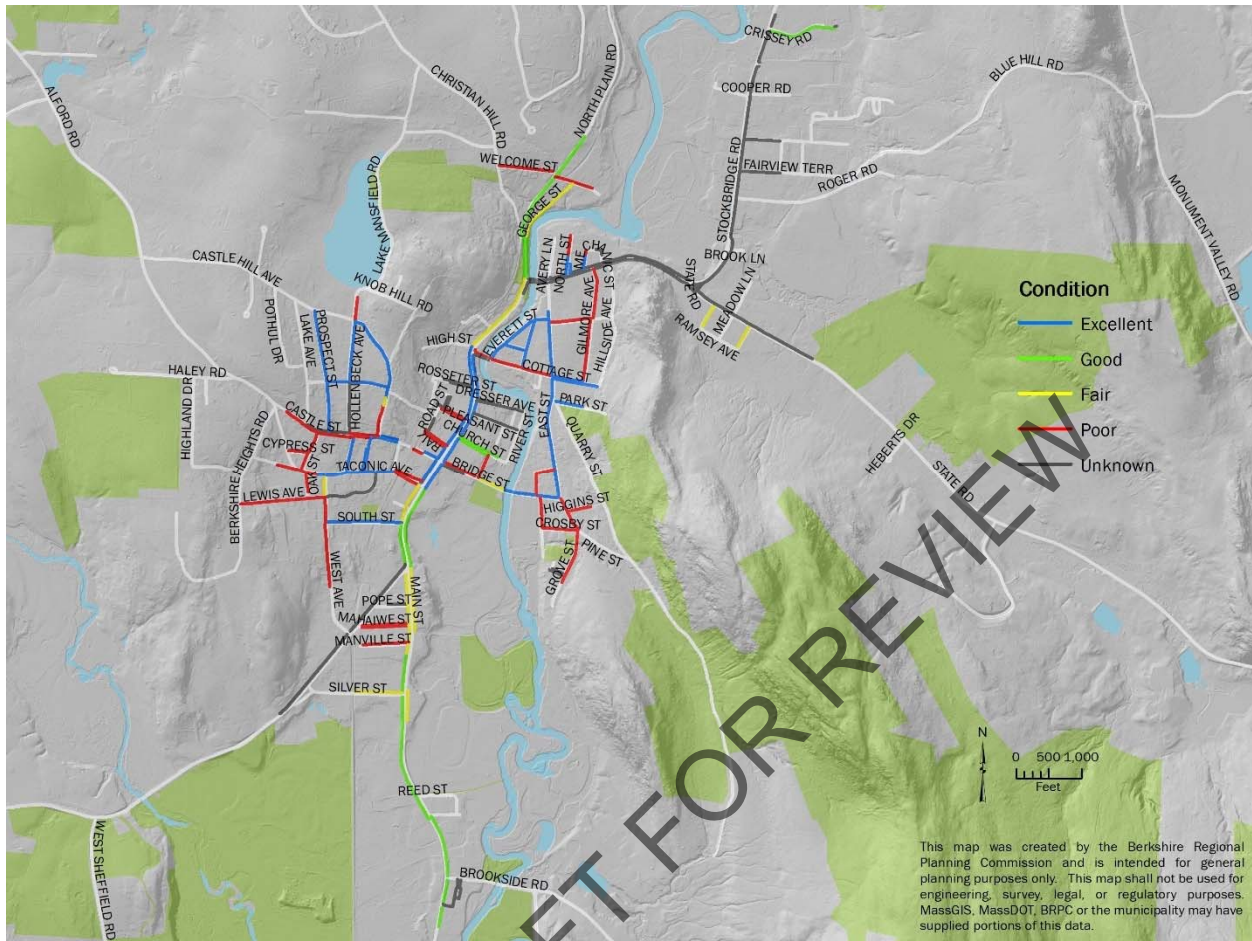
<sup>23</sup> <https://www.curbed.com/2017/7/25/16025388/senior-living-walkability-survey>



Figure 3.12 Existing Sidewalk Network



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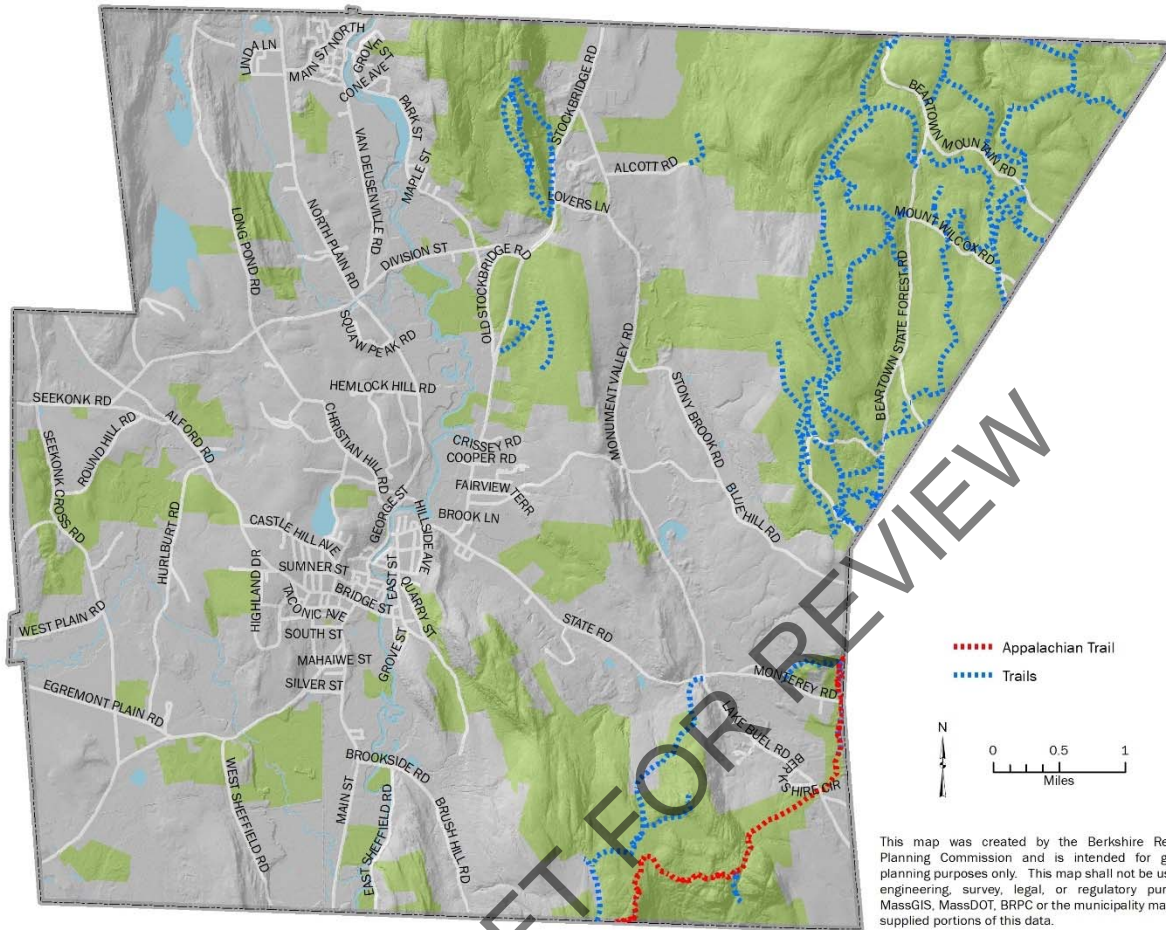


### Crossings

Most crossings in Great Barrington are at unsignalized intersections. The town has no existing Rapid Rectangular Flashing Beacons (RRFB) at unsignalized mid-block crossing locations. Notable crossings are those in the downtown area which receive heavy pedestrian traffic compared to other areas of town, which also includes some mid-block crossings. Another notable crossing is the raised traffic calming crossing located near the public beach on Lake Mansfield Rd.

### Off-Road Pedestrian Network and Trails

The Appalachian Trail is the longest hiking-only footpath in the world, stretching over 2,000 miles along the east coast from Springer Mountain in Georgia to Mt. Katahdin in Maine. A small portion of the Appalachian Trail passes through the southeast corner of Great Barrington. With 69% of Great Barrington covered by forest, it isn't difficult to stumble onto a number of preserves containing both formal and informal trails. One notable trail was recently completed in Lake Mansfield Forest. Other notable trails include those found in Beartown State Forest and in town recreation areas, like McCallister Park. The Great Barrington Riverwalk, which travels along the Housatonic River from the Rite-Aid south to Bridge St. has been designated as a National Recreation Trail by the National Park Service. Moreover, students at Bard College at Simon's Rock use an off-road trail to travel between campus and Alford Rd. / Castle Hill Ave. and then on town streets to downtown.

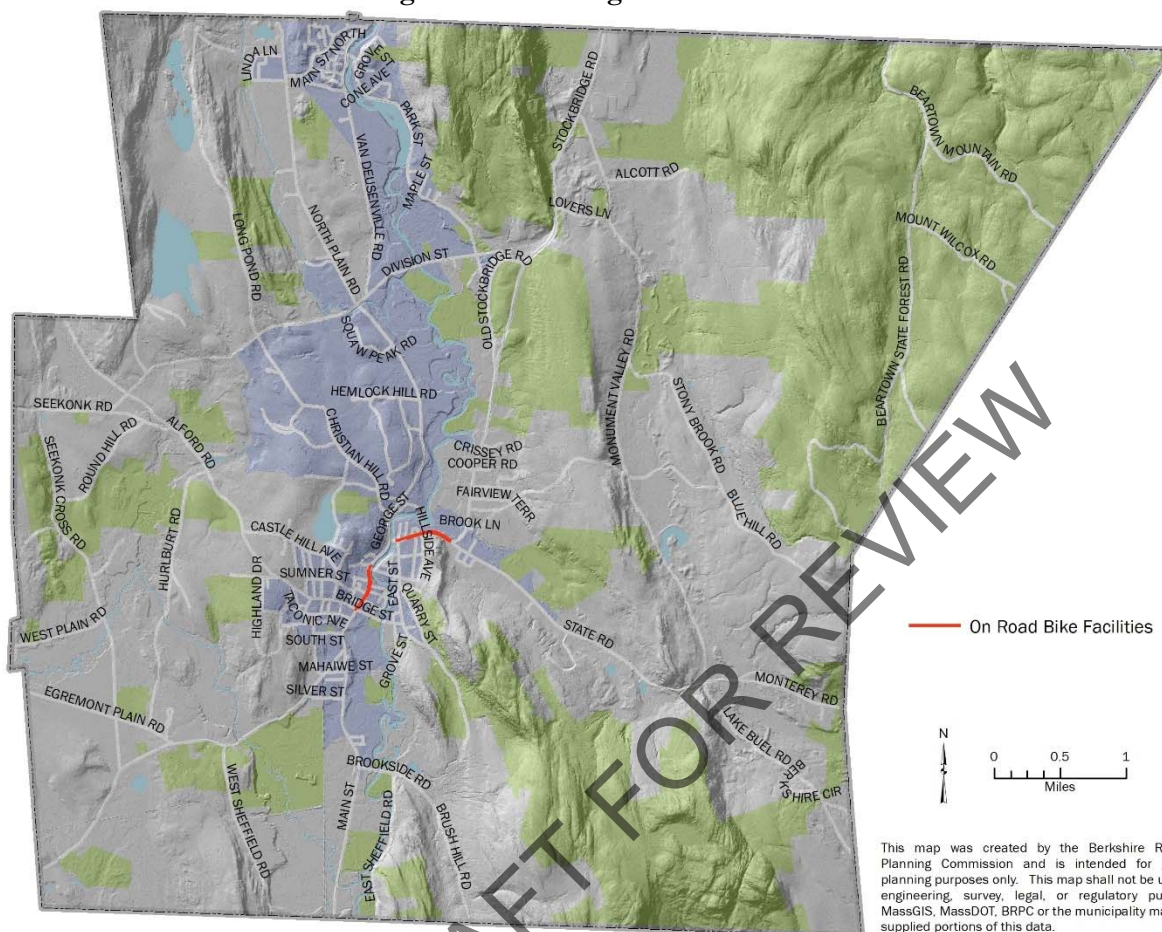


## Bicycle Conditions

### On-Road Bicycle Conditions

Great Barrington has two segments on-road bicycle facilities, both located along Route 7. Uneven pavement and unmaintained gravel roads may make on-road bicycling difficult in some areas. However, roads with better pavement condition tend to experience higher speeds, which can result in safety issues for cyclists.

Figure 3.13 Existing Bike Facilities



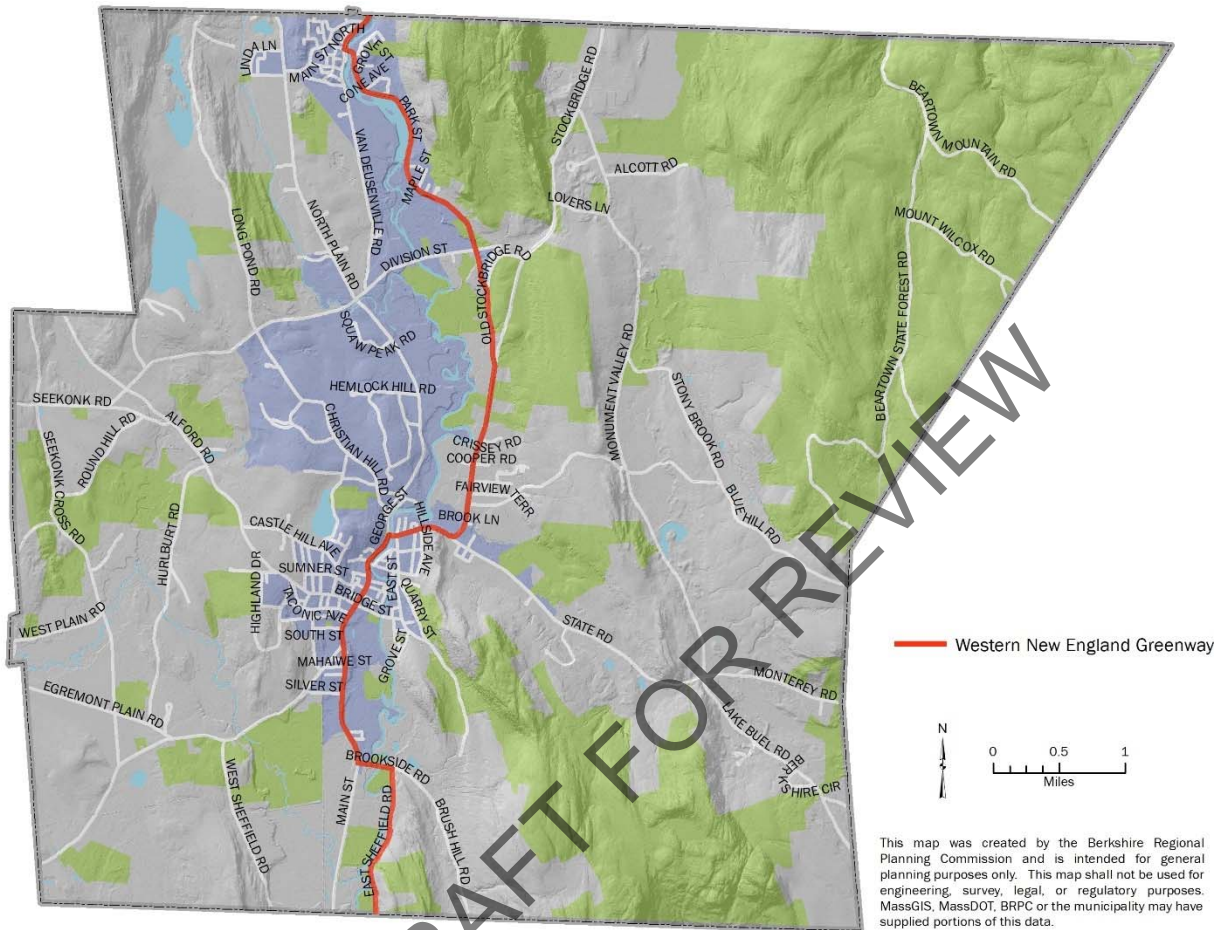
### Western New England Greenway

The Western New England Greenway, or U.S. Bicycle Route 7, is a multi-segment, multi-state bike route that links New York City and Montreal, passing north to south directly through the middle of Berkshire County.<sup>24</sup> The route largely follows Route 7 through the western portions of Connecticut, Massachusetts, and Vermont. The route links with East Coast Greenway at the Merritt Parkway near Norwalk, CT at its Southern terminus, and with Quebec's Route Verte at its northern terminus at the Canadian Border. Most of the route is located along existing roadways, which in Berkshire County are generally running along or parallel to Routes 7, 8, and 2. However, the Greenway does take advantage of the Ashuwillticook Rail Trail, the region's existing shared-use path, which passes through Lanesborough, Cheshire, and Adams (See **Figure 3.13**). In Great Barrington, the Greenway travels entirely on-road, primarily along Route 183, Route 7 and then Brookside Rd. before entering Sheffield.

There are plans to add wayfinding and signage to the multi-state route in the coming years. The effort will be coordinated across state lines to ensure a consistent look and feel to the route. This effort is not yet underway as of summer 2018 but is a short- to mid- term plan of the Western New England Greenway's Executive Team.

<sup>24</sup> <http://wnegreenway.org/>

Figure 3.14 Western New England Greenway Route in Great Barrington



### Bicycle Competency Mapping

Competency mapping is a method of classifying roadways that indicates the level of experience that is generally required for cycling on the roadway and accounts for various roadway characteristics including shoulder width, traffic speed and volume, or the presence of existing facilities, such as bike lanes. BRPC evaluated all roadways in the town as part of this planning process. A flow-chart explaining the categorization process is described in **Figure 3.15** and a description of the five competency levels can be found in **Table 3.4**. Final mapped competency levels are found in **Figure 3.16**.

The levels rank competency needed to safely cycle on a road and describe both the easiest and the most difficult areas to ride. The levels enable a quick reading of how useable the existing roadway network is for residents of and visitors to the Great Barrington area. For example, most cyclists will be able to use Level 1 categorized routes, but far fewer will feel comfortable using level 4 or 5 roadways. The resulting map shows the roads that are most difficult to navigate and is useful for identifying gaps and barriers to nonmotorized travel as well as the planning of alternative routes on easier to travel routes to bypass higher competency level roadways.

**Table 3.4 Bicycle Competency Levels<sup>25</sup>**

Competency Level	Route Ease/Safety	Usability
Level 1	Easiest routes	Learning to bike, beginner, casual, experienced, expert - <b>everyone</b>
Level 2	Easy routes	Beginner, casual, experienced, expert – <b>most people</b>
Level 3	Moderately difficult routes	Casual, experienced, expert – <b>confident, but cautious riders</b>
Level 4	Difficult routes	Experienced, expert – <b>experienced riders</b>
Level 5	Most difficult	Expert (rider with a lot of experience riding on-road) – <b>expert riders, with caution</b>

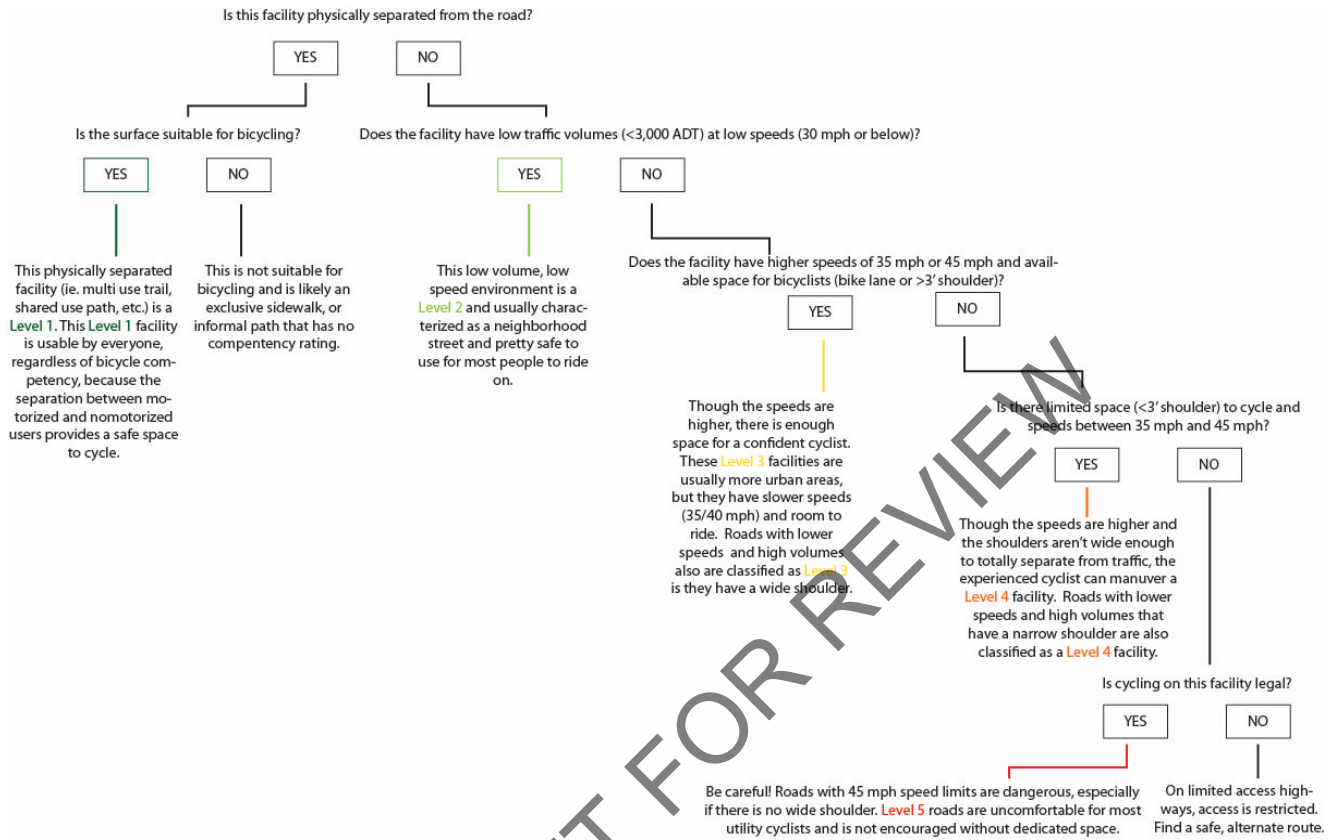
There are no Level 1 routes in Great Barrington. Many residential, low volume roads have been determined to be Level 2 or Level 3 roads, allowing most riders to feel comfortable riding them, however, steep grades (which are not accounted for in the competency mapping) may limit their potential for use by casual cyclists. There are many Level 2 facilities in Great Barrington and these are usually low-volume neighborhood streets where cyclists have room to ride. Most of the higher volume “main” roads in town have been rated at Level 4 or 5.

Most of the minor arterial and collector roads in the town have been rated as Level 3, 4 and 5. Level 4 and 5 facilities suggest major barriers for cyclists, whether in the form of high speeds and volumes or lack of separation from motorized traffic. Safety improvements and dedicated facilities should be considered on these roadways so that riders are separated from the higher volumes/speeds.

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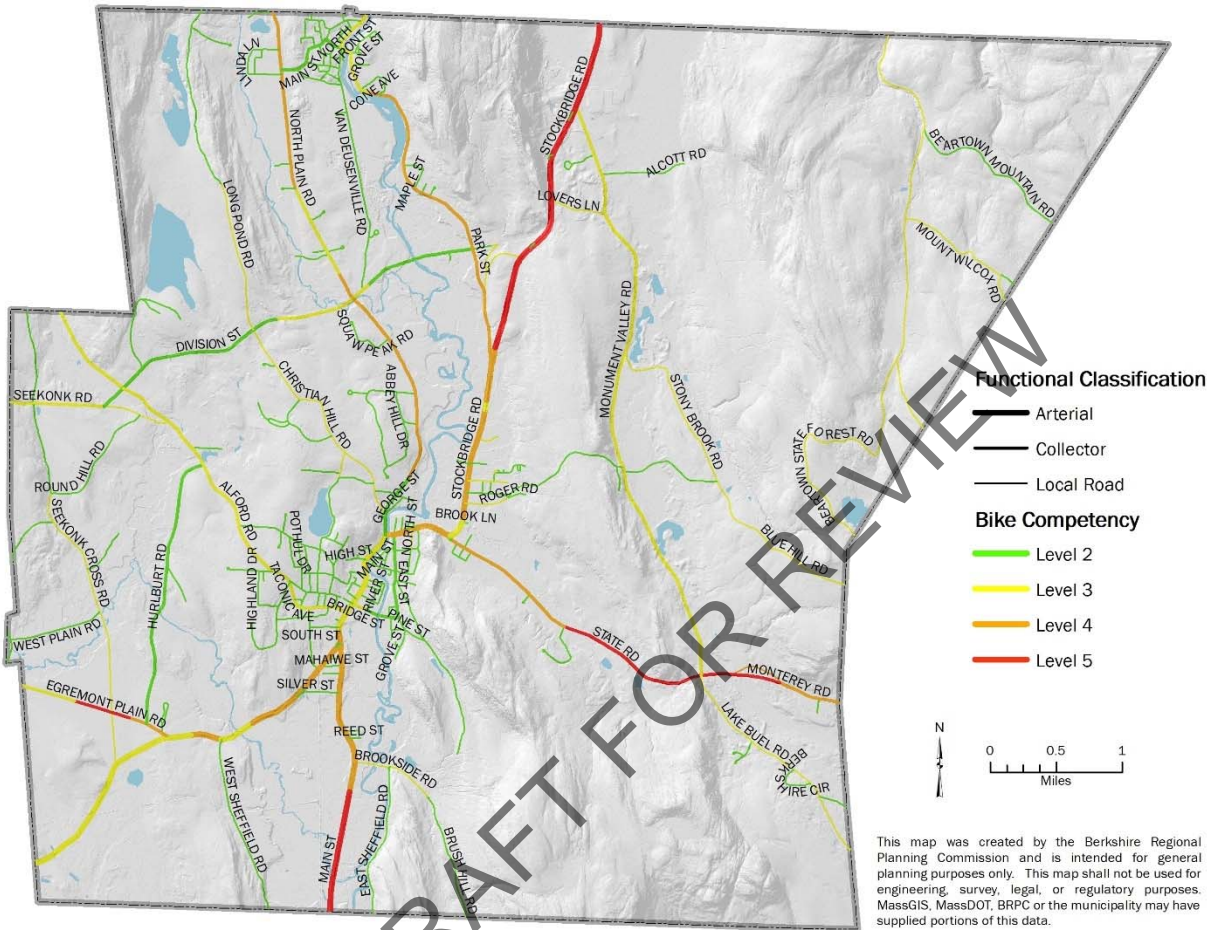
<sup>25</sup> Adapted from Pikes Peak Area Council of Governments. 2015. Regional Nonmotorized Transportation System Plan.

Figure 3.15 Bicycle Competency Classification Methodology



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Figure 3.16 Bicycle Competency Map

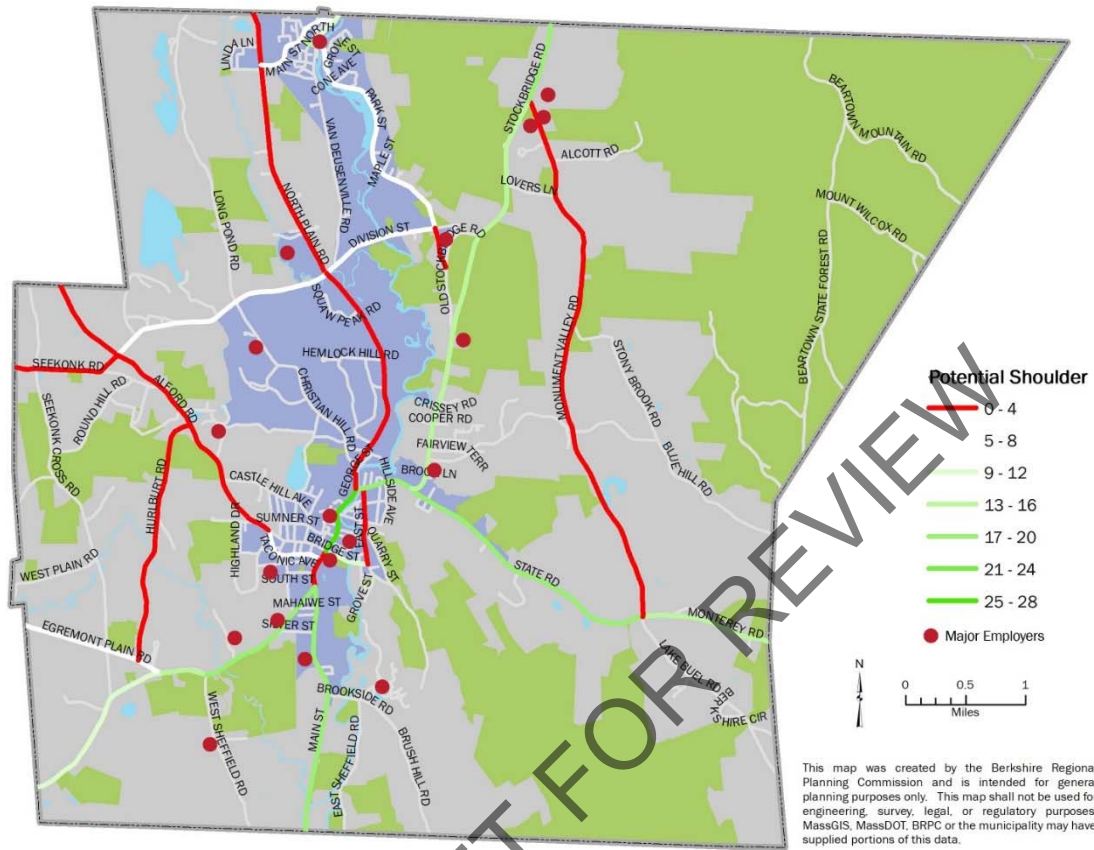


*Shoulder Width*

**Figure XX** identifies shoulder width on major roadways (collector and above) throughout town in relation to major employers. While bicycle competency mapping takes the existing shoulder width into account, it does not directly describe the existing road width available for biking, as **Figure XX** below does. Most arterial roadways in Great Barrington have very wide shoulders available for cycling. However, high traffic volumes and vehicle speeds may deter cyclists in these areas. Other major roadways, such as Route 41 and 183 have relatively narrow shoulders. While traffic volumes and speeds may be a little lower than on Route 7, these areas may still deter many cyclists, particularly inexperienced ones.



Figure 3.17 Potential Shoulder Width



### Off-Road Bicycle Conditions

There are no dedicated off-road cycling routes in Great Barrington.

### Bicycle Parking

bicycle rack locations?

### 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. 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 2012 to 2014. 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 **Table 3.5**.

MassDOT uses crash data collected over a three-year 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 **Table 3.5**:

- Identify route that has the highest percentage of non-fatal crashes.
- Identify highest concentration of traffic accidents related to weather and time of month.
- Identify percentage (%) of accidents resulting in property damage and non-fatal injuries.

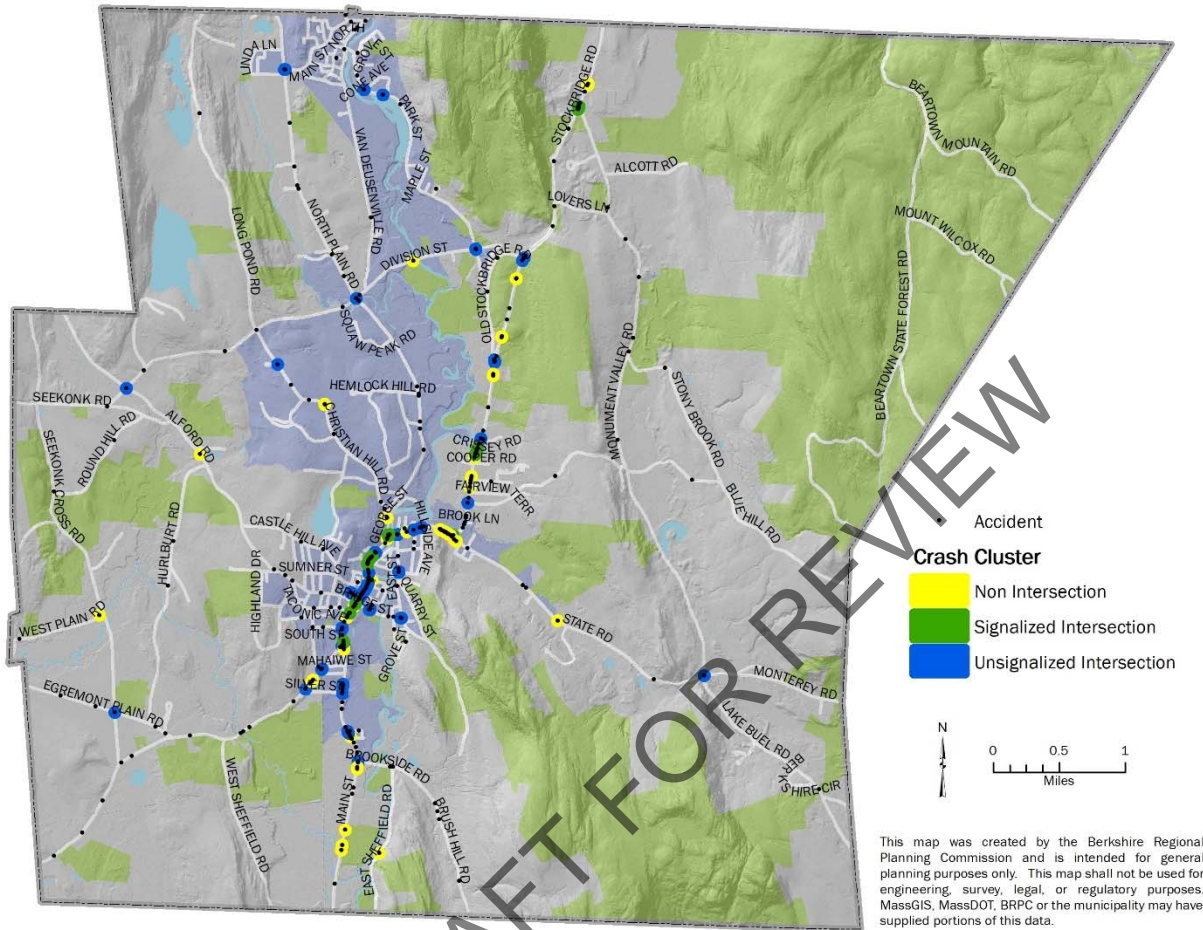
**Table 3.5 Great Barrington Accident Statistics, 2013-2015**

GREAT BARRINGTON ACCIDENT STATISTICS 2013 - 2015				
<b>CRASHES BY TYPE</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> Over this 3-year horizon, 2015 appears to have had more total crashes and fatalities than 2013 or 2014. However, crashes involving only property damage during these years were at their highest in 2014.
Total Crashes	216	221	250	
Fatality	0	0	2	
Non-fatal Injury	47	40	47	
Property Damage Only	165	221	9	
Not reported	4	8	9	
<b>COLLISION TYPE</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> 2014 and 2015 appear to stand out – with 2014 having the highest number of sideswipes and single vehicle crashes and 2015 having the most angle and rear-end collisions over this 3-year period.
Angle	50	38	70	
Head-on	8	6	5	
Not Reported	5	6	5	
Rear-end	65	60	67	
Rear-to-rear	1	5	5	
Sideswipe	26	39	34	
Single Vehicle Crash	61	67	64	
<b>DAY OF WEEK</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> Thursdays and Fridays during 2015 were particularly dangerous. These two days saw the highest number of accidents over any other day and year between 2013 and 2015 (aside from Mondays in 2014 which saw the exact same number of collision on Thursdays in 2015).
Sunday	21	26	19	
Monday	30	41	35	
Tuesday	30	24	37	
Wednesday	31	30	32	
Thursday	34	27	41	
Friday	42	30	53	
Saturday	28	43	33	
<b>TIME OF DAY</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> Between 2013 and 2015, the number of collisions occurring between 4:00 a.m. and 10:00 a.m. increased by 7 total collisions each year. 2015, between the times of 10:00 a.m. and 4:00 p.m., saw the highest number of collisions.
4 AM - 10 AM	29	36	43	
10 AM -4 PM	94	95	126	
4 PM - 10 PM	78	67	70	
10 PM - 4 AM	15	23	11	
<b>MONTH</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> February and June of 2015 had the highest total number of collisions, both months seeing exactly 28 total collisions.
January	24	26	21	
February	17	12	28	
March	12	17	15	
April	15	12	14	
May	20	17	21	
June	16	16	28	
July	24	18	28	
August	13	22	23	
September	9	15	19	

October	21	18	16		
November	24	25	16		
December	19	25	21		
<b>WEATHER</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>NOTES:</b> Most collisions occur on clear days, with 2015 at the front of the pack.	
Clear	132	115	163		
Clear/Cloudy	5	4	8		
Clear/Other	17	17	19		
Cloudy	28	33	20		
Cloudy/Other	-	3	1		
Cloudy/Rain	10	15	12		
Cloudy/Snow	1	3	5		
Rain	10	12	7		
Snow	10	4	4		
Snow/Sleet	-	1	2		
Other	-	1	-		
<b>ROAD SURFACE</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>		<b>NOTES:</b> Most collisions occur on dry road surfaces, again with 2015 topping both 2014 and 2013.
Dry	160	156	197		
Wet	42	43	27		
Ice	4	7	5		
Snow/Slush	9	13	16		
Sand/Dirt/Mud	1	1	2		
Not Reported	-	1	3		
<i>Data Source: MassDOT 2012-2014 Crash Data</i>					

[https://www.massdot.state.ma.us/Portals/8/docs/traffic/SafetyAudit/District1/GreatBarringtonMainSt\\_121012.pdf](https://www.massdot.state.ma.us/Portals/8/docs/traffic/SafetyAudit/District1/GreatBarringtonMainSt_121012.pdf)

Figure 3.17 Accident Locations



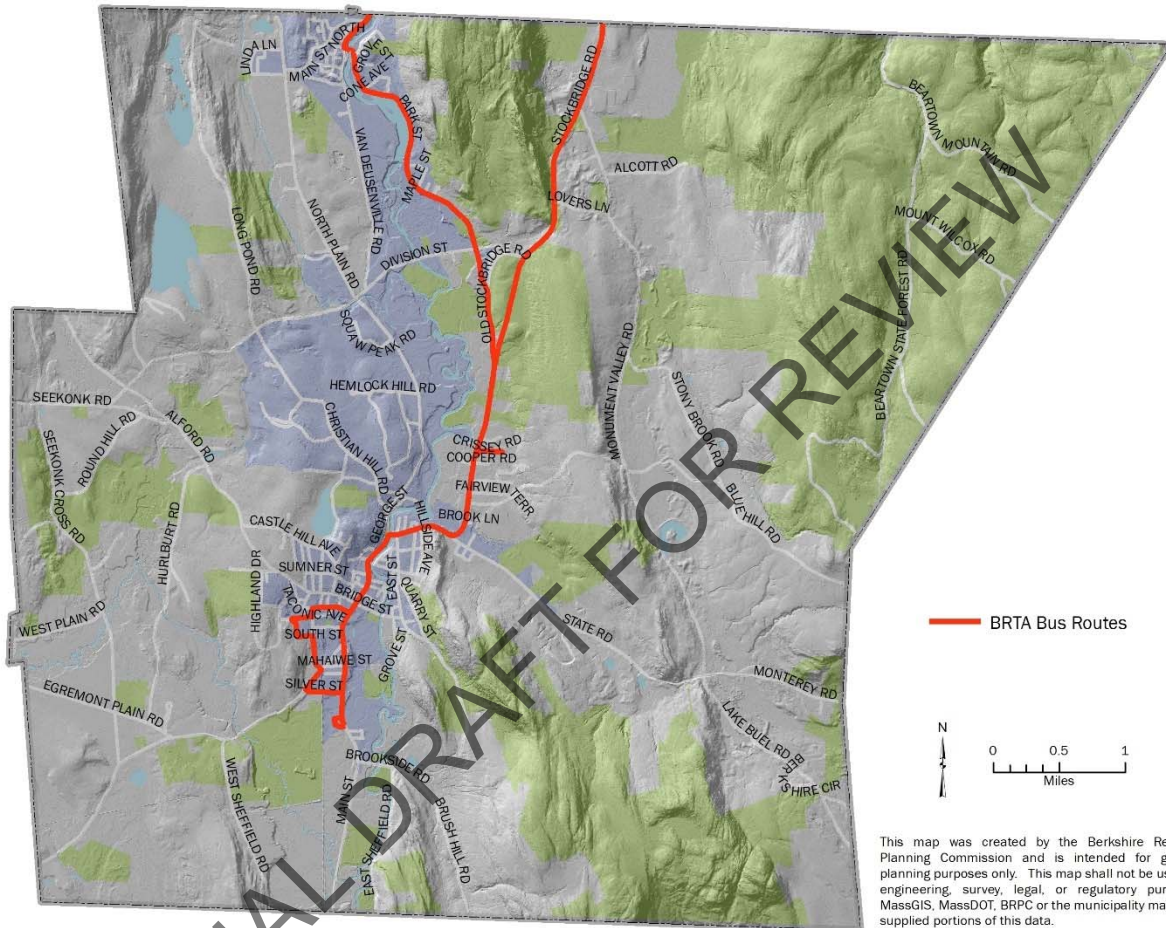
This map was created by the Berkshire Regional Planning Commission and is intended for general planning purposes only. This map shall not be used for engineering, survey, legal, or regulatory purposes. MassGIS, MassDOT, BRPC or the municipality may have supplied portions of this data.

FINAL DRAFT FOR REVIEW

## Public Transportation (BRTA Bus Route)

BRTA provides the only fixed-route public transportation service in the Berkshires. Great Barrington is located at the southern extent of fixed-route service in the county. The bus route loops through town passing by major destinations such as Housatonic, commercial areas along Route 7, downtown, and Fairview Hospital.

Figure 3.18 Great Barrington BRTA Bus Route



## 4. NEEDS

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

### Major Challenges

#### *Connecting Housatonic Village and the Great Barrington Downtown*

It has long been a vision of the town to provide a dedicated biking and walking connection between the Great Barrington Downtown and the Village of Housatonic. There are many potential routes, and all have significant advantages and disadvantages. In 2016, the town worked with VHB to plan for an off-road shared-use path between the two town centers. However, this route will not be easy to construct and would necessitate significant concessions from landowners.

#### *Narrow and Constrained Roadways Limit Potential for New Nonmotorized Infrastructure*

Most roadways in Great Barrington are narrow and constrained by existing development, topography, wetlands, vegetation and other conditions. This limits the ease with which nonmotorized facilities could be added to existing roadways, and greatly increases the cost that would be required to do so.

#### *Speeding Vehicles Deter Nonmotorized Users*

High vehicle speeds can deter pedestrians and cyclists from using the roadway, particularly where no nonmotorized facilities are present. This coupled with the absence of pedestrian facilities and cycling facilities in areas outside of the Great Barrington downtown area and Housatonic discourages traveling along these roads via walking or biking. The town may want to consider implementing speed feedback signs or other traffic calming measures that slow vehicle speeds in key areas.

#### *Most Easy to Cycle Areas found West of Downtown*

The roads west of downtown and connecting to the Town of Egremont are some of the easiest to cycle on. Traffic volumes are relatively low and the topography (with some exceptions) is gentle enough for cyclists of varying abilities to feel comfortable on. Unfortunately, this relatively small area isn't necessarily where recreational cyclists want to ride or where utility cyclists can access jobs, retail, or other services.

#### *Some Key Recreation Areas lie just outside the Town's Sidewalk Network*

Key neighborhood recreation areas are located just beyond the existing sidewalk network. These areas include Old Maids Park, McCallister Park, Cemeteries in Housatonic, and the Lake Mansfield recreation area.

#### *Lack of Cycling Infrastructure*

The only dedicated cycling infrastructure in Great Barrington are two short sections of bike lane, located along Main St. and Route 7 west of the Brown Bridge.

#### *The Route 41 / North Plain Rd. Underpass and Surrounding Area is a Challenge for Nonmotorized Users*

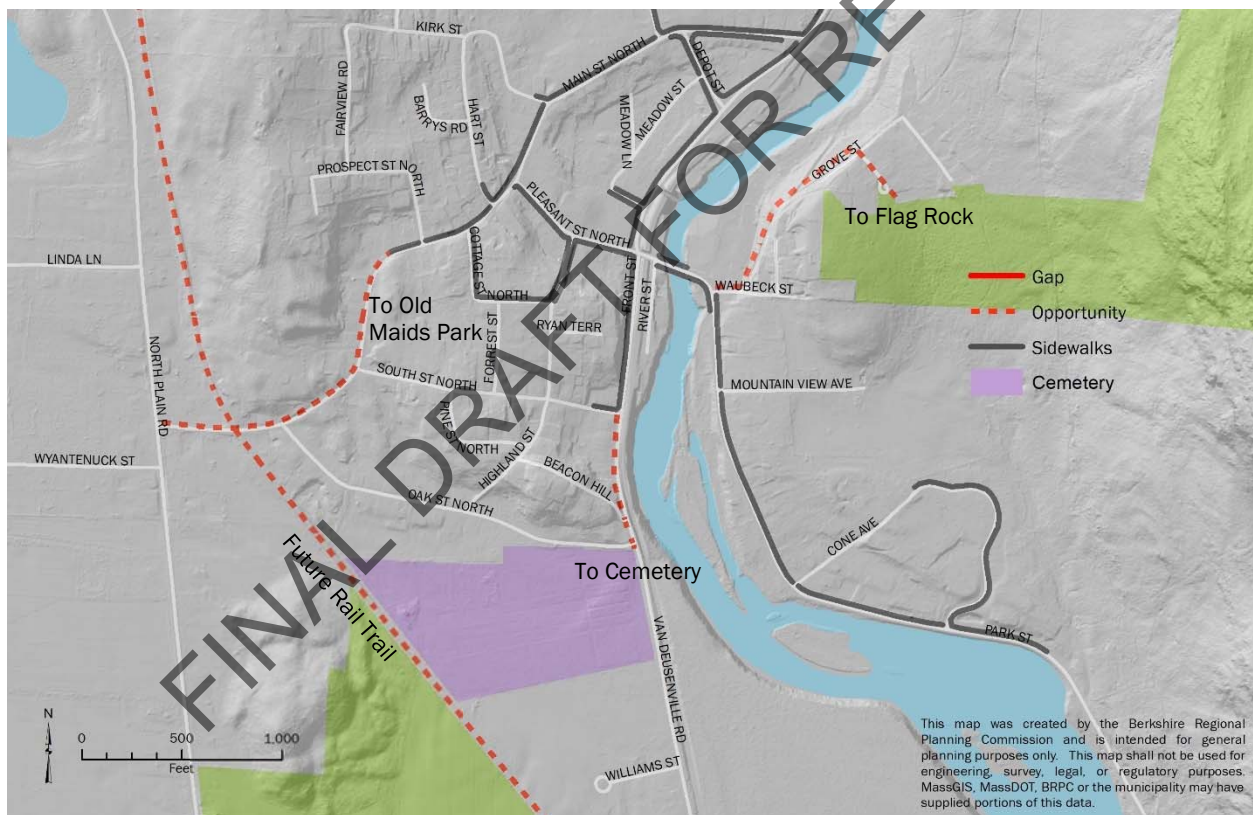
Route 41 / North Plain Rd. narrows and turns sharply as it passes under the rail bridge near the intersection of George St. The narrow underpass cannot accommodate a sidewalk and can be intimidating for cyclists. Additionally, south of the underpass, sidewalk only exists on the west side of the road. Pedestrians travelling to downtown from George St. must cross the road to use the sidewalk, and limited visibility to the north can make this daunting. The town should consider long term accommodations to alleviate this "pinch point."

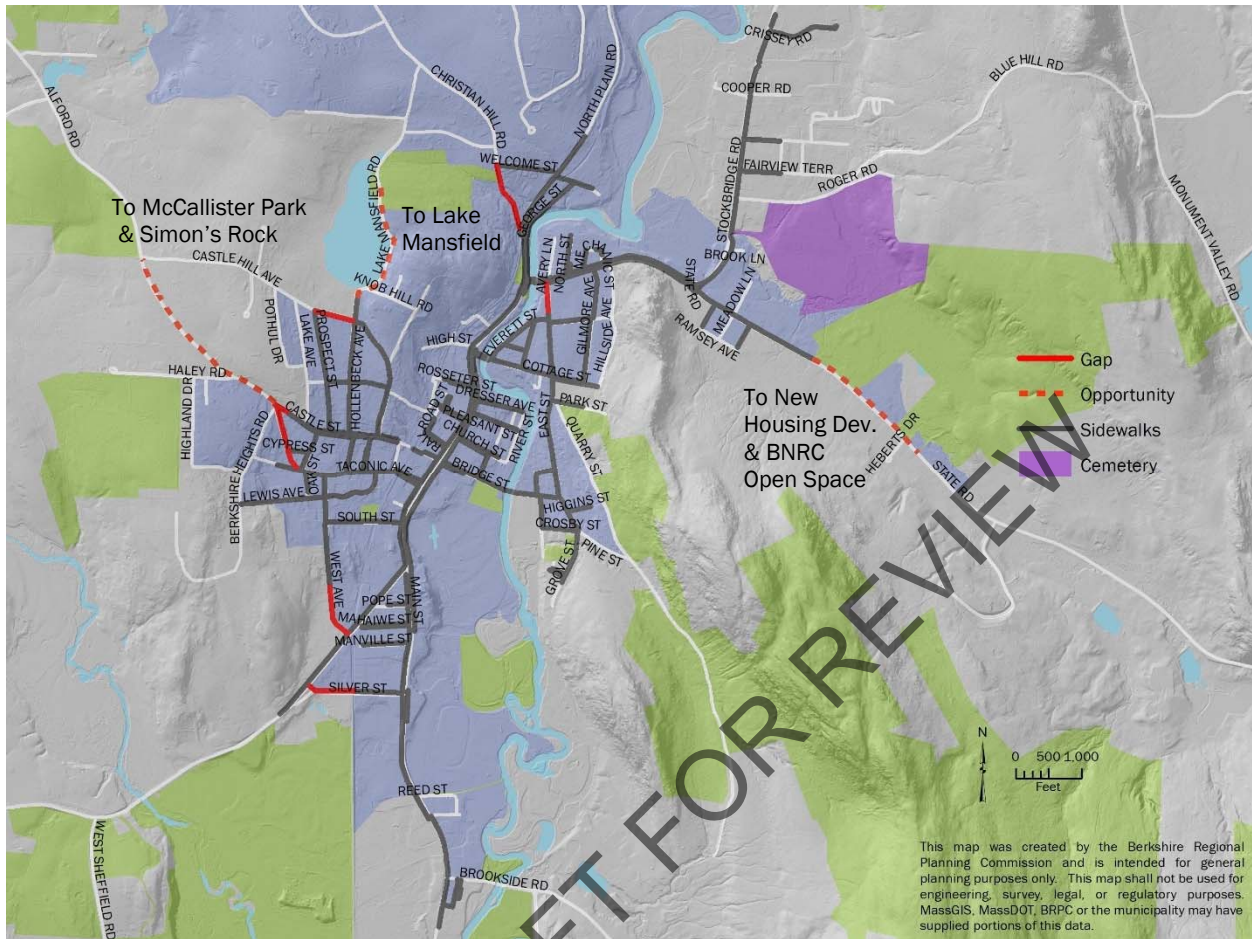
## Gaps, Barriers & Opportunities

Gaps are considered missing links where pedestrian infrastructure is either inadequate, antiquated or is non-existent. Location specific gaps and barriers are either point-specific locations such as a lack of a crosswalk or ADA ramps, or an entire intersection that presents a barrier to nonmotorized travel and is unsafe for vulnerable users. This might be due to inadequate crossing treatments, confusing geometry, long crossing distances, lack of crosswalks or traffic control devices. Generally, these are areas that provide access to or within major destinations or are desirable in connecting residential areas to primary activity centers. Opportunities are areas where nonmotorized facilities could be extended to reach a new destination.

BRPC mapped locations of existing sidewalk and identified gaps within the network (**Figure 3.17**). Gaps were identified by connecting two segments of existing sidewalk through the shortest possible route. This method does not consider existing conditions, such as Right-of-Way width, existing topography or wetlands that will affect potential construction. Moreover, gaps were only assessed from street to street or along streets containing a large sidewalk gap along both sides. Smaller sidewalk gaps, such as a gap in sidewalk along one side of a street, where sidewalk on the opposite side is continuous, were not identified.

**Figure 4.02 Sidewalk Gaps and Opportunities – Housatonic and Great Barrington Downtown**





### Future Bike Facilities

**Figure XX** describes future bike facilities in Great Barrington based on typologies described in the FHWA *Small Town and Rural Multi-Modal Networks*<sup>26</sup> guidance, existing planned shared-use paths and TIP eligibility. While bike lanes and shared-use paths provide the best accommodation for cyclists, they are extremely expensive to implement, and in the case of shared-use paths, can take decades to plan, design, and fund. Additionally, on roadways with relatively low traffic volumes and speeds, dedicated bike lanes or other separation from traffic may not be necessary. The future bike facilities described in **Figure XX** try to provide accommodation for cyclists to all areas and major employers throughout town while limiting future expenses, particularly on smaller local roadways.

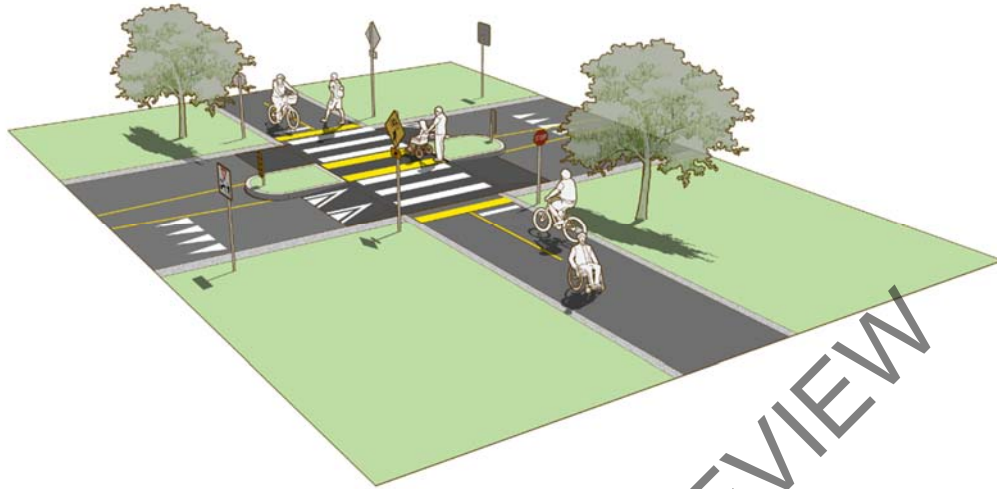
### Shared-Use Paths

Shared-use Paths are off-road facilities open to cyclists and pedestrians. These facilities provide the greatest comfort to cyclists as there is little to no interaction with vehicle traffic except at road crossings.

<sup>26</sup> [https://www.fhwa.dot.gov/environment/bicycle\\_pedestrian/publications/small\\_towns/](https://www.fhwa.dot.gov/environment/bicycle_pedestrian/publications/small_towns/)



**Figure 4.01 Shared-Use Path**



*Bike Boulevards*

Bicycle boulevards are typically residential streets where widening is unlikely to occur. In these areas bicycles can be best accommodated by providing traffic calming and installing sharrows and new warning signage.

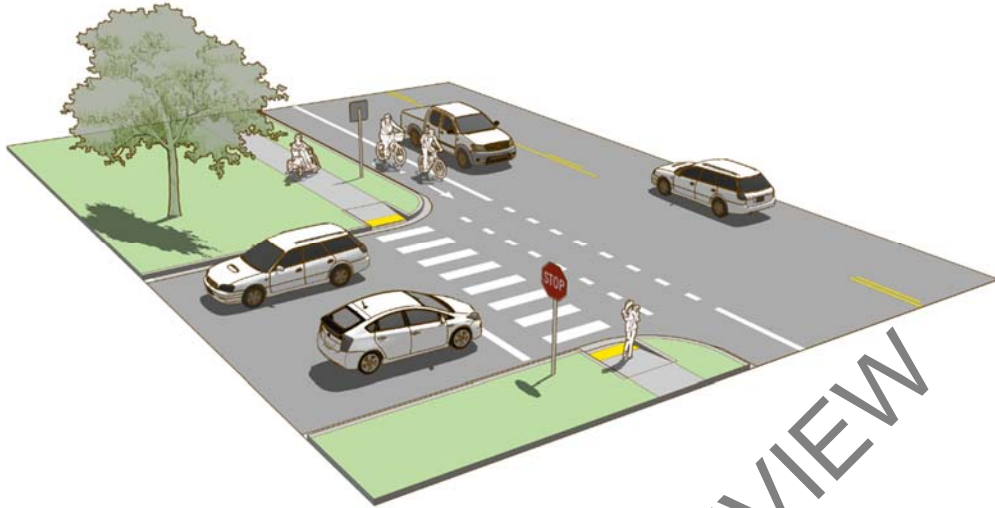
**Figure 4.01 Bike Boulevard**



*Bike Lanes*

Bike lanes are dedicated bike facilities in the shoulder of roadways. Basic bike lanes protect cyclists from traffic with painted striping and warning signs. Cyclists will find increasing comfort with either separated or buffered bike lanes, which provide either increasing horizontal or vertical distance between bikes and vehicles. The town should plan for these facilities along major roadways, particularly those maintained by MassDOT and advocate for their implementation. In the extreme long term, existing road shoulder or existing bike lanes may be reconstructed with buffered or separated lanes to better accommodate cyclists; however, simple striped lanes are a great start - particularly in rural areas like the Berkshires where on-road bike facilities are limited.

**Figure 4.01 Bike Lanes**



*Advisory Shoulders*

Advisory shoulders, also known as advisory bike lanes or suggestion lanes are areas where accommodations for cyclists and pedestrians are desired but widening is unlikely to occur. These areas require long straight sections of roadway with good visibility and relatively low speeds and traffic volumes.

**Figure 4.01 Advisory Shoulders**

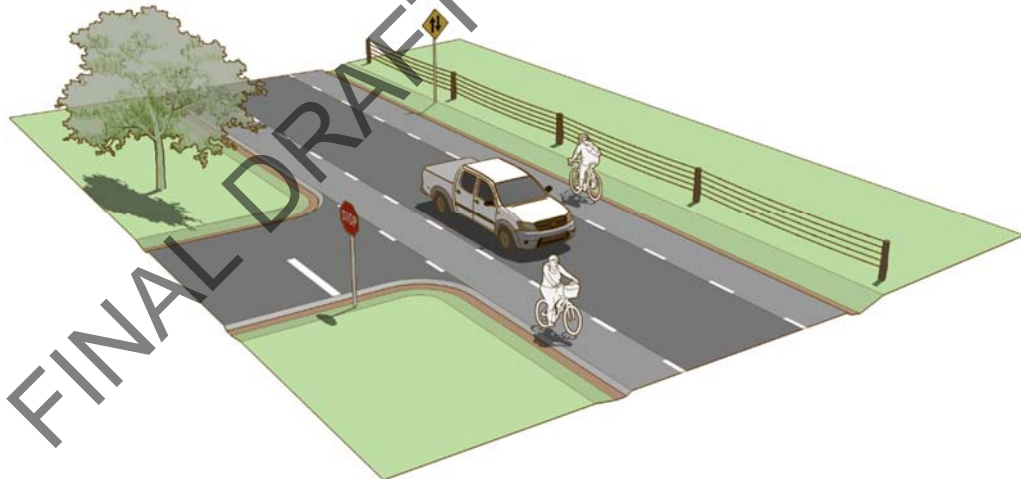
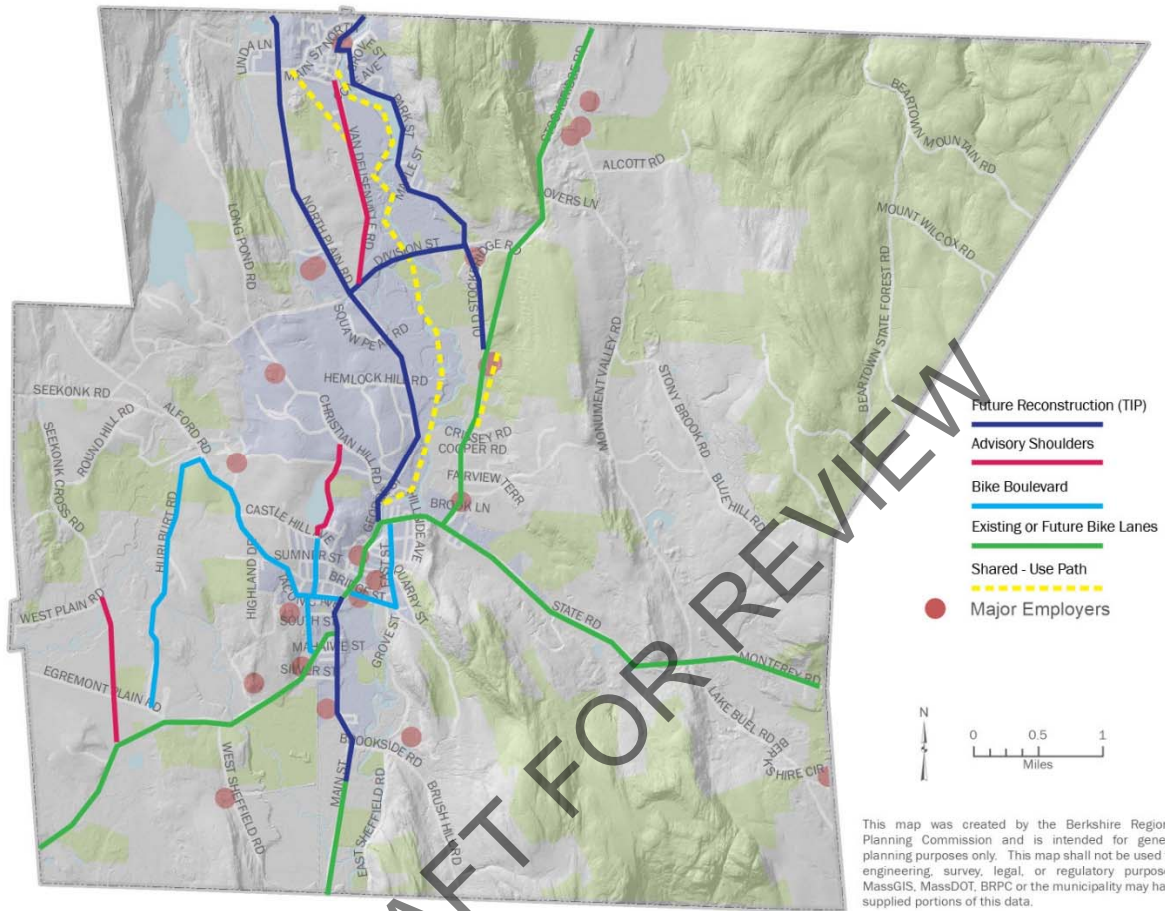


Figure 4.03 Future Bike Facilities



## 4. PROJECT AND GENERAL RECOMMENDATIONS

This section outlines some project specific and general recommendations that are not site-specific.

### Engineering + Design References

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.

Any improvements will likely need design and/or engineering and it is encouraged that the town reference the following detailed best practices, as applicable, which include but are not limited to:

- MassDOT Project Development and Design Guide
- FHWA Manual of Uniform Traffic Control Devices (MUTCD)
- AASHTO A Policy on the Geometric Design of Highways and Streets
- NACTO Urban Street Design Guide
- NACTO Urban Bikeway Design Guide
- NACTO Transit Street Design Guide
- 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 (STBGP, CMAQ, TA Set-Aside, etc.)

### Project Selection and Final List

The final project list was selected by the Complete Streets Team and includes projects identified through the Master Plan and other planning studies, this needs assessment, resident concerns, and other planned capital projects. The final project list is a subset of the overall recommendations of this plan.

**Table 4.1 Final Complete Streets Project Prioritization (Tier 2) List**

Project #	Project Name	Project Location and Features	Notes
PROJECT 1	Housatonic Main St. Sidewalk Extension	Housatonic - Main St. from sidewalk end west to Route 41 / N. Plain Rd.	Connect village to Rail Trail & Old Maids Park
PROJECT 2	Old Route 7 Shared-Use Path	Off Road from CHP to Brewery / Community Center	Former road bed
PROJECT 3	Lake Mansfield Rd. nonmotorized Improvements	Lake Mansfield Rd.	Recreation area
PROJECT 4	Riverwalk Extension	Extend Riverwalk south to Brookside Ave.	Walking path only.
State Road 1	New sidewalk / Traffic Calming	Route 7 / Stockbridge Rd. from Belcher Square north to CHP	State Road Project - not eligible for funding
PROJECT 5	South Main St. Reconstruction	South Main St / Route 7 - from senior center north to S. Berkshire Power Equipment / Big Y Entrance	Addresses safety for seniors / sidewalk gap on east side of road. Upcoming federally funded TIP project.
PROJECT 6	Housy Rail Trail	Off Road from Main St. in Housatonic south to Vandeusenville Road.	Former rail bed
State Road 2	Full Reconstruction w/ bike/ped. improvements	Route 7 / State Rd. from Bridge east to Belcher Square	State Road Project - not eligible for funding.
State Road 3	Intersection Reconstruction / Safety Improvements	Route 7 / Monument Mtn. High School entrance	State Road Project - not eligible for funding.
PROJECT 7	East St. Bike Boulevard	East St. - Install Sharrows, install share-the-road signage, install speed tables and radar speed feedback signs. Investigate possibility of additional stop signs along East St. and connecting streets, as well as at other key intersections in the area.	
PROJECT 8	Railroad St. Streetscape Enhancements	Railroad St. - 10 Benches and 3 Trash Receptacles	
PROJECT 9	Housatonic Front St. Sidewalk Extension	Housatonic - Front St. from sidewalk end south to Oak St. / Cemetery	To popular walking area
State Road 4	Sidewalk Extension	Route 23/183 from sidewalk end southeast to new public housing / BNRC Thomas and Palmer Brook	State Road Project - not eligible for funding
PROJECT 10	Downtown Crossing Enhancements	Installation of RRFB at crossings on Bridge and Main St.	

Project #	Project Name	Project Location and Features	Notes
PROJECT 11	Castle Hill Bike Boulevard	Castle Hill area - primarily Hollenbeck Ave. and West Ave. Install share-the-road signage, install speed tables and radar speed feedback signs. Investigate possibility of additional stop signs along West Ave. and Hollenbeck. and connecting streets, as well as at other key intersections in the area.	
PROJECT 12	Taconic Ave. Sidewalk Extension - Phase 1	Taconic Ave. - from Barrington Pl. to Berkshire Heights	Connect to McCallister Park
PROJECT 13	Taconic Ave. Sidewalk Extension - Phase 2	Alford Rd. - from Berkshire Heights to Haley Rd.	Connect to Simon's Rock and McCallister Park
PROJECT 14	Taconic Ave. Sidewalk Extension - Phase 3	Alford Rd. - From Haley Rd. to Castle Hill Ave.	Connect to Simon's Rock and McCallister Park
PROJECT 15	Route 41 Traffic Calming	Route 41 / North Plain Rd. - Install speed feedback signs	Town considering portions of Route 41 for a future federally funded TIP project
PROJECT 16	Route 183 Bicycle Accommodations	Route 183 / Park St. - Install sharrows and new share-the-road signage	TIP eligible roadway
PROJECT 17	Main St. Bicycle Accommodations	Main St. from St. James Pl. south to Police Station. - Install sharrows and share-the-road signage	
PROJECT 18	West Ave. Sidewalk Extension	West Ave from sidewalk end to Maple Ave / Route 41	Sidewalk gap - 900'
PROJECT 19	Silver St. Sidewalk Extension	Silver St. from sidewalk end to Maple Ave / Route 41	Sidewalk gap - 700' Rail Crossing

### Cost Estimates

Cost estimates for each project were prepared by Foresight Land Services for the Town of Great Barrington and can be seen in **Table C1**.

## General Recommendations

### *Regional TIP Participation*

The TIP requires that communities fund design and engineering work; however, when the project can be scheduled and programmed through the TIP, construction is fully funded. While projects can sometimes take years to become integrated into the Transportation Improvement Program, it is a way to fund expensive and complicated transportation projects. The town should continue investment in design and engineering for its federal aid-eligible roadways to ensure they are competitive on the regional TIP. Projects on federal-aid eligible roads have been noted in the project descriptions above.

### *View Every Repaving Project as an Opportunity to "Complete the Street"*

During every repaving project, the town should assess the condition of the existing sidewalk, the width of the existing lanes and shoulder, streetscape amenities (trash receptacles, trees and shrubs, bike racks, lighting, wayfinding signs, etc.) and determine if low cost improvements could be added to each project. Additionally, shoulder widening, and lane narrowing are crucial ways to improve cycling and walking on roadways that do not have dedicated nonmotorized facilities like sidewalks or bike lanes.

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

The Town of Great Barrington should evaluate the usage of wider shoulders to accommodate bicycle and pedestrian travelers where dedicated facilities are infeasible. Providing paved shoulders as part of routine resurfacing, restoration, rehabilitation, and/or reconstruction work on roadways is a way to implement the Great Barrington Complete Streets Policy given due consideration. Based on guidance from MassDOT, shoulder widths to accommodate pedestrians and cyclists should be at least 4' wide for a Case 4 Shared Bicycle/Pedestrian Accommodation.

#### *Use the 2016 Municipal Modernization Act to Reduce Speed Limits in Key Areas and Prioritize Nonmotorized Users*

The Town should consider lowering speed limits in specific areas where pedestrian safety may be at risk. Studies have correlated increased risk of injury or death with rising vehicle speeds. Risk of death from a collision at 23 mph is only 10%. However, as vehicle speed increases to 32 mph, the risk of death during a collision increases to 25%, and at 42 mph rises to 50%.<sup>27</sup> Moreover, high vehicle speeds can act as a deterrent to potential pedestrians and cyclists.

The 2016 Municipal Modernization Act<sup>28</sup> gives municipalities greater flexibility and control over reducing speed limits and establishing 20 mph “safety zones” on local roadways. Municipalities can now opt-in to the statutory 25 mph limits on local roadways within a “thickly settled” area or business district without conducting a traffic study. MGL Chapter 90, Section 1 defines a thickly settled or business district as, “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.”<sup>29</sup> Much of the Great Barrington downtown, Housatonic village, and surrounding neighborhoods qualify as thickly settled. Additionally, safety zones of 20 mph can be established near adjacent to land uses where “where vulnerable road users are likely to be present” – such as parks and playgrounds, senior housing and centers, high schools, and daycare facilities.<sup>30</sup> Pursuing a 25mph statutory speed limit in areas of Town would not alter the speed limit on roads with “special speed regulations” – essentially those roads with existing posted speed limits. The City of Pittsfield recently utilized the new legislation to reduce speed limits along North St.<sup>31</sup> Refer to **Figure 3.9** for mapped speed limits throughout town. Most “unknown” speed limits are likely statutory speed zones where the town could pursue a reduced 25 mph speed limit.

#### *Advocate for Complete Streets Improvements on State Roadways*

Potential projects on state owned roadways were scored and ranked during the planning process to see how these projects compared to others in the community (see **Table XX**). The town should advocate to MassDOT to advance and construct these projects. The Town of Great Barrington should submit these projects, in writing, to the District 1 Highway Director.

#### *Advocate for Complete Streets Improvements on State Roadways*

Potential projects on state owned roadways were scored and ranked during the planning process to see how these projects compared to others in the community. The town should advocate to MassDOT to advance

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<sup>27</sup> <https://www.aaafoundation.org/sites/default/files/2011PedestrianRiskVsSpeed.pdf>

<sup>28</sup> <http://www.mass.gov/dor/docs/dls/city-town/2016/16ctown-aug18.pdf>

<sup>29</sup>

<http://www.massdot.state.ma.us/highway/Departments/TrafficandSafetyEngineering/SpeedLimits/FrequentlyAskedQuestions.aspx>

<sup>30</sup><http://www.massdot.state.ma.us/highway/Departments/TrafficandSafetyEngineering/SpeedLimits/FrequentlyAskedQuestions.aspx>

<sup>31</sup> <http://www.berkshireagle.com/stories/pittsfield-trims-speed-limit-on-north-street-from-30-to-25-mph,498393>

and construct these projects. The Town of Great Barrington should submit these projects, in writing, to the District 1 Highway Director.

*Ensure Bike Parking and Amenities at Town Facilities and Open Space Areas*

Bicycle parking is a key street furnishings element to the usability of bicycles for transportation. If there is nowhere to safely park a bicycle, people will be less likely to rely on it for transportation. Bicycle parking is good to have in village center areas for visitors to shops and restaurants. There are many options for bicycle parking, and for reference see the Association of Pedestrian and Bicycle Professionals’ *Essentials of Bike Parking*.<sup>32</sup> Bicycle repair stations are another component of cycling infrastructure that include tools and an air pump for repairing or maintaining bicycles. Repair stations can help cyclists “in a pinch” who may not have a set of tools on hand and demonstrates that the town is bike friendly and encourages cycling. The Town recently installed one of these repair stations at Town Hall. The Town should consider installing others in key areas, such as at other points along USBR 7.

*Consider Implementing a Town-Wide Bike Plan*

While bike lanes and shared-use paths provide the greatest comfort for cyclists, they are expensive and time-consuming to implement. While some costly capital investments and federally funded TIP projects may be necessary to provide comprehensive bicycle accommodations, many other improvements can be made at little cost to the town. Moreover, in rural areas, low traffic volumes mean that not every road needs accommodation. The Future Bike Facilities Map seen in **Figure XX** includes recommendations for reconstruction and widening as well as the implementation of less costly bicycle accommodations such as bike boulevards and advisory shoulders.

*Formalize a Complete Streets Review and Implementation Process*

The Town of Great Barrington should formalize a review process that ensures its Complete Streets policy is implemented thoughtfully and carefully. The Public Works Department should begin project proposals yearly by formulating a budget and identifying roadway needs. This initial project list should be reviewed by key staff members including the Town Administrator, Selectboard and others. After this initial review, staff should organize a site visit to discuss potential complete streets improvements and evaluate other means to enhance the overall project value. Moreover, key staff members, such as the DPW director, Town Planner, and Town Manager, should draft a yearly memorandum that evaluates implementation progress based on the performance measures listed in **Table 2.2** and describing each Complete Streets project.

**Implementation**

In an effort to ensure the Town of Great Barrington is able to successfully implement their Complete Streets Policy, the Complete Streets Team and BRPC staff developed a table that details annual steps that ensure timely implementation of Complete Streets projects in the Town of Great Barrington. Annual implementation steps can be seen in **Table 4.2**.

**Table 4.2 Annual Implementation Tasks and Project Cycle**

Action	Responsible Party	Timeline (Yearly)	Others Interested
Project Identification	DPW, Complete Streets Team	Spring	Selectboard
Score and rank new projects, Revise Tier 2 List	Complete Streets Team	Late Spring	DPW
Project Budgeting	DPW	Summer or Fall	Selectboard, Finance Committee

<sup>32</sup> <http://www.apbp.org/?page=publications>

Action	Responsible Party	Timeline (Yearly)	Others Interested
Prepare RFP for design needs on identified projects requiring engineering or design	DPW	Fall	Selectboard, Finance Committee, Complete Streets Team
Construction	DPW	Following Spring	Selectboard, Complete Streets Team
Evaluate and Document Performance (See Performance Measures section)	Complete Streets Team	Following Summer or Fall	Selectboard, DPW

## APPENDIX A: PUBLIC PROCESS

### Public Project Selection & Ranking (Public Forum & Online Project Selection Survey)

Over the course of developing, ranking, and ultimately selecting projects, residents of Great Barrington had the opportunity to voice their views on projects they believed might best serve the needs of the town. The results are shown below.

Ranking (1 = Most important to 15 = least important)	<u>Public Forum</u> Frequency of Respondents that voted for project		<u>Online Public Survey</u> Frequency of Respondents that voted for project		<u>Cumulative – Public Forum + Online Survey Combined (High to Low)</u>	
1	East St. Traffic Calming	18	Lake Mansfield Rd. Bike / Ped. Improvements	165	Lake Mansfield Rd. Bike / Ped. Improvements	172
2	Main St. Bicycle Accommodations	12	Downtown to Simon's Rock Walking Path	120	Downtown to Simon's Rock Walking Path	126
3	Lake Mansfield Rd. Bike / Ped. Improvements	7	South Main St. Reconstruction and Safety Improvements	92	South Main St. Reconstruction and Safety Improvements	94
4	Downtown to Simon's Rock Walking Path	6	Housatonic Rail Trail	85	Housatonic Rail Trail	87
5	Taconic Ave. Sidewalk Extension	6	Riverwalk Extension	71	Riverwalk Extension	74
6	Silver St. Sidewalk Extension	5	Old Route 7 Path to CHP	62	Old Route 7 Path to CHP	63
7	Housatonic Main St. Sidewalk Extension	4	Housatonic Main St. Sidewalk Extension	53	Housatonic Main St. Sidewalk Extension	57
8	Route 41 / N. Plain Rd. Traffic Calming	4	Housatonic - Front St. Sidewalk Extension	48	Housatonic - Front St. Sidewalk Extension	51
9	Housatonic - Front St. Sidewalk Extension	3	Route 183 Bicycle Accommodations	38	Main St. Bicycle Accommodations	47
10	Riverwalk Extension	3	Taconic Ave. Sidewalk Extension	37	Taconic Ave. Sidewalk Extension	42
11	South Main St. Reconstruction and Safety Improvements	2	Main St. Bicycle Accommodations	35	East St. Traffic Calming	40
12	Housatonic Rail Trail	2	Route 41 / N. Plain Rd. Traffic Calming	27	Route 183 Bicycle Accommodations	40
13	Route 183 Bicycle Accommodations	2	Castle Hill Traffic Calming	23	Route 41 / N. Plain Rd. Traffic Calming	31
14	Old Route 7 Path to CHP	1	East St. Traffic Calming	22	Castle Hill Traffic Calming	23
15	West Ave Sidewalk Extension	1	West Ave Sidewalk Extension	18	West Ave Sidewalk Extension	19
16	Castle Hill Traffic Calming	0	Silver St. Sidewalk Extension	13	Silver St. Sidewalk Extension	18



The green column represents the results from the public forum – with the project name and frequency of those in favor of the project. The East Street Calming project received the most support at the forum. The blue column represents the results from the online survey – topped by the Lake Mansfield Road and Bicycle/Pedestrian Improvement project. The tan column represents the cumulative scores from the public forum and online survey.

## APPENDIX B: PROJECT SCORING

**Table B1** outlines the complete list of potential complete streets improvements identified by the Great Barrington Complete Streets Team and their scores. Projects in this list were further refined into a final list for submittal to MassDOT. Project locations have also been mapped in **Figure B1**.

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.

Below the table are project descriptions for each of the potential improvements, in order of weighted score.

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**Table B1 Complete List of Potential Improvements**

						Safety	Mobility/ Connectivity	Usability	Traffic Calming	Aging in Place/Access to Commercial + Public Facilities	Score Unweighted	Score Weighted
Project	Type	Location	Type	WEIGHT							-	-
PROJECT 1												
PROJECT 2												
PROJECT 3												
PROJECT 4												
PROJECT 5												
PROJECT 6												
PROJECT 7												
State Road 1												
PROJECT 8												
PROJECT 9												
State road 2												
PROJECT 10												
PROJECT 11												
PROJECT 12												

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PROJECT 13										
PROJECT 14										
PROJECT 15										
PROJECT 16										
PROJECT 17										

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**Figure B1. Potential Improvements**

Project numbers refer to Tables B1 and C1.

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## APPENDIX C: MASSDOT COMPLETE STREETS PROJECT PRIORITIZATION PLAN

The following Appendix section (**Table C1**) is a copy of the Tier 2 Prioritization Plan that was submitted to MassDOT. Projects are identical to those found in **Table 6.2** but includes additional information such as estimated start and end locations, anticipated construction duration and other information.

**TO BE COMPLETED**

**Table C1 MassDOT Complete Streets Tier 2 Prioritization Plan**

Project Details			EJ	Complete Streets Location		Project Origin and Type	Complete Streets Needs						Complete Streets Funding Request			Construction Schedule				
Rank	Project Name	Project Description	Environmental Justice Population	Project Limits	Project Start Location: X,Y Coordinates (MA State Plane meter)	Project End Location: X,Y Coordinates (MA State Plane meter)	Complete Streets Project Origin (planning documentation or supporting analysis)	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																				
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				

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	Project Details		EJ	Complete Streets Location			Project Origin and Type		Complete Streets Needs							Complete Streets Funding Request			Construction Schedule	
12																				
13																				
14																				
15																				
16																				
17																				

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## APPENDIX C: TOWN PLAN SUMMARY

The following are goals, actions, and objectives from existing town planning documents relevant to this Complete Streets Needs Assessment.

### **Goal TR 1: Improve neighborhood safety and connections by using a “complete streets” approach to all transportation improvements.**

TR 1.1: Calm traffic speeds in neighborhoods using passive means such as speed humps, bump outs, and traffic signs.

TR 1.2: Make walking easier. Ensure there are enough sidewalks, in good repair, and connected to each other, to services, and to other neighborhoods in a logical manner. Undertake walkability studies to develop a walkability improvement plan.

TR 1.3: Make walking more appealing to pedestrians. Buffer sidewalks from roads with street trees, grass strips or other means. Partner with local garden clubs and volunteers for an “adopt a median / flower box” program following the example of other local towns.

TR 1.4: In the Capital Improvement Plan, integrate the complete streets approach into transportation improvements. Design and budget decisions about tree plantings, and the type materials used such as asphalt or concrete, can impact the aesthetics and safety of the transportation system and should be addressed by DPW and town boards when completing the transportation plan.

TR 1.5: Develop a connectivity plan that improves town-wide connections, using sidewalks, bike paths, and multi-use paths. Paths should connect to jobs and services such as health care, downtown, and the schools, Great Barrington and Housatonic, and scenic resources like the River and open space.

TR 1.6: Improve winter sidewalk maintenance in neighborhoods. Consider a town regulation that requires homeowners and businesses to clear sidewalks within 24 hours of a snow event. Attend to concerns of the disabled and the elderly.

TR 1.7: Commit at least 15 percent of local spending for transportation improvements to non-automobile improvements, such as sidewalks, crosswalks, street trees, trails, bike accommodations, and signage. At current levels, this would be about \$90,000 annually, enough to repair and add significant trails or sidewalks. Demonstrate this yearly when presenting the street improvement and Capital Improvement Plan.

TR 1.8: Commit that every street or road improvement, such as widening, intersection redesign, repaving, and guardrails, also accommodate pedestrians and bicycles. Mandate this in all public roads, subdivision roads, and the driveways of any new commercial development. Attend to the needs of our residents, especially to the needs of our youngsters and senior citizens. Where the road is state-maintained, e.g., all of Route 7 and Route 23 outside of downtown, advocate to Mass DOT to include bike lanes.

TR 1.9: Work with Bard College at Simon’s Rock to develop signage and maps for a pedestrian route from campus to downtown, using the on-campus trails, gas easements, and Castle Hill Avenue.

### **Goal TR 2: Improve traffic safety town wide.**

TR 2.1: Slow speeds and reduce curb cuts to minimize vehicle-pedestrian-bike conflicts. Address high volume arterial roads and major neighborhood through streets (like East Street) first.

TR 2.2: Work with MassDOT and the BRPC to conduct an access management study of Stockbridge Road to assess needed pedestrian, bicycle, and traffic safety improvements.

TR 2.3: Continue proactive traffic enforcement. Increase patrols at high-traffic periods.

**Goal TR 3: Improve local public transit.**

TR 3.1: Cooperate with regional partners to fund adequately the Southern Berkshire Elderly Transportation shuttle bus service.

TR 3.2: Cooperate with regional partners, and state and federal officials, to improve the efficiency of and adequately fund the Berkshire Regional Transportation Authority. Consider a “local hub” from which more frequent service can be provided to employment and community centers in Great Barrington and South County yet make easy connections to points north.

TR 3.3: Take the lead in developing a ride share system, utilizing town website space or other resources as necessary to host a bulletin board or phone number for ride service. This is particularly important in providing access to town meetings, held at the high school, and to other services that may be remote to populations without access to a car.

**Other Complete Streets Related items in the Master Plan**

OSR 9.5 Continue stormwater improvements at Lake Mansfield, including the road, the boat launch, and Knob Hill Road. Design for the health of the lake, the safety of recreation area users, and vehicles.

TR 4.1 Rehabilitate Bridge Street and Cottage Street bridges. Accommodate pedestrians and bicyclists and add fishing piers where possible.

OSR 5.8 Identify and publicize the best walking roads, for those who prefer not to be off-road. Rural, low-traffic roads can be pleasant walking routes and an alternative to wilderness trails.

LU R7.3 Encourage shared driveways, connections and curb cuts between adjacent commercial uses. Route 7, particularly Stockbridge Road, can be unsafe to cross or bike or walk along. Better access management is needed.

OSR 5.2 Conduct walkability studies to identify where improvements to sidewalks and crosswalks are needed, and where connections can be made. Use studies to inform the Capital Improvement Plan.

OSR 8.2 Complete the Housatonic River Greenway (the River Walk south), to connect downtown with Olympian Meadows, the Fairgrounds, the Historical Society at the Truman Wheeler Farm, and the senior housing and Senior Center, as detailed in the 1997 Master Plan and in feasibility studies. Reach out to and cooperate with the John Dewey Academy school at Searles Castle to attend to their access, insurance, and liability concerns. Explore alternate routes if needed.

OSR 8.3 Develop a River Walk in Housatonic, extending from the Monument Mills to the Berkshire Mountain Bakery, and south, if possible. Preferably as part of development, not as an independent capital project. Consider both the east and west banks of the River.

OSR 8.5 Extend the downtown River Walk north to Cottage Street and Stanley Park.

OSR 5.3 Accommodate bike trails, sidewalks, and crosswalks when any road is rehabilitated. (See also “Complete Streets” strategies, above)

OSR 5.4 Connect Great Barrington and Housatonic village with a bike route or off-road bike trail. Work with local bike advocates and regional partners to build on the possible routes they have already identified and connect this route to the planned County-long north-south bike route.



LU H.7 Connect neighborhoods with the village core, open spaces including Old Maid's Greenlawn Cemetery, Flag Rock, the Housatonic River, and Rising Pond.

LU R7.2 Work with land trusts, businesses, the community center, and the hospitality industry to promote trails and safe connections to open spaces and services. Some of the protected open spaces along Route 7 are connected and these are a good model to follow. These spaces should be promoted through the tourist and hospitality industry.

OSR 2.1 Develop signage to direct people to recreation areas; develop signs and/or informational kiosks at recreational areas.

### Housatonic Village Walkability Study

#### **Sidewalk Recommendations**

Improve sidewalk presence and width

Improve sidewalk condition

Remove pedestrian obstructions

#### **Crosswalk Recommendations**

Add crosswalks strategically throughout the village

Improve crosswalk signage

Remove barriers posed by driveway curb cuts

Improve crosswalk markings

#### **Safety and Traffic Recommendations**

Calm traffic to reduce potential conflicts raised by speeding vehicles and limited visibility in places

Buffer sidewalks as much as possible with road shoulder, grass strips, or street trees

#### **Aesthetics, Amenities and Connectivity Recommendations**

Improve street lighting, particularly around Park St. rail underpass

Improve connectivity to Flag Rock trailheads (Grove St.), Old Maids Park (Main St), and the Cemetery (Front St.)

## **APPENDIX D: PUBLIC SURVEY RESULTS TO BE COMPLETED**