

# Sturbridge

MASSACHUSETTS

## 2011 Master Plan



Prepared for  
The Sturbridge Planning Board

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Prepared by  
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In association with  
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# 1. Vision and Goals

## Community Vision

Sturbridge is a community that cherishes its small town character, its vast open spaces, and the natural resources that provide numerous cultural and recreational opportunities. This rural character is the Town's core value as expressed by the many scenic vistas, the places where people gather, the open spaces, and the historical and cultural assets that residents and visitors hold dear. The Town is further defined by the design of its development and transportation system. Sturbridge believes that its identity and sense of place is what attracts people who would like to live, work, shop and play in the community. This Master Plan sets the course for the Town to protect the living spaces of its residents as well as important natural, historic, and cultural areas; create new economic opportunities for business; and enhance the design of the built environment. Through its actions thus far and ongoing implementation of the goals of the 2010 Master Plan, the Town will continue to thrive and build further upon these assets.

## Land Use and Community Design Goals

- ▶ Encourage the balance between residential, commercial and industrial development to ensure the Town continues to prosper while protecting the historic, environmental and rural character of the community.
- ▶ Improve the architectural quality and streetscape of Main Street (Routes 20 and 131) business areas to make them more attractive to businesses, residents, visitors and tourists.
- ▶ Promote growth that is environmentally sustainable and capable of withstanding economic downturns.
- ▶ Identify design values the Town considers important in preserving the historic character of its corridors.

## Housing Goals

- ▶ Provide high-quality affordable housing in attractive neighborhoods through development of appropriate zoning bylaws, regulations and programs designed to encourage a variety of housing types.
- ▶ Develop a plan designed to guide the Town toward meeting the 10% goal for housing affordability under Chapter 40B.

- ▶ Provide opportunities for existing low and moderate income Sturbridge residents to make improvements and repairs to their existing homes, while at the same time, increasing the affordable housing stock in the community.
- ▶ Ensure that housing choices are available to meet the needs of current and future generations Sturbridge.

### **Economic Development Goals**

- ▶ Foster economic sustainability via focused and integrated support of the existing business base while simultaneously encouraging longer-term economic diversification (such that Sturbridge is not so heavily dependent on tourism/hospitality).
- ▶ Take a more pro-active approach to marketing the town's assets in order to promote additional business growth.
- ▶ Promote economic development from a regional perspective.
- ▶ Maximize the opportunities to encourage redevelopment along the Route 20 and Route 131 corridors and development within the Special Use District.
- ▶ Create a Brand Promise/Identity for Sturbridge that presents a distinctive and positive image of the town.

### **Natural, Historic and Cultural Resources Goals**

- ▶ Provide better public access to water resources for passive recreation.
- ▶ Preserve water resources through stormwater management and lakefront zoning protection.
- ▶ Integrate natural, historic and archaeological resource identification, documentation, and evaluation into local planning.
- ▶ Develop and strengthen local planning and protection measures for natural and historic resources.
- ▶ Incorporate specific historic preservation objectives in community revitalization and economic development efforts.
- ▶ Create and enhance cultural opportunities in Sturbridge.

### **Open Space and Recreation Goals**

- ▶ Preserve the small town New England character of Sturbridge.
- ▶ Educate residents and others about the importance of open space preservation for passive recreation, habitat protection and water supply protection.
- ▶ Increase the inventory of open space within the Town by fee, conservation restriction, donation or easement in perpetuity. Give emphasis to these parcels that create green corridors, protect our water supplies and natural, cultural and historic resources, and provide access to our recreational resources.

- ▶ Expand outdoor recreational opportunities, both passive and active for all Sturbridge residents regardless of age or ability.
- ▶ Encourage the appropriate use of public lands and recreational resources as a tool to promote sustainable tourism and enhance economic development within the community.
- ▶ Protect and enhance drinking water supplies.
- ▶ Promote a cooperative and regional approach to open space and resource protection.

### Transportation Goals

- ▶ Develop an identity and sense of arrival into Sturbridge through the creation of distinct gateways and streetscaping, especially given the number of tourists coming to the area; prioritize Route 20 through the CTD.
- ▶ Balance the need to facilitate traffic flow with desires to make the roadways more walkable and bikeable and calm vehicle traffic speeds where appropriate (especially through the Commercial Tourist District along Route 20).
- ▶ Eliminate sign clutter and improve wayfinding to the key destinations.
- ▶ Make public transportation more available and increase opportunities for residents to walk and bicycle safely around Sturbridge.
- ▶ Develop access management and traffic impact study guidelines.
- ▶ Establish a collaborative working relationship with MassDOT.
- ▶ Develop a transportation plan that emphasizes safety and compliance with ADA requirements for sidewalks, crosswalks, and intersections.

### Public Services and Facilities Goals

- ▶ Establish efficiency and cost-effectiveness as a guiding principle for delivery of public services.
- ▶ Ensure that the Town can meet its infrastructure and service needs as growth and demand increases.
- ▶ Given the often conflicting demands, establish priorities for building and facility upgrades and replacement.
- ▶ Work to ensure that municipal staffing levels are adequate as the Town grows and service demands increase.
- ▶ Lead by example in municipal facilities and operations, fostering partnerships, communication, and sustainability principles through its investments and initiatives.

### Energy and Sustainability Goals

- ▶ Work toward becoming a Green Community by meeting state criteria for the designation.
- ▶ Promote sustainability in municipal and public operations, starting with a Sustainability Task Force that can advise and support sustainability efforts by Town departments.
- ▶ Encourage energy efficiency, conservation, and sustainability in Sturbridge to reduce energy consumption and cost.
- ▶ Establish best management practices and economically viable technologies in future construction, renovation, and maintenance of public buildings and facilities.
- ▶ Reach out to the community as a whole to inform and educate residents and businesses regarding energy conservation, recycling and sustainability principles.

### Survey and Public Participation

In April 2010, the University of New Hampshire Survey Center conducted a survey for the Sturbridge Master Plan effort. Residents were asked about their attitudes and opinions of the community, town services, open spaces, development, and transportation issues. Surveys were sent to 3,149 randomly selected household members and 930 Sturbridge residents responded. The resultant response rate of 30 percent is very respectable for a survey of this type. The following is a summary of the key findings from the survey and more details can be found in Appendix 1.

- ▶ When asked why they moved to Sturbridge, half of Sturbridge residents said they moved because of the quality of life, followed by the rural town character and location as the major reasons.
- ▶ Many of the respondents ranked public services as excellent, ambulance/paramedic services ranking highest.
- ▶ When asked to indicate the three most important reasons for the town to manage, acquire and/or preserve open space, more than half of Sturbridge residents said “to protect water quality and resources,” followed by “preserve forests and woodlands”, and “passive recreation” (44%).
- ▶ Eight in ten Sturbridge residents would like the Town to provide more dedicated bike routes, followed by walking trails, picnic areas, and canoe/kayak public access.
- ▶ Most Sturbridge residents favor a movie theatre, followed by more health care services, art galleries, boutiques, and small retail shops.
- ▶ Along Route 15, Sturbridge residents favor a movie theatre, followed by recreational facilities, and small scale retail or restaurants.
- ▶ Town residents believe the town should investigate and or encourage participation in alternative types of transportation such as sidewalks, dedicated bike routes, and transit. Another set of questions asked respondents to identify intersections that are considered unsafe and congested. See Appendix 1 for the detailed responses to these questions.

The survey was only one part of the overall public participation effort. Additionally, there were two town-wide public forums—one at the early stages of the planning process and one toward the end.

On Saturday, November 21, 2009, the Town of Sturbridge convened a public forum to discuss the 2010 Master Plan Update project. Approximately 80 people attended the forum, which was held at Old Sturbridge Village from 8:30 AM until 12 noon. The forum was attended by Jean Bubon, AICP, Town Planner; Sandra Gibson-Quigley, Chair of the Master Plan Steering Committee; members of the Master Plan Steering Committee; and representatives from the VHB and RKG consulting team (Ralph Willmer, FAICP; Juli Beth Hinds, AICP; Joe Wanat, P.E., PTOE; and Mike Casino).

After a presentation on Sturbridge land use and demographic data, a Strengths, Challenges, Opportunities and Threats (SCOT) analysis was conducted. Participants were asked to describe aspects of living, working, shopping and playing in Sturbridge that was both positive and negative. After the lists were generated, they were given four “voting dots” which were to be placed next to those items that the audience thought was most important issues to address in the master planning process. The results of this analysis can be found in the Appendix 2 to this Plan.

The second forum was held on Thursday, November 18, 2010 from 6:30 pm–9:00 PM at Paige Hall at the Publick House. This forum was attended by approximately 75 people. The presentation focused on the key findings from the research and data gathering phase of the project for each plan element. The major recommendations were summarized, followed by discussion and comments from the audience.



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**Public Forum – November 21, 2009**

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## 2. Land Use and Community Design

### Introduction

Land use within a community is the pattern of residential, commercial, industrial and public development, interspersed with what is generally considered as open space, such as forests and natural features, undeveloped land, agriculture and parks and recreational areas. The evolution of land use within a community is the product of local economic conditions and community preferences; growth and development is based on such factors as access to jobs, employment, and the availability of affordable land for new housing or commercial development. Community preferences, expressed as land use plans and regulations, dictate the use, form, location, and sometimes the pace, of new development.

Land use forms the basis for master planning and determines, to a large extent, a town’s need to provide public facilities and infrastructure, transportation networks and services, and protection of environmental resources. As communities plan for their future, determining how and where growth and development should occur will provide the basis for planning where investments for municipal services will be needed, as well as determining what controls will be necessary to protect areas of the town from unwanted development. Communities have the ability to control land use and development patterns through a variety of mechanisms, including zoning and subdivision regulations, provision of public utilities and infrastructure, and protection of open space lands through direct acquisition and the acquisition or acceptance of conservation restrictions/easements.

### Land Use and Community Design Goals

- Encourage the balance between residential, commercial and industrial development to ensure the Town continues to prosper while protecting the historic, environmental and rural character of the community.
- Improve the architectural quality and streetscape of Main Street (Routes 20 and 131) business areas to make them more attractive to businesses, residents, visitors and tourists.
- Promote growth that is environmentally sustainable and capable of withstanding economic downturns.
- Identify design values the Town considers important in preserving the historic character of its corridors.

## Land Use Patterns

### Historic Land Use

Sturbridge is a small community located in south central Massachusetts. Roughly 45 miles southwest of Boston, it is bordered by Brookfield and East Brookfield on the north; Charlton and Southbridge on the east; Union, Connecticut on the south; and Holland and Brimfield on the west. The town is easily accessed by major highways, as it lies at the junction of Interstate 84, Interstate 90 and US Route 20.

Roughly 39 square miles in size, Sturbridge was incorporated in 1738 as a small farming community. Many mills once operated in the town, situated near the Quinebaug River in Fiskdale Village. A number of the mills have since been redeveloped into homes and businesses.

These and other changes relating to historical land use trends in Sturbridge are shown in Table 2.1. According to that table, roughly 83 percent of the town's land was agriculture, open undeveloped land, forest or wooded perennial in 1971. This total decreased to 76 percent in 1999.

On the other hand, the amount of land dedicated to housing has steadily increased from just 6 percent in 1971 to 10 percent in 1999. Low density housing, defined by MassGIS as homes with lots larger than a ¼ acre, has continued to be the dominant type of residential use in Sturbridge. Less than half a percent of the land was occupied by multi-family housing in 1999.

**Table 2.1 Land Use: 1971, 1985 and 1999**

	1971		1985		1999	
	Size (acres)	Percent of Total	Size (acres)	Percent of Total	Size (acres)	Percent of Total
Agriculture	899	4%	800	3%	653	3%
Open Undeveloped Land	524	2%	522	2%	418	2%
Commercial	117	0%	154	1%	239	1%
Industrial/Transportation/Mining	828	3%	876	4%	882	4%
Higher Density Residential*	123	0%	187	1%	232	1%
Medium Density Residential	590	2%	701	3%	729	3%
Low Density Residential	679	3%	1,128	5%	1,632	7%
Recreation/Urban Open	339	1%	373	1%	433	2%
Forest/Wooded Perennial	19,360	78%	18,649	75%	17,980	72%
Waste Disposal	49	0%	19	0%	49	0%
Wetland	445	2%	511	2%	702	3%
Water	970	4%	973	4%	973	4%
<b>Total</b>	<b>24,923</b>	<b>100%</b>	<b>24,923</b>	<b>100%</b>	<b>24,923</b>	<b>100%</b>

\*Higher Density Residential includes multi-family housing and housing with lots smaller than 1/4 acre. Medium Density is quarter to half-acre lots.  
Low Density is lots larger than one-half acre.  
Source: MassGIS

Table 2.2 shows that the most significant changes in land use between 1971 and 1999 have been in Low Density Residential (+140 percent) and Commercial (+104 percent). Despite these land use changes over the years, the vast majority of land in Sturbridge remains forests or wooded perennials; these uses have consisted of more than 70 percent of the land between 1971 and 1999. In addition, there has been an increase in the amount of recreation and urban open land, which includes parks and public green space. These two trends reflect the community’s ongoing desire to protect open space and undeveloped land in Sturbridge. (See Natural, Historic and Cultural Resources and Open Space chapters for more details on the Town’s efforts to buy and preserve open space.)

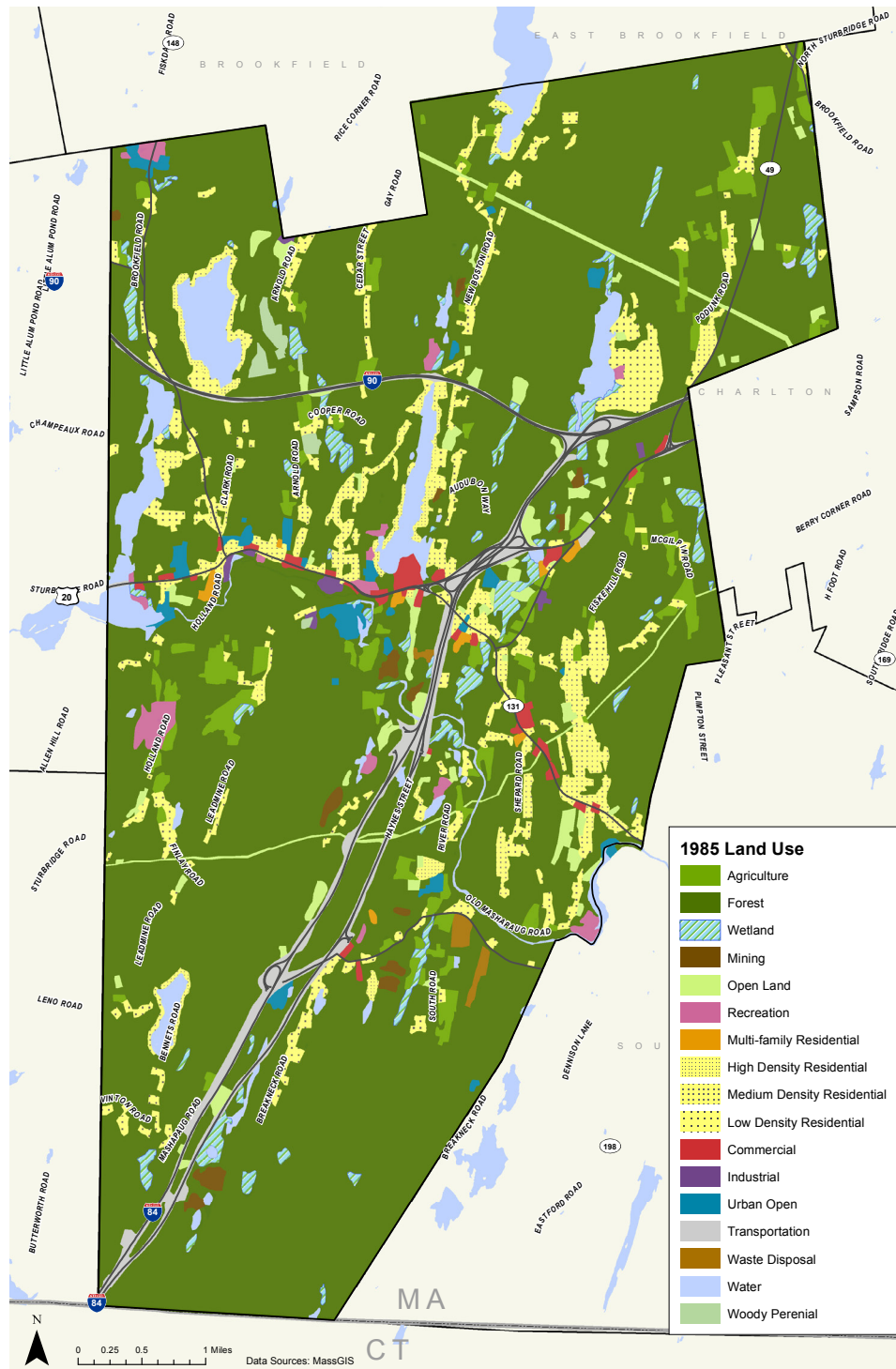
See Figure 2.2, which illustrates land use in Sturbridge in 1985.

**Table 2.2 Land Use Changes: 1971, 1985, and 1999**

Land Use	Percent Change		
	1971–1985	1985–1999	1971–1999
Agriculture	-11%	-18%	-27%
Open Undeveloped Land	0%	-20%	-20%
Commercial	32%	55%	104%
Industrial/Transportation/Mining	6%	1%	7%
Higher Density Residential*	52%	24%	89%
Medium Density Residential	19%	4%	24%
Low Density Residential	66%	45%	140%
Recreation/Urban Open	10%	16%	28%
Forest/Wooded Perennial	-4%	-4%	-7%
Waste Disposal	-61%	158%	0%
Wetland	15%	37%	58%
Water	0%	0%	0%

Source: MassGIS

**Figure 2.2** 1985 Land Use



### Current Land Use

Sturbridge covers roughly 24,923 acres. The Town's land use, shown in Figure 2.3, reflects its historical roots as a rural residential community. It also exemplifies the value the community places on the Town's rural character. As discussed in the Natural, Historic and Cultural Resources chapter, the Town has worked to protect, preserve and acquire undeveloped land in Sturbridge.

Despite development over the years, the vast majority of the Town is still undeveloped as shown in Figure 2.4. Currently, roughly 75 percent of the Town's land is agricultural or wooded perennial. While this appears to be an increase from 72 percent in 1999, the change is actually due to the greater degree of accuracy and detail in the 2005 MassGIS land use data compared to data from previous years.

An additional 2 percent of land (464 acres) is agricultural, which is down from 3 percent (653 acres) in 1999. This decrease is a continuation of the steady decline in agricultural land that has occurred in the last several decades (see Table 2.2) as farmers get out of the business, and land is sold for development. Between 1971 and 2005, Sturbridge has seen its agricultural land nearly cut in half.

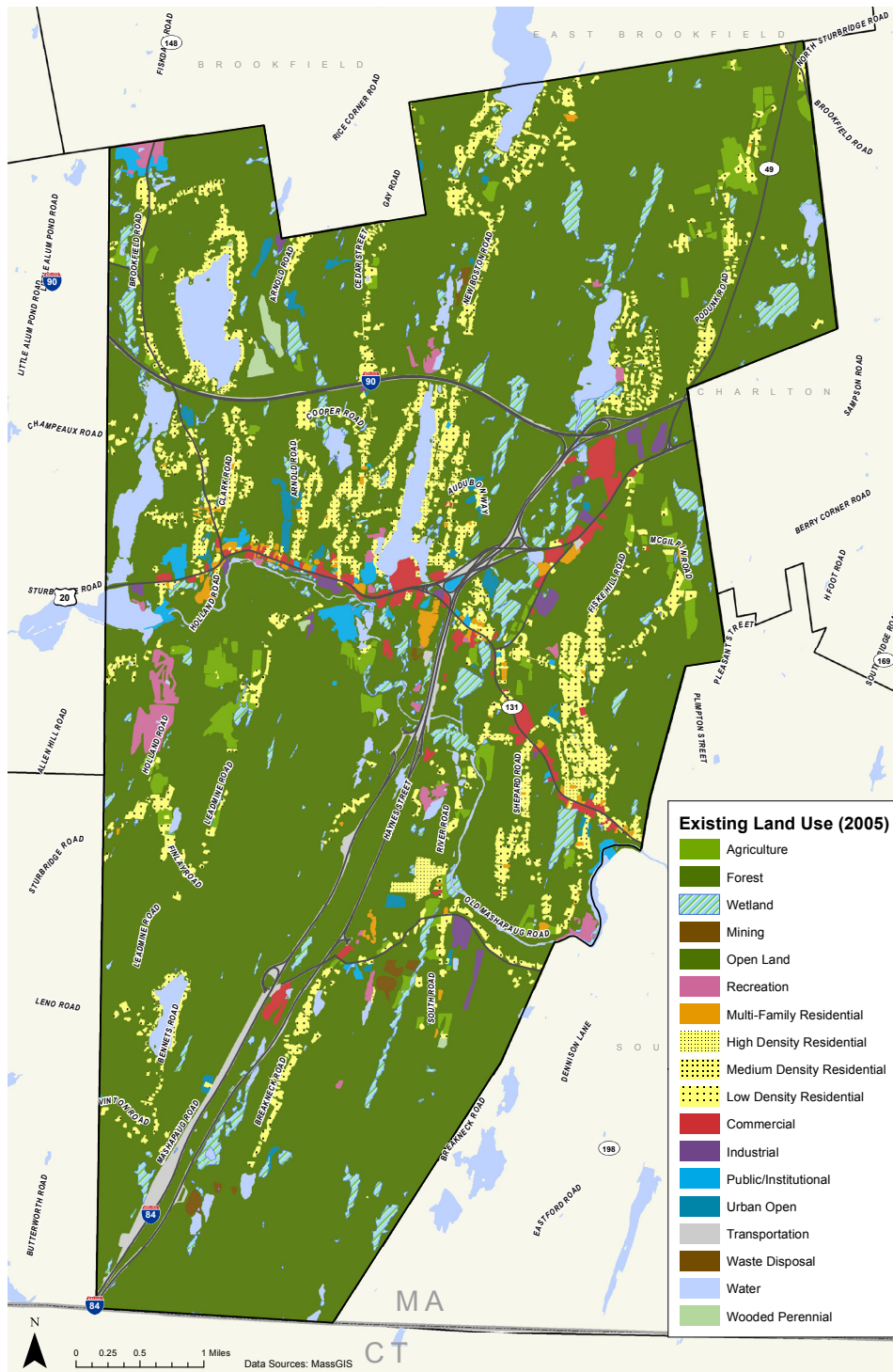
Similarly, the amount of open undeveloped land in town has significantly decreased, particularly since 1999. In that year, there was roughly 418 acres of open land, which represented 2 percent of all land in Sturbridge. In 2005, this number shrank to 306 acres.

Despite these losses in agricultural and undeveloped land, the Town maintains its rural feel, largely due to the amount of land that has been conserved and protected from development as well the low-density nature of most residential development. Roughly 8 percent of the land in town is residential, and most of that is housing on lots that are more than a half acre (5 percent).

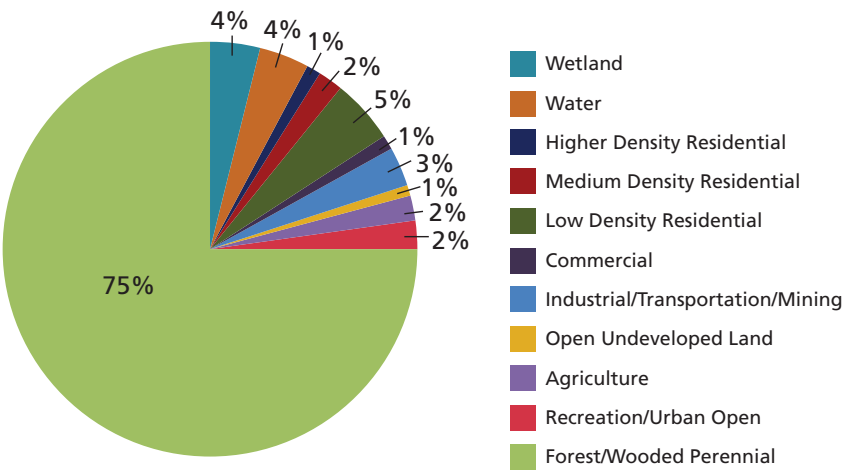
The amount of commercial land uses in Sturbridge remains low, representing only 1 percent of land in 2005. There has been, however, a continual increase since 1971. For example, there were roughly 300 acres of commercial land in 2005, which was a 26 percent increase from 1999. Much of the newer commercial uses have come along Main Street, Route 20 and Southbridge Road.



**Figure 2.3 Existing Land Use**



**Figure 2.4** Existing Land Use



Source: MassGIS

## Sturbridge Corridors

### Land Use and Community Design Issues and Opportunities

The issues associated with the Town's major transportation corridors represent the difficult balance Sturbridge faces between achieving economic development goals that allow the community to meet revenue needs with those values expressed time and again by citizens who choose to live in Sturbridge for its "small town, family oriented, rural character." Perhaps no other issue the Town faces is as tenuous. This is in evidence most poignantly on Route 20 which must respond to these often diverging goals.

#### Route 20

From the I-84 exit ramp to the intersection with Cedar Street, the character of the roadway and its adjacent land uses is tailored to tourism, a vital part of the town's economic health. Not surprisingly, the scale of this portion of the corridor is automobile oriented—a wider road width with two lanes in each direction, large traffic islands, broader setbacks with buildings set behind parking and tourist focused uses such as hotels and restaurants. The overall character, in response to the location, does not convey a small town/rural feel and in many ways does not differentiate itself from any other similar location at an interstate exit ramp other than signage directing visitors to the Old Sturbridge Village.

From Cedar Street west to Route 148, a second character begins to emerge: the road narrows to two lanes, many buildings are closer to the road, there are a variety of building types and uses, and one gets a better feel of a small town scale. There is a better sense of history as well with architecture that reflects the evolving life of the corridor. Buildings, such as the Holland Road Mill, Blackington Building, and Yankee Peddler to name a few, are an essential part of conveying this history and it should not be forgotten that it is history that brings tourists to the area.

But diverging goals and functions are at odds in this portion of the corridor as well. Route 20 is a major east-west state roadway designed to move traffic safely and efficiently. As the Sturbridge Commercial/Tourist Revitalization Study points out, the corridor is not pedestrian friendly, with discontinuous walkways and little in the way of pedestrian comfort. In addition, the corridor is long and linear with many curb cuts which result in more vehicle trips, thus more congestion and more safety conflicts.

Typical recommendations to address the goal of creating a more walkable area such as on-street parking; wide, continuous walkways with seating, special paving and lighting; articulated cross-walks; and necked-down corners are all at odds with the Route 20 transportation mandates as a state road. This is made more difficult by the lack of right-of-way and the presence of overhead utilities which dominate the visual character and take away from pedestrian space and the potential for planting street trees.

Route 20 must serve the needs of the local community, but also those of tourists and the region to some degree. It must also meet its responsibility as a major east-west link. The challenge for the future of Route 20 will be to implement the appropriate mechanism that allows it to respond to its multi-purposed charge while supporting a visual character that is aligned with the Town's expressed image of itself as a rural community with a strong sense of its' history. Given the disparate nature of the corridor and its multi-functional charge—the public realm, the roadway, and right of-way—it is the logical place to establish a consistent and unifying character that can create the appropriate image, mitigate the variety of land use expressions, and establish a coherent landscape. This task is made more difficult given its location at an exit from the interstate and the dual personalities of its corridor.

The nature of any corridor is a linear assemblage of individual properties and interests, each with the same objective of maximizing value, relying on its adjoining roadway to provide access and visibility. This linear configuration makes it difficult to create a sense of place. Linearity is reinforced by commercial zoning which typically creates shallow lot depths that are insufficient in their dimension to allow groupings of buildings with similar uses and objectives that might begin to mitigate the corridor's length.

The corridor today has three main framework elements: the eastern gateway and hospitality zone extending from the exit ramp at I-84 to Cedar Street; the western gateway at Route 148; and the more linear commercial-tourist zone from Route 148 to Cedar Street. The key to “taming” this corridor including addressing issues of walkability, identity, and overall character, will be a combination of appropriately scaled gateway landscape treatments and the creation/reinforcement of pedestrian scaled “places” within the remainder of the corridor, the Commercial-Tourist zone.

### Opportunities: Gateways and Places

#### *Eastern Gateway*



Gateway near Visitors Information Center

This is where most tourists first enter the Sturbridge area—the Town's first chance to make a first impression, so to speak. There are several opportunities in this area to develop a much stronger entry experience including the large grassed islands and the center median.

If the Route 20 corridor is to become an appropriate gateway to an historic “village,” then the scale of the area from the east, from the exit ramp to Cedar Street, needs to be reduced by

manipulating the landscape to the extent possible. Recognizing that this entry is oriented to tourist/visitor land uses and thus more scaled to the automobile, future efforts should focus on areas where an

investment in the landscape can have the greatest benefits. Currently the large traffic islands at this gateway are minimally planted but represent an opportunity for a much more dramatic landscape statement. While this area may be within the state right-of-way, it should be possible to develop a themed planting scheme that meets with the state's approval and which can provide a more appropriate welcoming gesture to visitors as well as residents. This landscape should utilize materials that are consistent with the historic nature of the village such as stone, rail fencing, fruit trees, and seasonal flowers, and should be planted in a manner that reduces the flat, open traffic islands. In fact, the 1996 "Beautification Plan – Proposed Route 20 Design" suggested a similar theme and included a specific tree list and plans for period lighting and fencing, shrub and flower plantings, and other improvements.

The paved center median could present another opportunity to tame the automobile scale of this area. Currently a granite paver median separates the travel lanes and controls the location of left turn movements. Replacing this with a raised median planted with street trees would provide a themed accent as well as a way to mitigate the visual width of the corridor within this section which, due to the land uses and larger setbacks, lacks a sense of intimacy associated with a historic village.

As described in Chapter 4 – Economic conditions, this plan recommends that the eastern gateway section of the corridor be designated as a new Entertainment and Recreation district.

#### *Western Gateway: Route 20 and Route 148*

Entry to the Commercial-Tourist Zone from the west engages the potential visitor more favorably into the character of the corridor. The mill on the corner of Holland Road and Route 20 (the Mill) and Blackington Building are particularly important to this experience. Opportunities at this location should build on the intersection's adjacency with the Quinebaug River, reinforcing views to that resource perhaps by providing a scenic overlook linked to the Mill by a pedestrian walkway. In addition, some landscape treatment, such as a low stone wall with signage that announces arrival to the district, could be added.

#### *The Commercial Tourist Zone – Creating Places*



Sturbridge Marketplace

Due to the long, linear nature of the remainder of the corridor from Cedar Street to Route 148, combined with the limitations placed on the roadway by virtue of its transportation role (i.e., limited right-of-way and overhead utilities) the goal of creating a more walkable, pedestrian friendly environment can best be met by exploring opportunities to reinforce special places along this portion of the corridor such as nodes supported by common parking, landscaping, and signage. Creating nodes or places would break the corridor down into more coherent pieces in scale with pedestrian needs.



Blackington Building

Such an approach would also address the goals associated with reducing congestion and improving access to some of the corridor's natural resources. In concept, the nodes would be reinforced by adding linked public parking at the rear of buildings in areas where existing conditions are favorable. Utilizing existing intersection points with roadways on the north side, potentially at Bates Court, Bates Hill Road, and Arnold Road, access could be extended south towards the river

via designated walking paths, reinforcing natural crossing points for pedestrians and logical points for left turns. Such an extension at Bates Hill Road for example would provide better access and parking to support Turner's Field as well as to provide a public point of access to the river and a potential river walk/bikeway.

Public access at the above mentioned locations would be connected with a bay of public parking behind the businesses and a wide pedestrian walk extended between, which would address the issue of the perception and reality of sufficient parking while supporting businesses within the nodes. Such a public parking area between Bates Hill Road and Bates Court would provide stronger linkage with the Mill and adjacent retail, an area which currently has a minimal pedestrian walk along the front side of the buildings.

A concept plan has been prepared for illustrative purposes to demonstrate some of the opportunities that can yield improvements to the current layout of the corridor (see Figure 2-5). This includes the creation of additional parking to the rear of the existing buildings on the south side of Route 20. By moving the parking from the front of the buildings to the rear, streetscape improvements can be implemented and some on-street parking can be provided. Additionally, there are several sites that could accommodate infill development of new commercial space.



Route 20 looking west

Similarly, on the north side of the corridor, opportunities could be explored to achieve the same cohesiveness. This is particularly true at the Blackington Building which is a vital piece of the historic fabric of this corridor, but which suffers from a lack of parking. The latter severely limits potential redevelopment options. If public parking were provided at the rear of the building, accessed from Bates Court and extended using High Street, business interests in this potential node would be greatly enhanced and the building could provide an interesting mixed-use opportunity.



**Figure 2.5 Route 20 Concept Plan**



### Route 131: Issues and Opportunities

This two-lane road links Route 20 (the Commercial-Tourist District) with the historic Town Hall, Town Common, and then Southbridge center and the Harrington Hospital medical district to the south. While it once may have been a road that expressed the rural character of the town with small scale buildings close to the street and long expanses of natural or agricultural areas, commercial zoning for much of its length has resulted in a character that is more disparate and suburban in nature. The corridor can essentially be divided into three zones: the gateway area from Route 20 to the I-84 overpass, the Town Common area, and the remainder of the corridor to the Southbridge line.



Publick House

#### Route 131 Gateway

The Town should explore opportunities to create a much stronger sense of identity and entry, particularly since this gateway provides the introduction to one of the more coherent historic resources—the restored Town Hall and Center Office Building, the Common, and the Publick House. This area presents the Town with a challenge because of potentially competing concerns that could impact the area. For example, the potential



Route 131 gateway

expansion of the Publick House needs to be accomplished in a manner that does not compromise the historic integrity of the area around the Town Common or adversely impact the surrounding residential character. It is important to note that the Sturbridge Common Historic District encompasses the Town Common and 47 buildings, so any new construction in the district should be designed to complement this historic setting. A more definitive gateway could be achieved with a combination of planting within the large traffic islands as well as street trees leading up to the overpass. The overpass bridge allows light to penetrate below which could support additional gateway planting along the grassed banks of the abutment. Now that the renovations are complete, Town Hall and the Center Office building, along with the nearby Library, church, and the Town Common, will provide an excellent anchor to this area as well as an important visual terminus to Route 15.

The gateway could be more clearly articulated by the use of consistent plantings, crosswalks and pedestrian-scaled lighting from the Commercial-Tourist District to the Town Common.



### Remaining Corridor

Again, objectives for preserving and enhancing the Town's rural nature are compromised by economic realities and this corridor's overall character has been altered significantly over the years due to its commercial development pattern. The spacing between uses that typifies a undeveloped road such as an occasional house or business with large expanses of wooded areas and then open views to farmed land has been minimized or lost by suburban development prototypes. There are a few areas where extensive natural landscape still exists (across from Hall Road along a portion of the west side of the road and an area to the south across from the Main Street/Old Sturbridge Road couplet) which will likely remain since much of this land is composed of wetlands. For the most part the corridor is dominated by commercial development, related signage, and multiple curb cuts.

As was seen in the Commercial-Tourist District along Route 20, the depth of the commercially zoned land along Route 131 only reinforces the linearity of the corridor by establishing the shallow pattern of road edge parking lots that predominates. Any opportunity to mitigate this pattern would have to reconsider the depth of the commercial zoning, extending the depth to a degree sufficient to support grouped patterns of buildings. This approach would be most effective if the overall zoning strategy for the corridor was to create pockets of mixed-use, returning the areas between to single family residential and preserved open space. Allowing higher densities of development within the pockets could compensate for lost development potential of individual lots.

### Route 15

Running north/south and parallel to I-84, this two-lane roadway provides access to a number of the Town's natural resource areas as well as the Jellystone Park campground area. The portion of the corridor from its intersection with Route 131 to the Quinebaug River is zoned for historic commercial.

The majority of the corridor is undeveloped due to the absence of town water and sewer. The issue of whether to extend these services has been an ongoing topic of discussion. The Wastewater Treatment Facility (WWTF) upgrade is on-going and will take approximately three years to complete. Therefore, a recent study of the corridor recommended that any consideration of extension of public wastewater infrastructure be tabled for approximately three years until such time that the Town can determine whether capacity may be available at the WWTF for flows from the study area.

If the Town pursues this issue in relation to some of its economic development objectives, such as lengthening tourist overnight stays by expanding recreational opportunities, interesting opportunities could arise. The Route 15 corridor is an appropriate location for such uses. Expanded activities could typically include such things as miniature golf, a golf driving range, batting cages, and a water park just to name a few.

Utilizing the Route 15 corridor for these uses would allow for these long range economic goals to be addressed without undermining goals related to preserving a sense of place and a respect for the history of the Commercial-Tourist District along Route 20 and portions of Route 131 corridors.

It should also be noted that if the Town pursues the economic development goals and recommendations discussed in Chapter 4, the Town needs to determine which options to pursue—promotion of this area for tourism related uses or more intensive uses such as manufacturing or health care/medical uses.

### Creating Visual Order

Visual consistency in any of these corridors is an issue. At the same time it would be a mistake to so rigidly control this that the authenticity of the Town is compromised as a real place, not a theme park. Finding a mid-point requires that the Town identify elements of an aesthetic that it values and considers appropriate to emulate in future buildings as well as the general landscape. To that end, the Town updated and adopted the “Design Review Committee Handbook and Design Guidelines” in March 2011. These guidelines establish design guidelines for surroundings (the areas around a building site such as landscaped buffers, parking areas, etc.), streetscapes, building exteriors, and signs. Guidelines are specifically targeted for historic areas, commercial corridors, and big box retail buildings. This is particularly relevant when the goal is to respect and preserve a sense of historic, rural character. There are specific architectural features, such as gabled roof lines, and building materials, such as shingles or multi-paned windows, that convey a sense of history but allow room for contemporary interpretation. There are building to roadway relationships more typical of a rural landscape that are important in conveying a scale that promotes walking. There are landscape materials that allow visitors to read the history of a place.

## What is zoning?

Modern zoning began in the early 1900’s in response to the location of potentially incompatible and noxious land uses next to commercial and residential areas. The zoning bylaw has evolved over the years as a means to limit the types of land uses that could locate in a particular area of the municipality, resulting in a separation of uses. Ideally, the Master Plan is the blueprint for the Town and the zoning bylaw is the regulation that implements the plan. Typically, a zoning bylaw regulates land use by:

- ▶ Specifying and distinguishing different land use types;
- ▶ Creating development standards for the size and shape of lots and the buildings erected on those lots;
- ▶ Addressing lots, buildings and uses that pre-dated the adoption of the zoning ordinance (non-conformities);
- ▶ Establishing criteria for the evaluation of permit applications for new buildings;
- ▶ Establishing procedures for permitting uses not specifically allowed by right;
- ▶ Defining terms that have specific meanings under the ordinance; and,
- ▶ Creating a map that displays the geographic extent of each zoning district.

## Land Development Regulations

This section discusses the important role zoning plays in guiding future land use decisions and thereby shaping the community. It analyzes the Town's Zoning Bylaws, providing descriptions of each of the districts in Sturbridge. Recommendations for amending the bylaw have also been included. The goal is to help ensure that the Zoning Bylaws are consistent with the goals and objectives of this Master Plan.

### Overview of the Sturbridge Zoning Districts

The Town of Sturbridge Zoning Bylaws were first adopted by Annual Town Meeting in 1965. Numerous additions and amendments have been made over the years, with the latest revisions having occurred at the 2010 Annual Town Meeting.

The Zoning Bylaws establish nine districts and three overlay districts. See Figure 2.6 for a map of the zoning districts. District boundaries were most recently changed since 2009.

#### *Rural Residential (RR)*

Most land in Sturbridge lies within this district. The district primarily allows single-family dwellings and accessory uses, though nurseries, farms, micro-breweries and adult day care facilities are also permitted. Other uses such as senior housing and hospitals are allowed by special permit.

#### *Suburban Residential (SR)*

This district is similar to the RR District, but it is more densely developed. Specifically, the minimum lot size in this district is three quarters of an acre (or half an acre if serviced by Town water and sewer) compared to one acre in the RR District.

#### *Commercial (C)*

This district allows a variety of commercial uses—such as restaurants, offices and retail stores—in addition to single-family homes and apartments accessory to commercial buildings. It is mainly located east of Interstate 84, along Route 20, and along Route 131 to the Southbridge line.

#### *Commercial II (C2)*

This district is nearly identical to the C District, with the exception of allowing a truck stop as a permitted use. Only a few properties are zoned this district, including New England Truck Stop on Route 20. The dimensional requirements for the C2 District are the same as the C District.

#### *Commercial/Tourist (CT)*

This district lies along Main Street (Route 20), between Brookfield Road and Burgess School Road. Allowed in this district is a mix of commercial and tourist-related uses, including gift shops and travel

industry offices. Mixed-use buildings are also permitted. Miniature golf, movie theaters, lodging houses and bed and breakfasts are allowed by special permit.

#### *Historic Commercial (HC)*

Located along Haynes Street south of Main Street, this district allows for limited retail and service uses. The goals of the district are to “protect and preserve the important historic features of the nearby Sturbridge Common,” ensure future development respects the character of the Common, and protect the town’s visual character.<sup>1</sup>

#### *General Industrial (GI)*

This district allows a range of uses, including hotels, storage facilities, manufacturing uses, automotive uses, and printing establishments. It is largely located along Main Street west of Brookfield Road.

#### *Industrial Park (IP)*

In addition to most of the uses allowed in the GI District, this district allows fuel oil distribution and storage facilities as well as telecommunications facilities like radio broadcasting studios. It is mostly located west of Interstate 84, between the Massachusetts Turnpike (Interstate 90) and Route 20.

#### *Special Use (SU)*

Adopted in 1998, this district is located north of Mashapaug Road, between Haynes Street and River Road. There are a limited number of permitted uses in this district, including single-family dwellings and farms. It is the only district where planned unit business developments (PUBD)—these are primarily non-residential uses—are allowed by special permit. Other uses allowed by special permit include mobile retirement communities, hospitals and commercial recreational facilities.

#### *Wireless Communication Overlay (WC)*

This is an overlay district that regulates where and how wireless communication facilities can be installed. In general these facilities are allowed in the C, C2, CT, GI and IP districts.

#### *Flood Plain District*

This overlay district is largely designed to protect land from flooding. Development cannot occur in this district without a special permit from the Planning Board.

<sup>1</sup> Sturbridge Zoning Bylaws,  
[http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5)

*Groundwater Protection District*

Adopted in 2002 and amended in 2009 to cover the protection zone for Well #4, this overlay district limits the types of uses allowed in delineated aquifers or recharge areas. Certain activities—like those that create impervious surfaces over a certain amount—require a special permit.

**Zoning Regulations**

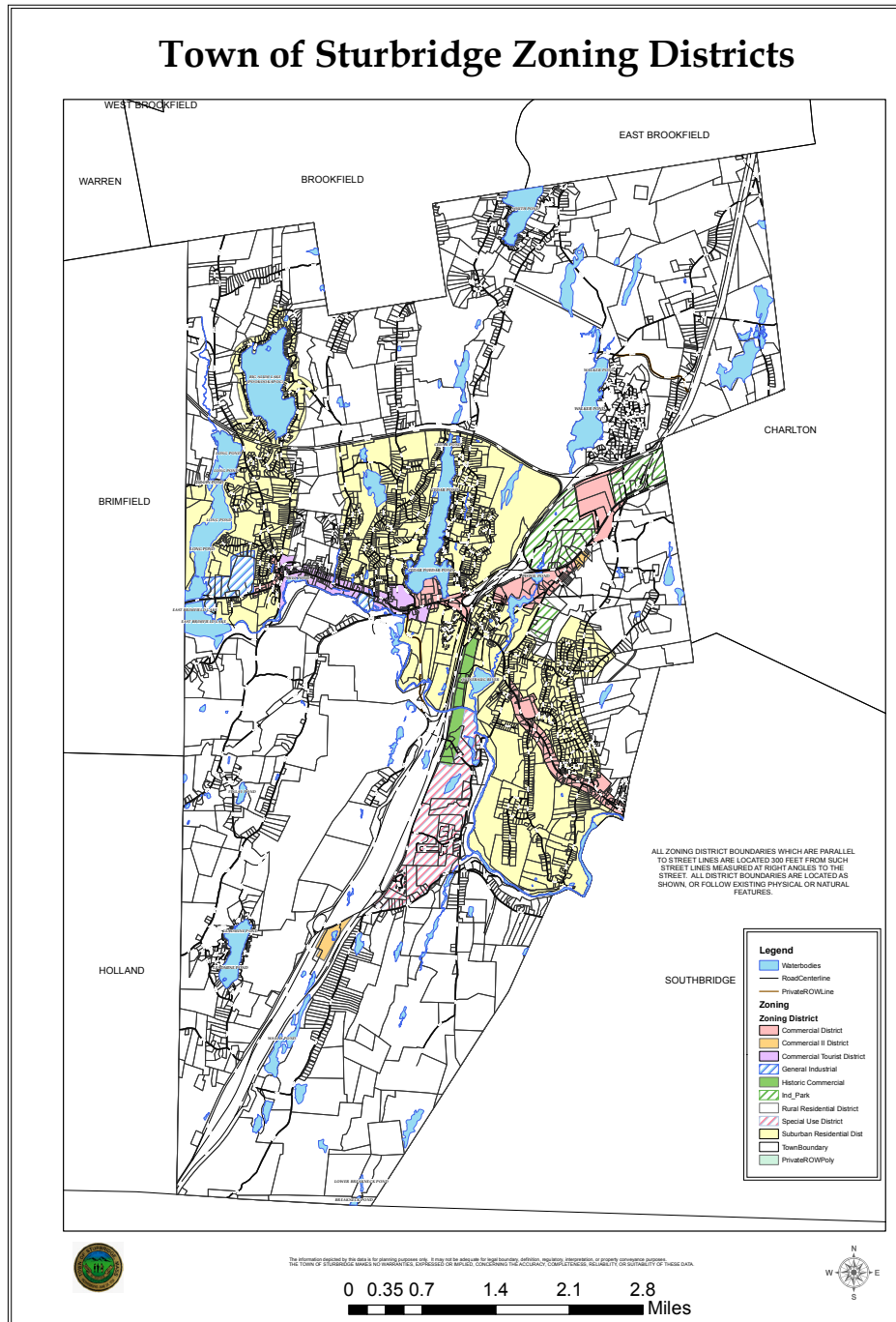
Both the Planning Board and Zoning Board of Appeals (ZBA) act as the special permit granting authority (SPGA) for different types of uses, though in most cases, the ZBA is the SPGA. The ZBA also has the authority to grant variances.

The Planning Board administers site plan review in Sturbridge. Site plan approval is required for most uses. The exceptions include single-family or two-family dwellings, horticultural nurseries, farms, tree farms, and professional offices when the office and residence are in the same building in a residential zone. In reviewing site plan applications, the Planning Board considers a number of issues, including vehicular and pedestrian circulation, lighting and impacts on Town resources. The Zoning Bylaw also has detailed landscaping and buffering requirements. The intent is to reduce environmental degradation, enhance the community's visual character, stabilize soils, and retain existing vegetation, among other goals.<sup>2</sup>

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<sup>2</sup> Sturbridge Zoning Bylaws,  
[http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5)

Figure 2.6 Zoning Map



In 2009, the Town adopted an Open Space Residential Development (OSRD) bylaw intended to preserve open space, encourage flexibility in the design of residential developments, promote less sprawling and help maintain Sturbridge's traditional New England character.<sup>3</sup> A special permit may be obtained in the Rural Residential, Suburban Residential or Special Use Districts provided that the total land area for the project encompasses at least ten acres. It requires a minimum of 50 percent of a parcel be provided as open space and incorporates design standards for the developed and the natural portions of the project site. Density bonuses can be awarded for protecting additional open space, providing recreational facilities, preserving agricultural soils or active farmland, preserving historical structures, utilizing alternative energy sources, or setting aside dwelling units for affordable housing.

In 2010, the Town adopted an Expedited Permitting bylaw, which streamlines the approval process of projects on priority development sites. Incorporating language from Massachusetts General Laws Chapter 43D, the bylaw generally requires that these projects be reviewed and permitted within 180 days.

## Recommendations

As land use and zoning are intimately tied to a community's growth and development, many land use recommendations have been made throughout this Master Plan. See the Housing, Economic Development, and Transportation chapters for additional detailed recommendations.

### Land Use and Community Design Recommendations for the Corridors

In order to respect and preserve a sense of the historic, rural character of the town and in particular the main corridors, establish design guidelines or a form-based code to encourage better building layout and design.

- ▶ Consider establishing zoning incentives to encourage reinvestment and redevelopment of existing properties. Such incentives could include density bonuses to allow vertical expansion and new infill development.
- ▶ Use appropriately scaled gateway landscape treatments, pocket parks, and the creation/reinforcement of pedestrian scaled "places" within the Commercial-Tourist District to augment the identity and character of the area while enhancing its walkability. This can be achieved in part by implementing the design plans found in the 1996 Beautification Plan.
- ▶ Encourage the creation of a parking area behind the businesses to create extra capacity and enable streetscape improvements and some on-street parking along Main Street. This should help to reduce short vehicle trips between businesses not otherwise connected by a safe pedestrian pathway.
- ▶ Establish walking paths to provide pedestrian access between Main Street and the Quinebaug River.

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<sup>3</sup> Ibid

- ▶ Consider allowing mixed-use projects in the Commercial district. Such uses are currently allowed in the Commercial-Tourist District.
- ▶ Develop design guidelines to be incorporated into the zoning bylaw for new development along the corridor with an emphasis on creating a safe and friendly pedestrian environment. These guidelines could include provisions for building massing; building placement; window, door and façade treatments; signage; lighting; streetscape and landscape improvements; and pedestrian amenities.
- ▶ Consider consolidation of future development along Routes 20 and 131 into nodes at key locations, preserving natural areas between these nodes using tools such as transfer of development rights (TDR). Essentially, TDR transfers the growth from areas where protection is desired (open spaces, environmental resources) to areas where development is appropriate because of proximity to infrastructure and services.
- ▶ Encourage streetscape improvements that create gateways to Sturbridge along Route 20 at the east and west end of the Commercial-Tourist District at Route 131 near the Town Common.
- ▶ Since the actual intent of this zoning district is unclear, consider revising the use regulations for the Historic Commercial zone along Route 15 to reflect the existing hospitality-oriented businesses. Incorporate the Publick House property boundaries into the district. Given the lack of undeveloped land in the district, revise the zoning provisions to encourage suitable redevelopment opportunities.

### General Zoning Recommendations

- ▶ Create a table of uses to replace the existing narrative listing of uses allowed by right or special permit in each zoning district. This would make the zoning bylaw easier to read and comprehend.
- ▶ Consolidate all of the definitions in the bylaw into one section, Chapter 2 Definitions. Currently, definitions are included in several sections of the bylaw.
- ▶ Create a separate section for parking and consider putting the parking regulations—specifically Section 20.22 (a) through (i)—into a table. Update the standards and include both minimum and maximum parking standards to avoid areas that are over-parked and to establish a mechanism for reducing impervious coverage for new development.
- ▶ As described in the Economic Development chapter, review, update and expand the lists of permitted uses in non-residential districts. In many of these districts, the lists seem outdated and restrictive as unlisted uses are excluded.
- ▶ As is the case in most municipalities, many of the lots within the Town of Sturbridge are non-conforming. Changes to the structures on these lots generally cannot be made without the specific approval of the Zoning Board of Appeals. However, property owners frequently seek to improve the homes and businesses with little or no impact to the character of the surrounding neighborhood. The bylaw should be reviewed for potential revisions to allow for certain by right improvements to structures on non-conforming lots based upon a finding of no impact.



- Update the sign bylaw (Chapter 22 of the Zoning Bylaw) to incorporate standards relating to the size, design and location of signs, as well as the types of signs currently being used by businesses.

#### **Preservation of Rural Character**

- Educate agricultural landowners about the state's voluntary Agriculture Preservation Restriction Program, which provides an alternative to selling or developing their land. The program pays farmland owners the difference between the fair market value and agricultural value of their land, and in return, a deed restriction is placed on the land that prohibits uses that would negatively impact the property's agricultural viability.<sup>4</sup>
- Encourage local agriculture through the development of farmers' markets. The state Department of Agricultural Resources provides technical assistance to people interested in starting farmers' markets.<sup>5</sup> The Town should also consider establishing community gardens on town-owned land. This could be done on a seasonal basis.
- Consider amending the OSRD to allow them by right and reduce or eliminate the minimum threshold of ten acres. OSRD can be an effective tool for open space preservation for smaller project sites and its use would be encouraged by streamlining the permitting process for developers. This is more effective than increasing lot size as a means to reduce the overall impacts of development while preserving more contiguous tracts of land for open space.

Hillside and steep slope alteration presents a number of health, safety, and environmental challenges such as increased erosion, landslides, and sedimentation. Septic systems on steep slopes are highly unreliable due to the slope and shallow soils. Hilltop development may result in additional expenses and difficulties in extending and maintaining infrastructure (roads, sewer, water systems, and power lines). Conversely, protecting hillsides and steep slopes preserves the natural scenic beauty of the native landscape, adds value to property, and provides educational and recreational opportunities. The Town should consider a hillside protection bylaw that would establish appropriate density and development standards for land that exceeds an established elevation or slope.

<sup>4</sup> Massachusetts Department of Agricultural Resources, Agriculture Preservation Restriction Program, <http://www.mass.gov/agr/landuse/APR/index.htm>

<sup>5</sup> Massachusetts Department of Agricultural Resources, Farmers' Markets, <http://www.mass.gov/agr/markets/farmersmarkets/index.htm>

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## 3. Housing

### Introduction

As a significant percentage of the Town's land area, housing is the most prevalent land use in Sturbridge; its cost and availability are critical components in the range of elements that together define the character of the community. While the housing stock (supply) today serves the needs of many of its citizens, market changes have made it difficult for certain segments of the community to afford housing costs. The housing goal is to provide choices for people and therefore, diversity in housing type and price is a significant aspect of this Plan.

The first section of this chapter provides an overview of the population and household changes that have been occurring in Sturbridge. It also looks at how the Town's demographics compare to those of the region, which includes neighboring Massachusetts cities and towns.

The following section discusses the type of housing that is available in Sturbridge as well as key housing issues that have been identified by members of the community and in the Town's Housing Needs Assessment Housing Production Concepts completed in 2008 for the Sturbridge Housing Partnership. Elements of this latter study have been included and updated in throughout this chapter.

### Housing Goals

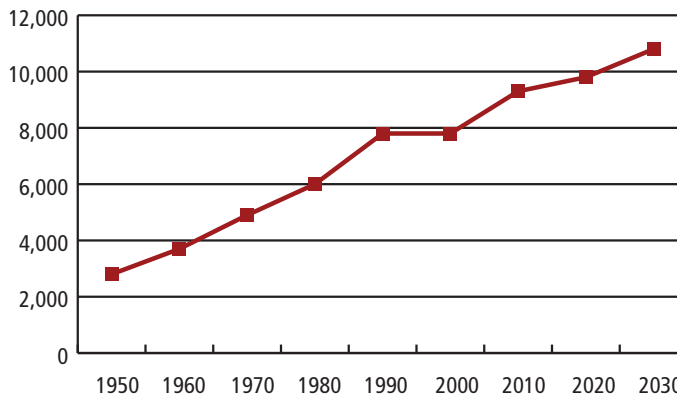
Housing in Sturbridge should be available to households of all kinds and residents of all income levels. Sturbridge should strive to:

- ▶ Provide high-quality affordable housing in attractive neighborhoods through development of appropriate zoning bylaws, regulations and programs designed to encourage a variety of housing types.
- ▶ Develop a plan designed to guide the Town toward meeting the 10% goal for housing affordability under Chapter 40B.
- ▶ Provide opportunities for existing low- and moderate-income Sturbridge residents to make improvements and repairs to their existing homes, while at the same time, increasing the affordable housing stock in the community.
- ▶ Ensure that housing choices are available to meet the needs of current and future generations Sturbridge.

### Population and Demographic Profile

Sturbridge's population has steadily grown over the last six decades and is expected to continue growing through 2030, as shown in Figure 3.1. The population increased by an average of 29 percent between 1950 and 1990.<sup>1</sup> That rate of growth slowed between 1990 and 2000 (1 percent increase) but picked up again in the last decade. Specifically, the population was projected to grow by 19 percent in the last 10 years, but it actually jumped by 26 percent to 9,876 people this year.<sup>2</sup>

**Figure 3.1 Population Over Time**



Source: US Census 1990 and 2000; Central Massachusetts Regional Planning Commission [www.cmrpc.org](http://www.cmrpc.org) (projections)

With a total land mass of 37.41 square miles, Sturbridge's current population density is 262 people per square mile.<sup>3</sup> This is an increase in density of about 25 percent since 1990 (208 people per square mile) and 2000 (210 people per square mile).<sup>4</sup>

Sturbridge's growth in recent years may be attributed in part to the availability of a large number of new housing units. Since 2000, at least eight new subdivisions have been approved by the Town. (See Table 3.8 below for more details). The Town's schools and accessibility to major highways for commuting purposes also make the Town an attractive community.

Compared to its neighbors on average as well as Worcester County and the state, Sturbridge grew more rapidly in the 1970s and 1980s but more slowly in the 1990s, as shown in Table 3.1. Between 2000 and 2008, Sturbridge's growth rate (16.2 percent) far outpaced that of its neighbors (3.5 percent on average), Worcester County (7 percent) and the state (3.9 percent).

<sup>1</sup> US Census 1990 and 2000

<sup>2</sup> Central Massachusetts Regional Planning Commission [www.cmrpc.org](http://www.cmrpc.org) (projections), Sturbridge Town Clerk's office. [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_Depts/clerk](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_Depts/clerk) (actual)

<sup>3</sup> US Census 2000; density based on population figures from Sturbridge Town Clerk's office

<sup>4</sup> US Census 1990 and 2000

**Table 3.1 Population Comparisons by Region**

Region	1970	1980	1990	2000	2008
Sturbridge	4878 (-)	5,976 (22.5%)	7,775 (30.1%)	7,837 (0.8%)	9,103 (16.2%)
Neighbors	27,481 (-)	30,054 (9.4%)	37,580 (25.0%)	39,371 (4.8%)	40,738 (3.5%)
Worcester County	637,037 (-)	646,352 (1.5%)	709,705 (9.8%)	750,963 (5.8%)	803,701 (7.0%)
Massachusetts	5,689,000 (-)	5,737,000 (0.8%)	6,016,425 (4.9%)	6,349,097 (5.5%)	6,593,587 (3.9%)

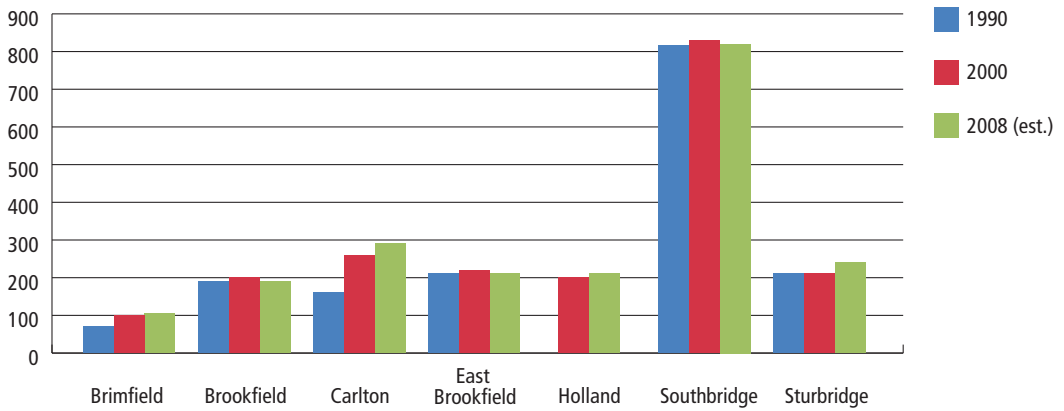
\*Worcester County data is from 2009.

Source: Central Massachusetts Regional Planning Agency, US Census 1990 and 2000, 2008 Population Estimates

Among its neighbors, Sturbridge has the third highest population, behind only Southbridge (16,852) and Charlton (12,585)<sup>5</sup>. It also has the third highest population density, again behind Southbridge and Charlton. Figure 3.2 shows that Sturbridge experienced the largest increase in population density (16 percent) in the region between 2000 and 2008.

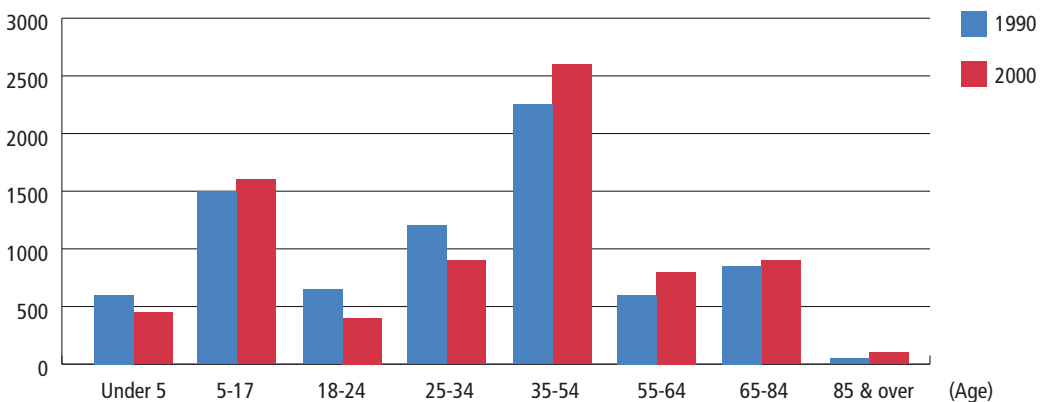
The Town's oldest cohort—people 85 years old and up—are the fastest growing segment of the population, having increased more than 100 percent in the 1990s. The Population Program at Massachusetts Institute for Social and Economic Research (MISER) projected that the 85 and older cohort would increase another 74 percent in the 2000s. (It is important to note that this cohort only included 87 people in 2000. MISER projected that it would include 151 people in 2010.) Among the other, more populous cohorts, the 55 to 64 age group grew most rapidly in the 1990s, jumping 32 percent to 812 people in 2000. It was projected to increase by 54 percent—or 440 people—between 2000 and 2010. That cohort is followed by the 35 to 54 age group, which saw a 15 percent increase in the 1990s. This information suggests that Sturbridge's population is getting older, which will affect the type of housing the Town will need.

5 US Census 2008 population estimates

**Figure 3.2** Population Density Comparisons by Region

Source: US Census 1990 and 2000, 2008 Population Estimates

In contrast, the younger population in Sturbridge has been declining as shown in Figure 3.3. The 18 to 24 age cohort and 25 to 35 age cohort both declined in the 1990s by 37 percent and 19 percent, respectively. This indicates that young adults appear to be leaving town once they graduate from high school. High school seniors have stated that they think they will need to leave the area in order to be able to afford housing, either rental or homeownership units. They cited a lack of apartments and entertainment opportunities as other related issues.

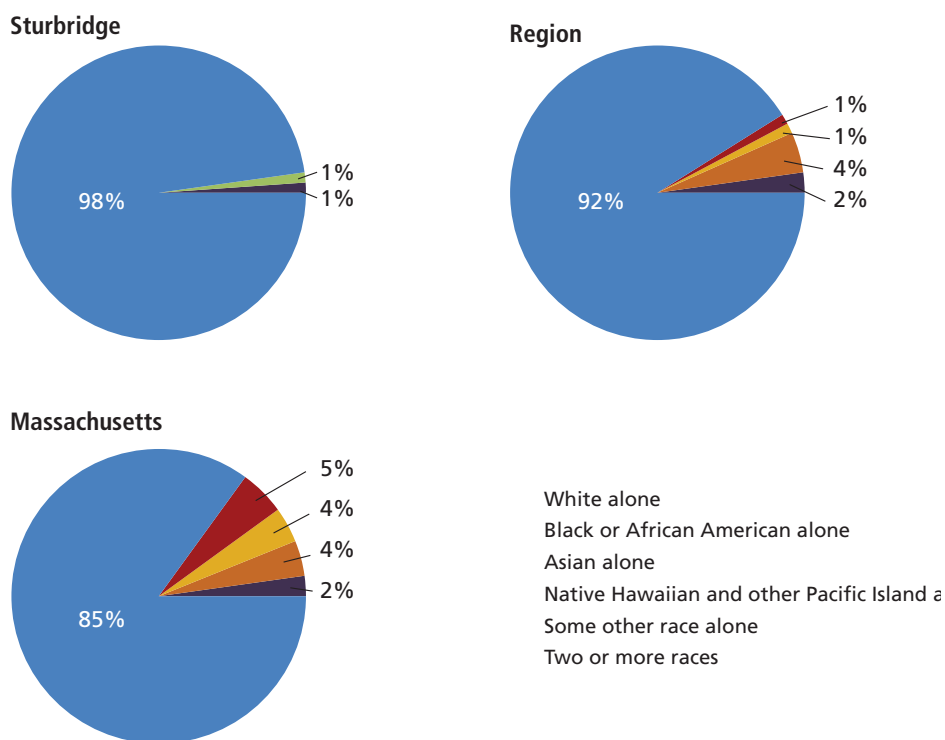
**Figure 3.3** Distribution of Population by Age\*

\*Note that the MISER projections are not included in this chart since MISER uses different age groupings than the US Census Bureau  
Source: US Census 1990 and 2000

The Town's 2008 Housing Needs Assessment compared the age distribution in Sturbridge to that of Worcester County and the state. Using 2000 Census data, it found that the number of Sturbridge residents in the different age cohorts largely resembled the patterns in the county and state.<sup>6</sup> The only cohort where Sturbridge varied more than 3 percent from either Worcester County or the state was the 20 to 29 age cohort; Sturbridge had a smaller percentage of people in this cohort than the other geographic areas.

In terms of gender, Sturbridge's population is evenly distributed between men (49 percent) and women (51 percent).<sup>7</sup> The Town is also largely homogeneous, with approximately 98 percent of the population identifying as White alone as shown in Figure 3.4.<sup>8</sup> Approximately 1 percent of the population is American Indian or Alaska native, with the remaining 1 percent being two or more races. In comparison, the region (neighboring communities) and the state are much more racially diverse. In particular, 8 percent of the region and 15 percent of the state are not White.

**Figure 3.4 Population Comparison by Race**



<sup>6</sup> Sturbridge Housing Needs Assessment Housing Production Concepts 2008

<sup>7</sup> 2000 US Census

<sup>8</sup> 2000 US Census



### Households

Sturbridge had 3,066 households in 2000, which was an 11 percent increase from 1990, as shown in Table 3.2. Compared to its neighbors, this rate of growth was in the middle of the pack: higher than three communities (Brookfield, East Brookfield and Southbridge) and lower than three communities (Brimfield, Charlton and Holland). This comparison is shown in Table 3.3. Sturbridge's rate of household growth contrasts with its much slower rate of population growth (1 percent) over the same period, indicating that the size of households has decreased.

**Table 3.2 Household Changes by Type**

	1990	2000	Percent Change 1990–2000
<b>Total Households</b>	<b>2,759</b>	<b>3,066</b>	<b>11%</b>
<b>Family Households</b>	<b>2,158</b>	<b>2,247</b>	<b>4%</b>
Married couple family	1,904	1,956	3%
Households with <18	1,129	1,039	-8%
Householder >64	384	381	-1%
<b>Nonfamily households</b>	<b>601</b>	<b>819</b>	<b>36%</b>
One-person households	537	722	34%
Age 65+	227	256	13%
Age 65+	227	256	13%

Source: US Census 1990 and 2000

**Table 3.3 Regional Household Growth**

Year	Sturbridge	Brimfield	Brookfield	Charlton	East Brookfield	Holland	Southbridge
<b>1990</b>	2,759	1,104	1,098	3,159	726	795	6,851
<b>2000</b>	3,066	1,252	1,212	3,786	775	900	7,097
<b>% Change</b>	11%	13%	10%	20%	7%	13%	4%

Source: US Census 1990 and 2000

Census data confirms this decrease (9 percent), showing that Sturbridge's average household size was 2.55 in 2000, as shown in Table 3.4. Households in town were larger in 1990 (2.8 persons per household). The decrease between 1990 and 2000 follows state and national trends, though the Town's rate of decrease was larger than that of the region on average (-4 percent), state (-3 percent) and country (-2 percent).

**Table 3.4 Household Size**

	1990	2000	% change
Sturbridge	2.80	2.55	-9%
Region	2.75	2.65	-4%
Massachusetts	2.58	2.51	-3%
US	2.63	2.59	-2%

Source: US Census 1990 and 2000

The household size decrease in Sturbridge is reflected in the changing makeup of households. As shown in Table 3.2, family households have generally increased at a much slower rate (4 percent) than nonfamily households (36 percent). In particular, the number of family households with children under 18 dropped by 8 percent between 1990 and 2000, while the number of single-person nonfamily households jumped by 34 percent. Of those single-person households, more than 35 percent are older than 65 years of age.

## Housing Conditions

Household growth is a major driver of housing demand in a community. As the number of households in Sturbridge increased between 1990 and 2000 (11 percent), so has the number of housing units, though at a slower rate (5 percent). As shown in Table 3.5, there were 3,335 housing units in Sturbridge in 2000, with 92 percent (3,066 units) being occupied.

**Table 3.5 Change in Housing Units (1990–2000)**

Housing Units	1990	2000	# Change	% Change
Occupied	2,793	3,066	273	10%
Vacant	385	269	(116)	-30%
Total	3,178	3,335	157	5%

Source: US Census 1990 and 2000

The vacancy rate declined from 12 percent in 1990 to 8 percent in 2000, as shown in Table 3.6.

Sturbridge's 2008 Housing Needs Assessment noted that this 8 percent vacancy rate is higher than those of Worcester County and the state. A greater percentage of Sturbridge's vacant housing stock, however, is used as seasonal.

**Table 3.6**                      **Housing Vacancy**

	1990	2000
Vacant units	385	269
Total housing units	3178	3,335
Vacancy rate	12%	8%

Source: US Census 1990 and 2000

The needs assessment also noted that Sturbridge had a small amount of rent vacancy—17 units listed on the 2000 Census—particularly when compared to Worcester County and the state. Despite this low vacancy rate, the needs assessment stated that there appears to be “significant enough turnover so that rental availability is not usually an issue.”

Of the 3,066 occupied housing units in Sturbridge, approximately 78 percent were owner-occupied in 2000. This equals 2,380 units, which is a 12 percent increase from 1990, as shown in Table 3. 7. The number of renter-occupied units increased at a slower rate (3 percent) during the same 10-year period.

**Table 3.7**                      **Housing Tenure**

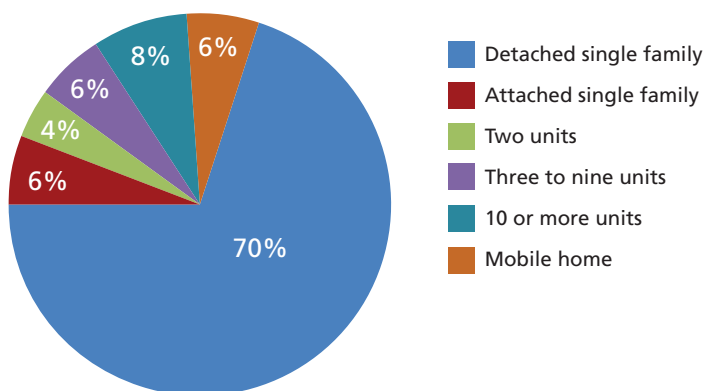
Occupied Housing Units	1999	2000	% change
Owner Occupied	2,129	2,380	12%
Renter occupied	665	686	3%

Source: US Census 1990 and 2000

Also, while the number of renter-occupied units increased by 22 in the 1990s, rental units represented a smaller percentage of the overall occupied housing stock in 2000 (22 percent versus 24 percent in 1990). This suggests that homeownership is on the rise in Sturbridge. In addition, the 2008 Housing Needs Assessment found that Sturbridge had a higher portion of owner-occupied housing compared to Worcester County and the state as of the 2000 Census.

In terms of housing type, Sturbridge is predominantly home to single-family dwellings (70 percent as of the 2000 Census), as shown in Figure 3.5. The 2008 Housing Needs Assessment found that Sturbridge had a larger percentage of single-family homes than Worcester County (61 percent) and the state (56 percent). The Town also had a smaller percentage of duplexes compared to the region and state.

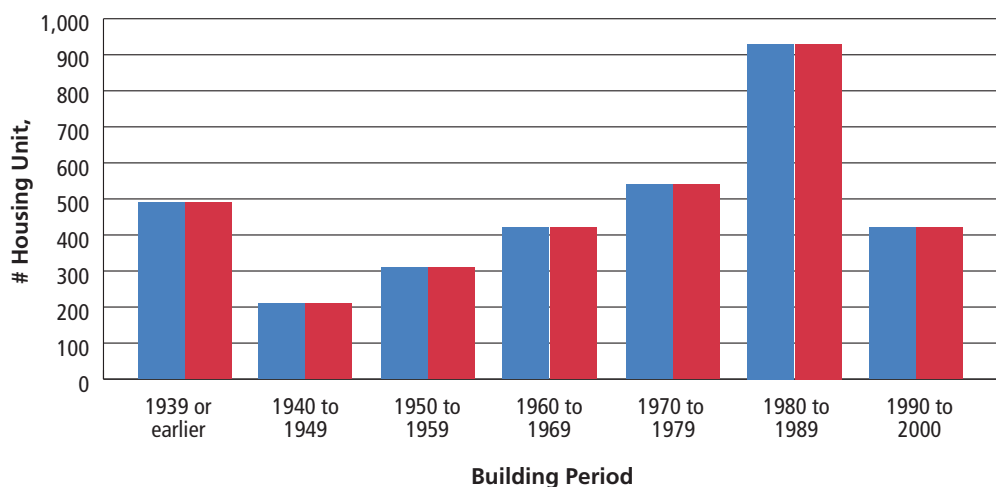
**Figure 3.5**      **Housing by Units in Structure**



Source: 2000 US Census

The housing stock in Sturbridge is relatively new compared to Worcester County and the state, according to the 2008 Housing Needs Assessment. A large portion of both the county and state's housing stock was built before 1940. In comparison, Sturbridge saw its largest building boom in the 1980s, as shown in Figure 3.6. This increase in housing construction is in line with the significant jump in population (30 percent increase) that occurred in the 1980s, as shown in Figure 3.1.

**Figure 3.6**      **Age of Housing Stock**

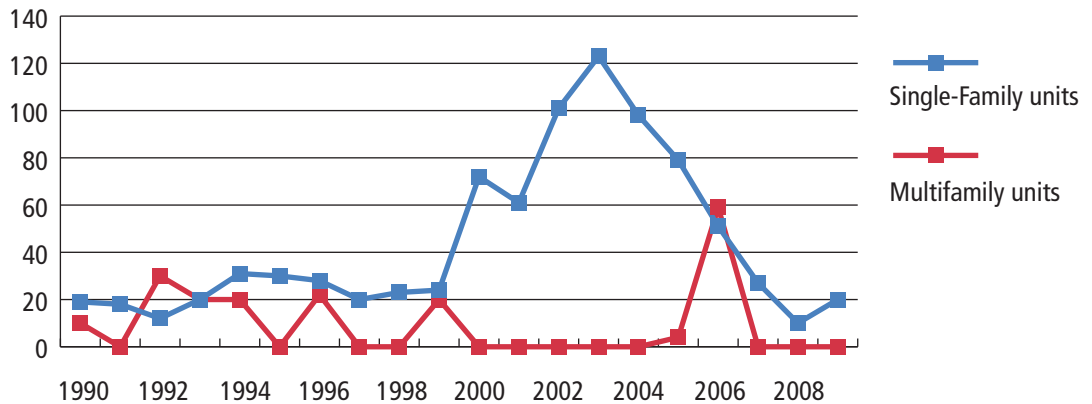


Source: 2000 US Census

### Housing Market

In addition to the housing boom in the 1980s, Sturbridge has experienced a surge of housing construction since 2000, as shown in Figure 3.7. A total of 708 building permits were pulled between 2000 and 2009. This is more than double the number issued in the 1990s (304 total). In both decades, the vast majority of permits have been for single-family units. Multifamily units have not been produced in any year since 2000 except in 2005 and 2006.

**Figure 3.7** New Housing Starts: 1990 to 2009



Source: US Department of Housing and Urban Development

As mentioned above, Sturbridge has approved eight subdivisions since 2000, which could have driven the population growth in the last decade. Many of the new homes that have been built are now occupied by families, particularly young families.<sup>9</sup>

Table 3.8 from the 2008 Housing Needs Assessment—which has been updated—provides information about recent subdivisions in Sturbridge. It shows that many of the approved subdivisions have not been completed. The Town has been trying to encourage developers to finish the roadways and other infrastructure, but there has been little incentive—due to the slow housing market and economy—to complete the subdivisions.

<sup>9</sup> Based on conversations with Sturbridge Town Planner Jean Bubon

**Table 3.8** Recent Sturbridge Subdivisions

Project name	Year Approved	Number of Lots Built	Street/Intersection	Number of Lots Remaining
Allen Homestead	2001	42	Colette Road	7
Brook Hill	2002	10	Brookfield Road	0
The Preserve	2002	72	New Boston Road	1
The Sanctuary	2002	24	Arnold Road	0
Draper Woods	2003	46	Brookfield Road	20
The Highlands	2004	29	Arnold Street	2
Laurel Woods	2005	9	Cedar Street	9
Estates at Sturbridge Farms	2007	6	Farquhar Road	3

Source: 2008 Housing Needs Assessment, updated with information from Sturbridge Planning Department

Similar to the decrease in housing starts, the number of home sales in Sturbridge has declined since the early 2000s. As shown in Table 3.9, the number of home sales in the last decade peaked in 2004 (315 sales) and has steadily decreased since then.

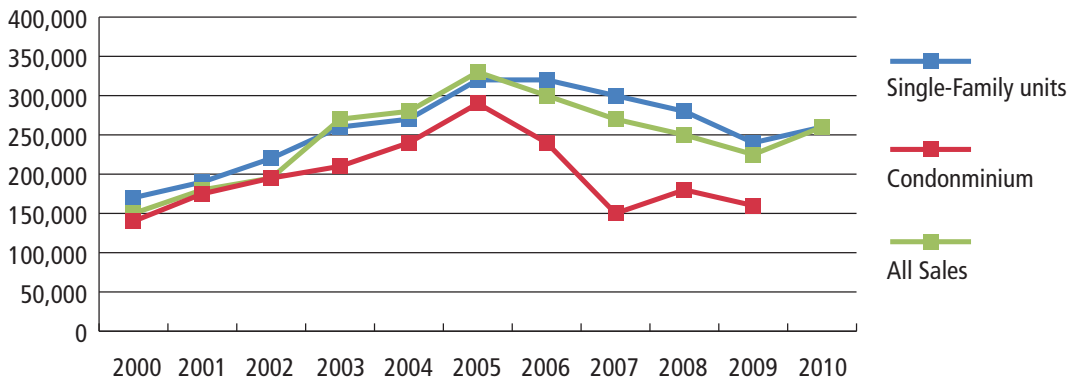
**Table 3.9** Number of Home Sales

Year	Single-family	Condominium	All
2010*	27	1	38
2009	87	12	121
2008	86	21	132
2007	117	35	205
2006	134	52	255
2005	158	19	279
2004	136	28	315
2003	135	22	282
2002	124	27	249
2001	96	22	200
2000	139	28	228

\*Number of sales in 2010 are for the months January through April  
Source: The Warren Group

This drop in home sales is nearly mirrored by the decline in median sales prices. As shown in Figure 3.8, housing prices in Sturbridge peaked at \$335,000 in 2005 and fell to \$225,000 in 2009. This housing stabilization has occurred throughout most of the region and state. Recently, though, prices have started to become more stable, even increasing in some areas. In Sturbridge, the median sales price as of April 2010 increased to \$264,000, which is near the 2007 levels.

**Figure 3.8 Median Sales Price\***



\*Median sales prices for 2010 are for the months January through April  
Source: The Warren Group

Despite the fluctuation in home prices over the last decade, Sturbridge has largely remained one of the more expensive places to buy a single-family home compared to its neighbors. As shown in Table 3.10, the Town had the second highest median sales price in 2009, behind only Charlton by approximately \$4,000.

**Table 3.10 2009 Median Sales Prices in the Region**

	Single-family	All
Sturbridge	\$240,000	\$225,000
Brookfield	\$182,000	\$166,500
East Brookfield	\$169,000	\$168,000
Charlton	\$235,250	\$229,250
Southbridge	\$154,500	\$130,000
Holland	\$167,700	\$151,825
Brimfield	\$199,000	\$170,000

Source: The Warren Group

## Affordable Housing

Sturbridge's Housing Needs Assessment was prepared by Bailey Boyd Associates for the Sturbridge Housing Partnership in 2008. The goal of the study was to “assist the Sturbridge Housing Partnership and the community as a whole to gain a clearer understanding of community housing and its availability in Sturbridge, as well as a clearer understanding of the housing needs in Sturbridge.”<sup>10</sup>

The needs assessment found that it was debatable whether the Town had reached a “crisis level in terms of affordable housing,” but it stated there was a clear housing need in Sturbridge. Given this need, it laid out a series of priorities for the Town to follow in the short term. These priorities as well as a summary of the assessment and its goals for Sturbridge will be summarized in the following sections.

## Housing Needs Assessment

The needs assessment included several major findings related to Sturbridge's population and housing needs. These findings, listed in the assessment's executive summary, have been updated and are listed here:

- ▶ The state goal for affordable housing is that 10% of a community's year-round housing stock be affordable. Sturbridge has 3,141 year-round housing units (2000 Census), so the goal is 314 affordable units. As of May 2010, Sturbridge had 211 affordable units (6.59%), leaving a gap of 103 units. This gap is projected to increase at the next decennial Census count, when, based on estimates of population and building, the number of year-round housing units will increase, and therefore the affordability needs and goals will also increase.
- ▶ Sturbridge median family income for 2010 was \$79,900. For housing to be affordable (as defined by the state), it must be affordable to households earning at or below 80% of area median income, as adjusted for family size. This means a family of four can afford monthly housing costs—either mortgage or rent—of approximately \$1,398.
- ▶ As the median sales price for a single family Sturbridge home hovers around \$264,000, there is a substantial affordability gap—approximately \$94,000. There is virtually no housing stock (traditional homes or condominiums) available priced below \$200,000.
- ▶ On the rental side, it appears that the open market is providing some affordable rentals.
- ▶ Demographically, Sturbridge is a small but growing community. As is true for many Commonwealth communities, the growth is more heavily weighted towards the older population segments. Sturbridge is also a community of predominantly family households, and Sturbridge's housing stock is predominantly single-family dwellings. Sturbridge has infrastructure issues that present a challenge to denser development (sewer and water), but also has areas of town where both town sewer and water are available.

10 Sturbridge Housing Needs Assessment Housing Production Concepts, 2008.



- ▶ Although not addressed in the 2008 Needs Assessment, research conducted by the Housing Focus Group indicates that there are extensive waiting lists for affordable units and in some cases it is taking several years to qualify for a unit.

### 2008 Housing Needs Assessment Goals and Recommendations

The Housing Needs Assessments stated that the overriding goal was to ensure that Sturbridge's Subsidized Housing Inventory (SHI) units—there were 207 such units in 2008 but there are 211 as of May 2010—remain affordable and to increase the number of affordable units to 314, which would be 10 percent of the Town's year-around housing units. The assessment acknowledged that this 10 percent goal will increase when 2010 Census data is available.

In the meantime, a shorter-term goal was to create 16 units per year, which would equal one-half of one percent of Sturbridge year-round housing stock. This follows the state Department of Housing and Community Development's (DHCD) Housing Production Plan Regulations, which effectively grants cities and towns short-term reprieves from Chapter 40B projects if certain requirements are met. For example, if a community increases its affordable housing stock by 0.5 percent of its year-round housing units in a year, it can effectively deny 40B projects for a year. Sturbridge does not have a Housing Production Plan (HPP).

The needs assessment recommended that Sturbridge focus on producing homeownership opportunities to the greatest extent possible. This was based in part on the fact that only 18 units on the Town's SHI are homeownership units, and all of those units are age restricted. Specific recommendations were as follows:

- ▶ The majority of affordable homeownership opportunities should be two-bedroom units.
- ▶ Five percent of new affordable homeownership opportunities should be accessible/convertible to those with disabilities.
- ▶ All housing production should be open to all ages in the short term.
- ▶ Additional focus should be on the creation of middle-income housing (those available to families earning up to 120 percent of area median income).

While affordable housing production was recommended, preservation of existing units was stressed as well. Specifically, the needs assessment stated that it was a critical priority to preserve existing affordability at Heritage Green, a senior and family housing development. The affordability at the 130-unit subsidized apartment community was set to expire in 2011. Rhode Island Homes, LLC, however, is now purchasing the property with an \$11.1 million loan from MassHousing and extending the affordability for 60 years.<sup>11</sup>

In addition to outlining goals, the 2008 needs assessment identified a range of priorities that not only aim to preserve and promote affordable housing but also help Sturbridge understand its existing

<sup>11</sup> Banker and Tradesman, <http://www.bankerandtradesman.com/news138368.html>

### What is Chapter 40B?

Chapter 40B is a state statute that encourages the development of low- and moderate-income housing by allowing developers to skirt local zoning regulations if certain requirements are met. When 10 percent of a community's housing stock is considered affordable, that community can deny a 40B project without the developer being able to appeal the decision to the Housing Appeals Committee (HAC).

A Housing Production Plan (HPP), formerly "Planned Production," is a community's proactive strategy for developing affordable housing. If a community has a HPP approved by DHCD and is granted certification of compliance with the plan, a decision by the Zoning Board of Appeals (ZBA) relative to a comprehensive permit application will be deemed "consistent with local needs" under MGL Chapter 40B. "Consistent with local needs" means the ZBA's decision will be upheld by the HAC.

resources and move toward implementing Smart Growth techniques. The following list of priorities—which has been summarized—is from the needs assessment. (The priority related to preserving Heritage Green has not been included as it has been achieved.<sup>12</sup>)

- ▶ **Primary Priority: Education and Outreach**—Publicize the needs assessment to help the community understand the needs and set the stage for action.
- ▶ **Primary Priority: Lobby for Inclusion of Mobile Homes on SHI**—Lobby DHCD to accept mobile homes at the Sturbridge Retirement Cooperative for inclusion on the Subsidized Housing Inventory.
- ▶ **Primary Priority: Planning Initiatives**—Work to implement inclusionary zoning and other initiatives while ensuring they address Sturbridge's housing needs and meet the requirements for inclusion on the Subsidized Housing Inventory.
- ▶ **Primary Priority: Town Land Inventory**—Create an inventory of town-owned land that includes current uses, planned use, potential uses, and unique aspects of the land. It should also document current zoning and the number of dwelling units each lot could support under zoning and other infrastructure requirements.
- ▶ **Secondary Priority: Sewer Preference for Projects with Affordable Housing**—Institute a process to give projects with affordable housing a priority within the sewer allocation reserved for residential use.
- ▶ **Secondary Priority: Affordable Housing Development Guidelines**—Create a set of guidelines for affordable housing development. Guidelines can address issues such as design, location and appropriate density.
- ▶ **Secondary Priority: BuyDown Program**—Use existing housing funding to start a pilot buydown program. This would include buying low-to-moderately priced Sturbridge homes, recording deed restrictions and then re-selling them affordably. The Housing Needs Assessment also provided a chart of foreseeable action items. In addition to the priority items listed above, the chart included action items such as the creation of a housing trust, promotion of friendly 40Bs, and preservation and upgrading of existing SHI stock.

## Updates Since the 2008 Housing Needs Assessment

Since receiving the 2008 Housing Needs Assessment, the Town of Sturbridge has completed several of the listed action items. In 2009, Town Meeting approved the creation of both an Accessory Dwelling Unit bylaw (Chapter 18 of the Zoning Bylaws) and Open Space Residential Development bylaw (Chapter 17)<sup>13</sup>. The Accessory Dwelling Unit bylaw allows, through a special permit, the creation of smaller accessory dwellings that are contained within single-family dwellings or attached accessory structures but function as separate units. The bylaw has several goals, including providing "a mix of

<sup>12</sup> Based on conversation with Sturbridge Town Planner Jean Bubon and Manager of Heritage Green Pam Welcome

<sup>13</sup> Based on conversation with Sturbridge Town Planner Jean Bubon and Sturbridge Zoning Bylaws.

housing that responds to changing family needs and smaller households,” and providing “a broader mix of accessible and more affordable housing.”<sup>14</sup>

The new Open Space Residential Development bylaw encourages denser residential development and the preservation of open space in the Rural Residence, Suburban Residence and Special Use districts with a special permit granted the Planning Board. A minimum of ten acres is required to allow this type of development. It requires that a minimum of 50 percent of a parcel be set aside as open space. The bylaw offers developers several different ways to obtain a density bonus. For example, preserving more than the required amount of open space, preserving historic structures, and creating affordable housing can result in a density bonus. A number of municipalities have allowed this type of development by right while offering the density bonus through the issuance of a special permit.

The Town should also examine whether the Multiple Dwelling Project provisions of the zoning bylaw (Chapter 21) is an effective tool in adding diversity to the Town’s housing stock. It allows multiple dwelling units to be built in the Rural Residence and Suburban Residence districts with a special permit on properties that are at least 15 acres in size as an alternative to typical grid subdivision development. Projects constructed pursuant to this bylaw must adhere to specific siting and design regulations. Given that Open Space Residential Developments are also permitted in these districts, it may be a more useful tool in allowing for a more flexible development pattern while achieving the Town’s goals of preserving open space and diversifying the types of housing available to Sturbridge residents.

In addition, Southern Worcester County Community Development Corporation held a first time home-buying classes in April 2010. While the Town of Sturbridge was not the host, it promoted the classes to encourage Sturbridge residents to attend. Sturbridge officials have also tried to initiate conversations with DHCD about the inclusion of mobile homes—those at Sturbridge Retirement Cooperative—on the SHI. DHCD officials received the Town’s letter in the Spring of 2010 and told the Sturbridge Housing Partnership that it will review the request.

The Town has not moved forward with proposing an Inclusionary Zoning bylaw. A lack of time has been the main reason for the inaction. The Town also decided not to pursue the completion of a HPP. While the goal had been to turn the Housing Needs Assessment into an HPP, the Town realized that it would not be feasible to create the number of affordable housing units required to have the state certify an HPP in Sturbridge. When the 2010 Census data becomes available, the Town will have a better idea as to its housing needs as they relate to the SHI. This may present an opportunity to prepare a HPP to assist the Town in producing new affordable housing units to add to the SHI.

## Recommendations

- Provide high-quality affordable housing in attractive neighborhoods through development of appropriate zoning bylaws, regulations and programs designed to encourage a variety of housing types

14 Sturbridge Zoning Bylaws

- Adopt an Inclusionary Zoning bylaw and consider including a provision whereby developers can give a cash payment in-lieu of affordable units.
  - Consider a buydown program whereby the Town uses Community Preservation Act money or other funds (inclusionary zoning could be a funding source) to buy down market-rate homes, deed restrict them as affordable in perpetuity, and sell them to income-qualified, first-time homebuyers at below-market prices.
  - Consider amending the Multiple Dwelling Project chapter of the zoning bylaw to be a more effective tool in creating a variety of housing options.
  - Amend the Open Space Residential Development bylaw to allow such projects by right rather than by special permit and eliminate the minimum threshold of ten acres. This would provide more of an incentive to develop OSRDs, thereby helping to conserve open space while diversifying the type of housing in Sturbridge.
- **Develop a plan designed to guide the Town toward meeting Chapter 40B goals**
- Inventory town-owned land and tax title property to identify potential parcels for use as affordable housing sites, which can be developed/rehabilitated by the Town or private developers.
  - Create a policy whereby projects with a certain amount of on-site affordable housing receive priority within the sewer allocation process.
  - Prepare a Planned Production Plan that allows the Town to realistically achieve the creation of new affordable units to meet the needs of current and future Sturbridge residents. An emphasis should be placed on finding ways to reduce the waiting lists for affordable housing, establishing housing for senior citizens, including assisted living facilities, and creating entry level housing opportunities for younger residents. This effort should be coordinated by the Sturbridge Housing Partnership.
- **Provide opportunities for existing low- and moderate-income Sturbridge residents to make improvements and repairs to their existing homes, while at the same time, increasing the affordable housing stock in the community**
- Create a home improvement program whereby the Town provides zero- or low-interest loans to residents. This program could target income-eligible homeowners or owners of multifamily properties. It can also be used to promote more energy-efficient housing.
  - Create a downpayment/closing cost assistance program whereby the Town provides grants to income-eligible, first-time homebuyers. Grants could be forgiven over a five-year period provided that the residents remain in the home during that time.
- **Ensure that housing choices are available to meet the needs of current and future generations in Sturbridge**
- Allow (or allow by special permit) mixed-use developments in more zoning districts.

- The Housing Focus Group identified a need for assisted living facilities in Sturbridge since there are none located in the Town. Such uses (listed as a long-term care facility in the zoning bylaw) are only allowed by special permit in the Rural Residence district. The Town should consider allowing this type of use in other districts, perhaps in areas where there is the infrastructure to support this more intensive type of housing.
- As a means to offer more alternatives to allow senior citizens to stay in their homes, provide incentives to rehabilitate older housing or subdivide residential properties into smaller units.
- Additionally, the Focus Group identified the need for better transportation alternatives for senior citizens and improved walkability. These issues are addressed in Chapter 7 – Transportation. The need for a low impact development bylaw to address stormwater management issues are addressed in Chapter 6 – Natural, Historic and Cultural Resources.

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## 4. Economic Conditions

### Introduction

The economic conditions examined in this chapter review changes at the local level in Sturbridge but also place these changes with the context of the regional and state economies. The first portion of the chapter reviews overall employment growth over the last decade and also presents a detailed perspective regarding changes and trends within major industry sectors. These historical trends are followed by a discussion of projected employment growth at the state level and how Sturbridge may be affected by these forecasts.

The second portion of the chapter discusses characteristics of the town's labor force and how they have changed over the past decade. This is followed by an examination of land use trends for commercial and industrial development and a discussion of strategic opportunity areas that will play a key role in the town's future economic development activities.

### Economic Development Goals

- ▶ Foster economic sustainability via focused and integrated support of the existing business base while simultaneously encouraging longer-term economic diversification (such that Sturbridge is not so heavily dependent on tourism/hospitality).
- ▶ Take a more pro-active approach to marketing the town's assets in order to promote additional business growth.
- ▶ Promote economic development from a regional perspective.
- ▶ Maximize the opportunities to encourage redevelopment along the Route 20 and Route 131 corridors and development within the Special Use District.
- ▶ Create a Brand Promise/Identity for Sturbridge that presents a distinctive and positive image of the town.

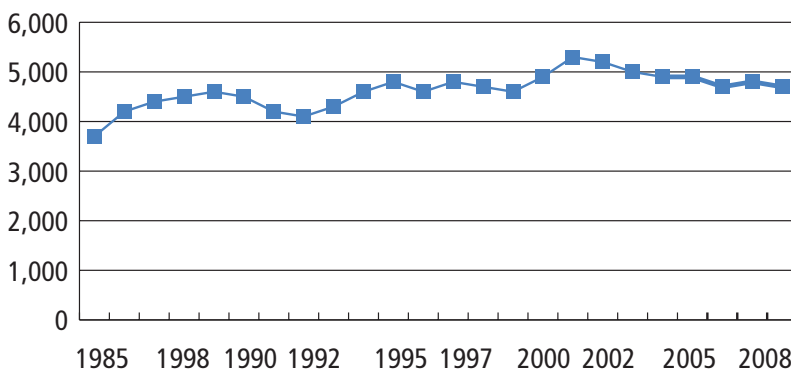
### Historical Employment Trends

Figure 4.1 illustrates the town's long-term total employment trends between 1985 and 2008. As shown, job growth has occurred with a rather undulating trajectory that reflects the peaks and troughs of the expansion and recessionary periods that have occurred over the last 20–25 years. During this time period the town experienced a net job growth of approximately 900. The chart indicates that the town's employment base has remained relatively stable over the long-term and has been able to consistently offset job losses with gains, resulting in an overall average annual growth rate of just under one percent (0.9%) over this time period. This matched the Southern Worcester region's 0.9% rate of annual increase and exceeded the state's 0.6% average yearly growth.



**Figure 4.1**      **Total Employment 1985–2008**  
**Town of Sturbridge**

Table 4.1 presents a comparison of total employment change for jobs within Sturbridge and its neighboring communities between 2001–2008. As illustrated, most of the region experienced either a net loss or only a modest gain in employment during this time period.



**Table 4.1**      **Total Covered Employment 2001–2008**  
**Sturbridge and Neighboring Communities**

Municipality	2001	2008	Change	% Change	2008 Population	Employment/Population
Sturbridge	5,307	4,654	-653	-12%	9,103	51%
Brimfield	494	564	70	14%	3,708	15%
Brookfield	475	466	-9	-2%	3,007	15%
Charlton	2,804	3,737	933	33%	12,585	30%
East Brookfield	391	434	43	11%	2,057	21%
Holland	127	145	18	14%	2,529	6%
North Brookfield	1,171	949	-222	-19%	4,833	20%
Southbridge	6,177	6,011	-166	-3%	16,852	36%
Spencer	3,555	3,327	-228	-6%	11,922	36%
Wales	124	162	38	31%	1,881	9%
Warren	1,209	684	-525	-43%	5,068	13%
West Brookfield	933	858	-75	-8%	3,806	23%

Sturbridge experienced the largest actual decrease in employment (653) of these comparative communities and the third highest percentage decline (12%). Despite these losses, Sturbridge's employment to population ratio of 51% (i.e. total jobs in town were equivalent to 51% of the population) was the highest, indicating a relatively strong economic base for its size when compared to this local region.

Table 4.2 presents a more detailed perspective on employment growth in Sturbridge since 2000. The data is categorized based on the two-digit North American Industry Classification System (NAICS). It should be noted that this data (as well as Table 1 data), which is derived from the Covered Employment Insurance program, does not include sole proprietor firms or part-time workers. Estimates of this non-covered employment are not available at the local level but based on county-wide percentages could add an additional 15%–20% to the town's total employment figure presented in the table.

**Table 4.2**      **Average Annual Covered Employment 2001–2008**  
**Town of Sturbridge**

NACS	Industry	2001	2002	2003	2004	2005	2006	2007	2008	Change 2001–2008		2008
										Actual	Percent	
	<b>TOTAL ALL INDUSTRIES</b>	<b>5,307</b>	<b>5,271</b>	<b>4,995</b>	<b>4,845</b>	<b>4,852</b>	<b>4,646</b>	<b>4,737</b>	<b>4,654</b>	<b>(663)</b>	<b>-12.3%</b>	<b>100%</b>
	Total Government	592	605	595	572	574	586	613	627	35	5.9%	13%
	Total Private	4,715	4,666	4,400	4,273	4,278	4,060	4,124	4,027	(688)	-14.6%	87%
<b>101</b>	<b>Goods Producing Industries</b>	<b>1,189</b>	<b>887</b>	<b>684</b>	<b>569</b>	<b>595</b>	<b>547</b>	<b>566</b>	<b>525</b>	<b>(664)</b>	<b>-55.8%</b>	<b>13%</b>
11	Agriculture/Forestry/Fishing	**	**	**	**	**	**	**	**	**	**	**
21	Mining	**	**	**	**	**	**	**	**	**	**	**
23	Construction	94	83	82	89	113	109	99	75	(19)	-20.2%	2%
31-33	Manufacturing	1,093	804	598	479	482	465	467	450	(643)	-58.8%	11%
<b>102</b>	<b>Service Producing Industries</b>	<b>3,526</b>	<b>3,779</b>	<b>3,716</b>	<b>3,703</b>	<b>3,683</b>	<b>3,486</b>	<b>3,558</b>	<b>3,502</b>	<b>(24)</b>	<b>-0.7%</b>	<b>87%</b>
22	Utilities	7	**	16	**	9	**	**	6	(1)	-14.3%	0.1%
42	Wholesale Trade	83	76	69	79	53	34	46	54	(29)	-34.9%	1%
44-45	Retail Trade	1,149	1,224	1,194	1,196	1,194	1,160	1,095	1,097	(52)	-4.5%	27%
48-49	Transportation and Warehousing	61	68	51	53	48	54	**	40	(21)	-34.4%	1%
51	Information	14	14	14	**	**	**	**	10	(4)	-28.6%	0%
52	Finance and Insurance	87	84	105	115	119	124	146	144	57	65.5%	4%
53	Real Estate and Rental and Leasing	40	45	49	40	36	32	30	28	(12)	-30.0%	1%
54	Professional and Technical Services	73	66	73	75	114	126	136	153	80	109.6%	4%
55	Management of Companies/Enterprises	**	**	**	**	**	**	**	**	**	**	**
56	Administrative and Waste Services	12	21	22	20	144	143	**	106	94	783.3%	3%
61	Education	3	**	**	**	10	11	**	12	9	300.0%	0.3%
62	Health Care and Social Assistance	198	199	209	218	205	204	247	245	47	23.7%	6%
71	Arts, Entertainment, Recreation	269	**	328	**	274	**	**	193	(76)	-28.3%	5%
72	Accommodation and Food Services	1,462	1,548	1,504	1,500	1,372	1,291	1,348	1,301	(161)	-11.0%	32%
81	Other Services, Ex. Public Admin.	68	76	77	93	87	83	118	113	45	66.2%	3%

\*\*Data suppressed or equal to zero  
Source: MA Department of Labor

As noted previously, total covered employment decreased by 12.3% overall between 2001–2008 representing a net loss of 653 jobs. Private sector losses of 688 (-14.6%) were marginally offset by a modest increase of 35 government jobs during this time period. The goods producing sectors absorbed most of the losses with a net decrease in Manufacturing employment of 643, almost 59% of the total jobs in this sector. In contrast, service producing sectors had a net loss of only 24 jobs, a decrease of less than 1%. As of 2008, goods producing sectors accounted for 13% of the town's total private employment as compared to 87% in the service sectors. The town's larger manufacturing firms are involved in the production of plastics, machining and metal fabrication, machinery manufacturing, glass/optical products and related electronic components.

The town's economic base is largely dependent upon the Leisure & Hospitality sectors as well as Retail Trade. The former is comprised of Accommodations/Food Services and Arts, Entertainment, and Recreation, which together, account for 37% of total private sector jobs. In comparison, the Southern Worcester Region<sup>1</sup> and the State each have only 11% of their employment in these sectors. This job concentration illustrates the town's dependence on tourists and other visitors to the area and is likely to result in higher proportions of part-time labor and lower average wages. The town's Leisure & Hospitality sectors experienced a combined loss of 13.7% in total employment (237 jobs) over the eight year period examined. Lodging related employment declined by 125 while employment at eating/drinking establishments recorded losses of 36 jobs (data not shown). The town's eating/drinking establishments account for about two-thirds of total employment in the Leisure & Hospitality sectors. Retail Trade, which accounts for 27% of the town's employment base, had more modest losses of 5.4%, or 52 jobs, over the time period (Retail employment in the Region and State is 14% and 12%, respectively).

Table 4.2 illustrates that the town's primary employment gains occurred in the following sectors: Administration and Waste Management Services (94 jobs); Professional and Technical Services (80 jobs); Finance and Insurance (57 jobs); Health Care and Social Assistance (47 jobs); and Other Services (45 jobs). Each of these sectors range between 3%–6% of the town's total private employment as of 2008. Growth in these sectors has helped to offset losses in other service sector industries and diversify the town's employment base to a limited degree. However, as noted previously, employment remains concentrated in the Leisure & Hospitality and Retail sectors leaving the town susceptible to potentially greater losses if further declines occur in these industries.

Table 4.3 presents a comparison of the change in employment for Sturbridge, the Southern Worcester Workforce Investment Area (WIA) region, and the State of Massachusetts between 2001–2008. The table also presents a Location Quotient (LQ) calculation for 2008. The LQ represents a comparison ratio of total employment by sector between two geographic locations (e.g. Sturbridge compared to the region or the region compared to the state). An LQ of 1.00 means that the percentage of employment in a given sector is equivalent in both locations. An LQ of 2.00 means that one location has twice the employment, from a percentage standpoint, in a given industrial sector versus the comparison location.

<sup>1</sup> Refers to the Southern Worcester Workforce Investment Area (WIA), which essentially includes the towns in the southern half of Worcester County.

**Table 4.3**      **Change in Average Annual Employment (2001–2008) and Location Quotient (2008)**  
**Town of Sturbridge, Southern Worcester WIA and State of Massachusetts**

NA/CS	Industry	Change in Employment			% Change			Location Quotient	
		Sturbridge	WIA	State	Sturbridge	WIA	State	Sturbridge	WIA
	<b>TOTAL ALL INDUSTRIES</b>	<b>(653)</b>	<b>932</b>	<b>(30,348)</b>	<b>-12.3%</b>	<b>0.4%</b>	<b>-0.9%</b>		
	Total Government	35	3,252	(105)	5.9%	9.8%	0.0%		
	Total Private	(688)	(2,320)	(30,243)	-14.6%	-1.1%	-1.1%		
101	Goods Producing Industries	(664)	(8,794)	(108,816)	-55.8%	-19.2%	-20.3%		
11	Agriculture/Forestry/Fishing	**	(9)	100	**	-3.9%	1.6%	**	0.46
21	Mining	**	(26)	(157)	**	-15.7%	-11.0%	**	**
23	Construction	(19)	(287)	(5,985)	-20.2%	-2.8%	-4.3%	0.40	1.01
31-33	Manufacturing	(643)	(8,472)	(102,774)	-58.8%	-24.0%	-26.4%	0.87	1.28
<b>102</b>	<b>Service Producing Industries</b>	<b>(24)</b>	<b>6,474</b>	<b>78,572</b>	<b>-0.7%</b>	<b>3.9%</b>	<b>3.4%</b>		
22	Utilities	(1)	(335)	(1,919)	-14%	-22.7%	-16.1%	0.30	1.55
42	Wholesale Trade	(29)	290	(4,559)	-34.9%	2.8%	-3.2%	0.26	1.06
44-45	Retail Trade	(52)	(619)	(10,996)	-4.5%	-2.1%	-3.1%	2.00	1.10
48-49	Transportation and Warehousing	(21)	872	(5,969)	-34.4%	15.3%	-7.7%	0.31	1.25
51	Information	(4)	(517)	(22,260)	-28.6%	-11.5%	-20.0%	0.13	0.61
52	Finance and Insurance	57	(162)	(3,903)	65.5%	-1.4%	-2.1%	0.65	0.87
<b>53</b>	<b>Real Estate and Rental and Leasing</b>	<b>(12)</b>	<b>(400)</b>	<b>(2,469)</b>	<b>-30.0%</b>	<b>-16.8%</b>	<b>-5.5%</b>	<b>0.70</b>	<b>0.59</b>
54	Professional and Technical Services	80	(305)	14,474	109.6%	-2.7%	5.9%	0.70	0.59
55	Management of Companies/Enterprises	**	(1,922)	(10,464)	**	-29.1%	-14.5%	**	1.04
56	Administrative and Waste Services	94	331	(711)	783.3%	2.7%	5.9%	0.70	0.59
61	Education	9	1,922	13,767	300%	36.1%	12.3%	0.09	0.78
62	Health Care and Social Assistance	47	3,897	69,920	23.7%	10.6%	17.1%	0.31	1.15
71	Arts, Entertainment, Recreation	(76)	365	7,699	-28%	12.1%	18.5%	3.00	0.94
72	Accommodation and Food Services	(161)	2,348	19,362	-11.0%	14.8%	8.2%	3.67	0.97
81	Other Services, Ex. Public Admin.	45	709	16,600	66.2%	8.4%	14.8%	0.64	0.97

\* Sturbridge compared to WIA and WIA compared to Massachusetts

\*\* Data suppressed or equal to zero

Source: MA Department of Labor

From an overall percentage perspective, the town experienced a considerably larger decline in total employment (-12.3%) than the WIA which incurred only a minor net increase (0.4%) and the State, where employment decreased slightly (-0.9%) during this time period. While there were a number of factors that contributed to this discrepancy, of particular note is the fact that Sturbridge's Manufacturing employment declined by almost 59% with the WIA and State experiencing losses of less than half that rate, -24% and -26.4% respectively. Furthermore, an LQ of 1.28 for the WIA suggests greater strength in the regional manufacturing base as compared to the state, whereas an LQ of 0.87 for Sturbridge suggests the town is not sharing in this regional advantage.

High LQs of 3.00 and 3.67 for Sturbridge in the Leisure/Hospitality sectors (NAICS 71 & 72), and 2.00 in the Retail sector reinforce the point made previously regarding the dominance of total employment in these areas. However, the regional and statewide growth in Leisure & Hospitality, in comparison to losses experienced at the town level, suggest that Sturbridge reached a saturation point over the past decade, based on its mix of businesses, in comparison to local demand.

The town did exceed the growth rates of the region and/or state in the previously noted growth sectors including Finance and Insurance, Professional/Technical Services, Administration, Health Care, and Other Services. However, low LQs in all these sectors, in comparison to the WIA, suggest that there may be potential to capture a greater portion of future growth in these industries. In addition, the Transportation and Warehousing sector shows particular strength in the region (based on a growth rate of 15.3% and an LQ of 1.25), a fact that is also not reflected in the town's employment base and which may also offer future economic expansion potential.

## Establishments

Table 4.4 illustrates the change in business establishments in Sturbridge between 2001–2008. Overall, the town experienced a net increase of 22 private sector businesses during this time period. The largest gains were recorded in Other Services (10), Finance and Insurance (9), Retail (7), Administrative and Waster Management Services (6), and Professional and Technical Services (4). This reflects growth in businesses that generally include personal services, repair facilities, banks and other credit intermediary firms, a variety of retail establishments, buildings and grounds maintenance firms, legal services, and other technical services such as architects and engineering firms.

The town's largest concentration of businesses are in Retail (69) and Accommodation/ Food Services (52), mirroring its primary employment sectors. However, relatively high business counts in a number of other sectors where the town has lower employment totals highlights the importance of small businesses within the community's economic base. This fact is also illustrated in Figures 4.2 and 4.3 that show the distribution of firms, by size, for Sturbridge and Worcester County as of 2008, based on County Business Patterns data compiled by the U.S. Census Bureau. As shown, about half (49%) of the town's businesses have fewer than five employees and almost 70% have fewer than ten. The county has slightly more firms (53%) in the smallest size category although the distributions between the two locales are otherwise relatively comparable.

Despite this preponderance of smaller firms, Sturbridge also has a total of 18 larger firms in the size categories of 50–99 employees and 100–249 employees. Five of these are manufacturing firms, six are related to accommodations/food services, five retail establishments, one trucking, and one telecomm firm. The town's largest employers are listed on next page.

- Publick House (250–499 employees)
- Arland Tool & Manufacturing (100–249 employees)
- Shaw's Supermarket (100–249 employees)
- Super Stop & Shop (100–249 employees)
- Walmart (100–249 employees)
- Sturbridge Host Hotel (100–249 employees)
- Cracker Barrel (100–249 employees)
- Rom's Restaurant (100–249 employees)

**Table 4.4**      **Town Establishments by Sector 2001–2008**  
**Town of Sturbridge**

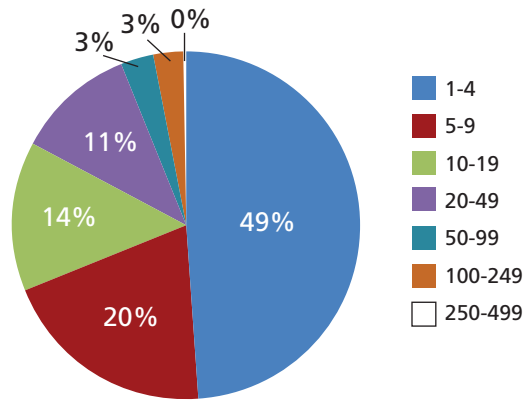
NA/CS	Industry	Change in Employment			% Change			Location Quotient	
		Sturbridge	WIA	State	Sturbridge	WIA	State	Sturbridge	WIA
	<b>TOTAL ALL INDUSTRIES</b>	<b>(653)</b>	<b>932</b>	<b>(30,348)</b>	<b>-12.3%</b>	<b>0.4%</b>	<b>-0.9%</b>		
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	Total Private	(688)	(2,320)	(30,243)	-14.6%	-1.1%	-1.1%		
<b>101</b>	<b>Goods Producing Industries</b>	<b>(664)</b>	<b>(8,794)</b>	<b>(108,816)</b>	<b>-55.8%</b>	<b>-19.2%</b>	<b>-20.3%</b>		
11	Agriculture/Forestry/Fishing	**	(9)	100	**	-3.9%	1.6%	**	0.46
21	Mining	**	(26)	(157)	**	-15.7%	-11.0%	**	**
23	Construction	(19)	(287)	(5,985)	-20.2%	-2.8%	-4.3%	0.40	1.01
31-33	Manufacturing	(643)	(8,472)	(102,774)	-58.8%	-24.0%	-26.4%	0.87	1.28
<b>102</b>	<b>Service Producing Industries</b>	<b>(24)</b>	<b>6,474</b>	<b>78,572</b>	<b>-0.7%</b>	<b>3.9%</b>	<b>3.4%</b>		
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42	Wholesale Trade	(29)	290	(4,559)	-34.9%	2.8%	-3.2%	0.26	1.06
44-45	Retail Trade	(52)	(619)	(10,996)	-4.5%	-2.1%	-3.1%	2.00	1.10
48-49	Transportation and Warehousing	(21)	872	(5,969)	-34.4%	15.3%	-7.7%	0.31	1.25
51	Information	(4)	(517)	(22,260)	-28.6%	-11.5%	-20.0%	0.13	0.61
52	Finance and Insurance	57	(162)	(3,903)	65.5%	-1.4%	-2.1%	0.65	0.87
53	Real Estate and Rental and Leasing	(12)	(400)	(2,469)	-30.0%	-16.8%	-5.5%	0.70	0.59
54	Professional and Technical Services	80	(305)	14,474	109.6%	-2.7%	5.9%	0.70	0.59
55	Management of Companies/Enterprises	**	(1,922)	(10,464)	**	-29.1%	-14.5%	**	1.04
56	Administrative and Waste Services	94	331	(711)	783.3%	2.7%	5.9%	0.70	0.59
61	Education	9	1,922	13,767	300%	36.1%	12.3%	0.09	0.78
62	Health Care and Social Assistance	47	3,897	69,920	23.7%	10.6%	17.1%	0.31	1.15
71	Arts, Entertainment, Recreation	(76)	365	7,699	-28%	12.1%	18.5%	3.00	0.94
72	Accommodation and Food Services	(161)	2,348	19,362	-11.0%	14.8%	8.2%	3.67	0.97
81	Other Services, Ex. Public Admin.	45	709	16,600	66.2%	8.4%	14.8%	0.64	0.97

\* Sturbridge compared to WIA and WIA compared to Massachusetts

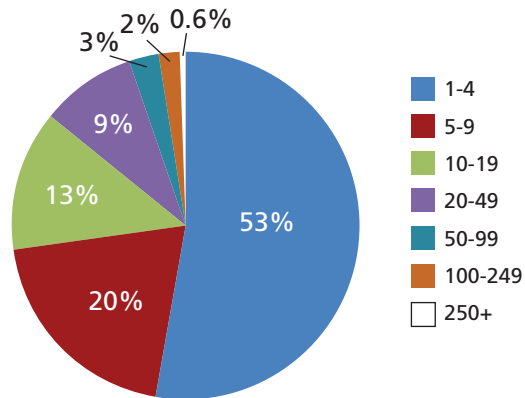
\*\* Data suppressed or equal to zero

Source: MA Department of Labor

**Figure 4.2**      **Size of Business by Number of Employees**  
**Town of Sturbridge**



**Figure 4.3**      **Size of Business by Number of Employees**  
**Worcester County**





### Wages

A summary of the change in total and weekly wages between 2001–2008, by sector, is presented in Table 4.5. Overall, the town's economic base generates approximately \$142.7 million in total annual covered wages in both the public and private sectors. Employment losses noted previously in this chapter have resulted in a net decrease in total wages of \$5.3 million, or 3.6%, during this time period. Private sector net losses of \$12.3 million were offset by an increase of \$7 million in the public sector's total wages. The largest private sector decrease occurred in the Manufacturing sector where total wages declined by 48%, or approximately \$25.7 million. Despite this loss, Manufacturing still represented the largest percentage of total private sector wages in Sturbridge as of 2008 at 19.1%. This was followed by the town's two largest employment sectors of Retail (15.9% of total wages), where wages increased by 18.8%, and Accommodations and Food Services (14.3% of total wages) which decreased by 4.6% during this time period.

The right-hand side of Table 4.5 presents the change in average weekly wages and also provides a comparison of wage rates in Sturbridge versus the WIA and the State. During this time period the town's average weekly wages increased by 9.9%. The estimated increase in inflation for this period, according to the U.S. Bureau of Labor Statistics (BLS), was 22% indicating an widening gap between wages and costs (Note: regional and state wages increased at or above the inflation rate during this period). The data also indicates that there is considerable discrepancy between the local, regional, and statewide wage rates. The town's \$590 average weekly wages in 2008 represented only 65% of the WIA's and 54% of the State's average wages. While local public sector wages were more comparable (96% and 93%, respectively), private sector wages were equivalent to only 59% and 48%, respectively, of the regional and statewide rates. This lower town-wide average is a reflection of the town's larger employment concentration in Retail and Leisure & Hospitality sectors which typically pays lower wages. However, wages in many of the town's private sector industries lag behind the region and the state. Although other factors must be considered when comparing wage rates, such as cost of living and quality of life, this data suggests that local businesses may experience more difficulty in competing for employees due to this factor. Several sectors where the town does have competitive wage rates are in Wholesale Trade, and regionally, in Manufacturing (98%), Accommodations and Food Services (98%), and Arts, Entertainment, and Recreation (110%).

**Table 4.5**      **Total and Average Weekly Covered Wages 2001–2008**  
**Town of Sturbridge**

NA/CS	Industry	Total Wages					Average Weekly Wages				Sturbridge Weekly Wage as % of	
		2001	2008	Change	% Change	% Total 2008	2001	2008	Change	% Change	WIA	State
	TOTAL ALL INDUSTRIES	\$148,076,235	\$142,715,278	(\$15,360,957)	-3.6%	100%	\$537	\$590	\$53	9.9%	65%	54%
	Total Government	\$23,855,982	\$30,858,591	\$7,002,609	29.4%	21.6%	\$775	\$946	\$172	22.1%	96%	93%
	Total Private	\$124,220,253	\$111,856,687	(\$12,363,566)	-10.0%	78.4%	\$507	\$534	\$27	5.3%	59%	48%
11	Agriculture/Forestry/ Fishing	**	**	**	**	**	**	**	**	**	**	**
21	Mining	**	**	**	**	**	**	**	**	**	**	**
23	Construction	\$3,450,848	\$3,129,754	(\$321,094)	-9.3%	2.2%	\$707	\$803	\$96	13.5%	76%	67%
31-33	Manufacturing	\$52,974,267	\$27,211,260	(\$25,763,007)	-48.6%	19.1%	\$932	\$1,163	\$231	24.8%	93%	88%
22	Utilities	\$219,481	\$345,610	\$126,129	57.5%	0.2%	\$603	\$1,107	\$504	83.6%	58%	58%
42	Wholesale Trade	\$5,103,509	\$4,620,185	(\$483,324)	-9.5%	3.2%	\$1,182	\$1,645	\$463	39.2%	141%	111%
44-45	Retail Trade	\$19,056,635	\$22,635,813	\$3,579,178	18.8%	15.9%	\$319	\$397	\$78	24.5%	79%	75%
48-49	Transportation and Warehousing	\$1,442,921	\$974,285	(\$468,636)	-32.5%	0.7%	\$455	\$468	\$13	2.9%	63%	59%
51	Information	\$358,581	**	**	**	**	\$478	**	**	**	**	**
52	Finance and Insurance	\$2,458,697	\$6,607,060	\$4,148,363	168.7%	4.6%	\$545	\$882	\$337	61.8%	68%	39%
53	Real Estate and Rental and Leasing	\$1,069,737	\$838,249	(\$231,488)	-21.6%	0.6%	\$516	\$576	\$60	11.5%	69%	53%
54	Professional and Technical Services	\$2,808,034	\$8,012,951	\$5,204,917	185.4%	5.6%	\$745	\$1,007	\$262	35.2%	72%	54%
55	Management of Companies/Enterprises	**	**	**	**	**	**	**	**	**	**	**
56	Administrative and Waste Services	\$281,914	\$1,974,419	\$1,692,505	600.4%	1.4%	\$452	\$358	(\$94)	-20.8%	58%	48%
61	Education	\$53,085	\$163,928	\$110,843	208.8%	0.1%	\$340	\$262	(\$78)	-23.0%	31%	26%
62	Health Care and Social Assistance	\$6,835,210	\$8,626,976	\$1,791,766	26.2%	6.0%	\$664	\$677	\$13	2.0%	77%	71%
71	Arts, Entertainment, Recreation	\$4,980,797	\$3,704,454	(\$1,276,343)	-25.6%	2.6%	\$356	\$369	\$13	3.7%	110%	55%
72	Accommodation and Food Services	\$21,439,616	\$20,456,757	(\$982,859)	-4.6%	14.3%	\$282	\$302	\$20	7.1%	98%	81%
81	Other Services, Ex. Public Admin.	\$1,630,408	\$2,379,528	\$749,120	45.9%	1.7%	\$464	\$405	(\$59)	-12.7%	76%	75%

\*\*Data suppressed or equal to zero  
Source: MA Department of Labor

### Employment Projections

Developing an accurate picture of future employment growth is a difficult task given the current economic downturn and uncertainty of how soon Massachusetts, and the country as a whole, will return to more normal and predictable economic conditions. An examination of projections prepared by the State's Department of Labor and Workforce Development (LWD) illustrates this point. Forecasts prepared by the LWD for the ten-year period of 2006–2016 estimated that the state's total employment (nonfarm wage and salary employment) would increase from approximately 3.24 million to 3.44 million, an additional 200,000 jobs representing an annual growth rate of 0.6%. However, as of November, 2009, the state's total employment had dropped below 2006 levels to 3.17 million representing a net decrease of about 70,000 jobs. Given these losses, and the fact that growth is expected to return at a slower rate, it appears unlikely that the state will achieve the job growth levels that were forecast in 2006. These losses and lower than expected long-term growth do not, however, preclude all future economic opportunities for the state and the Town of Sturbridge. In fact, as noted previously in this chapter (refer to Table 4.3), a number of industry sectors grew over the past decade at a time when the state experienced a net loss in jobs overall. These growth sectors included Health Care, Professional/Technical Services, Education, Accommodations & Food Services, Arts/Entertainment/Recreation, and Other Services. Combined, these sectors added over 141,000 jobs statewide between 2001–2008 versus a net loss of 30,000 for the state as a whole. Roughly half of this job growth (69,900) was in the Health Care sector, an area where growth is expected to continue uninterrupted in the future, as is the Education sector, as illustrated in Table 4.6. This table presents a recent forecast for the State prepared by the New England Economic Partnership (NEEP) for the next five years (2009–2013). As shown, most of the supersector groups are not expected to have net positive growth until 2011 with the exception of Natural Resources and Information where modest gains are projected in 2010. Overall, the State is expected to add approximately 33,700 net jobs over five years. However, Health Care job growth is projected to exceed 73,000 with Leisure & Hospitality showing the second largest increase of 11,400 beginning later in the forecast period. Following these are an additional 5,600 jobs in the Information sector and 1,600 in Other Services. As noted previously, the remaining sectors are projected to rebound within the forecast period but early losses are not expected to be fully regained resulting in negative net growth through 2013. Strong, later-year gains are expected in the Professional/Business Services sector where annual growth in 2012/13 is projected to range between 4%–5% suggesting that almost all of the previously lost 43,000 jobs will be recouped. Manufacturing is also expected to begin expanding again in 2011 with a net increase of 9,000 jobs between 2010–2013.

From a regional and local perspective these projections have a number of potential ramifications as follows. Health Care and Social Services has been a growing sector for the town and region and will likely continue as such for the foreseeable future. The proximity of Harrington Hospital in Southbridge could provide additional impetus for local growth in Health Care and related services.

Growth in the Leisure & Hospitality sector suggests that the town will benefit from this forecast as well. However, as noted previously in this chapter, Sturbridge's employment in this sector has declined over the past decade (at a time when the region's was expanding) suggesting that actions will need to be taken if the

town is to capture, or recapture, additional job growth in these industries. The majority of future statewide growth is expected in food and drinking establishments followed by arts/entertainment/recreation facilities. Lodging and accommodations establishments are expected to have only moderate growth.

**Table 4.6**      **Employment Forecast 2008–2013 (in 000s)**  
**State of Massachusetts**

	Actual 2008	Forecast					2008–2013 Change/Annual Growth Rate
Total Employment							
Total Employment	3285.6	3174.3	3109.5	3140.6	3226.9	3319.3	33.7
% Change	0.2	-3.4	-2.0	1.0	2.7	2.9	0.2
Natural Resources and Mining	1.4	1.1	1.2	1.3	1.4	1.4	0.0
% Change	-14.4	-16	7.0	7.3	5.2	2.7	0.8
Construction	132.1	113.8	103.5	100.6	106.2	110.4	-21.7
% Change	-4.0	-13.9	-9.0	-2.9	5.6	4.0	-3.5
Manufacturing	286.4	269.2	257.3	258	262.5	-18.9	267.5
% Change	-2.9	-6.0	-4.4	0.3	1.7	1.9	-1.4
Trades, Transportation, and Utilities	586.4	543.2	523.8	523.7	530.9	541	-27.4
% Change	-0.5	-4.4	-3.6	0.0	1.4	1.9	-1.0
Information	132.1	113.8	103.5	100.6	106.2	110.4	-21.7
% Change	-4.0	-13.9	-9.0	-2.9	5.6	4.0	-3.5
Financial Activities	219.7	207.8	201.3	199.7	202.3	207.1	-12.6
% Change	-2.1	-5.4	-3.2	-0.8	1.3	2.4	-1.2
Professional and Business Services	486.3	454.6	440.6	445	464.4	486.2	-0.1
% Change	0.8	-6.5	-3.1	1.0	4.4	4.7	0.0
Education and Health Care	640.0	684.4	652.4	670.0	690.6	713.4	73.4
% Change	2.5	1.3	0.6	2.7	3.1	3.3	2.2
Leisure and Hospitality	305	299.2	291.8	294.8	305.1	316.4	11.4
% Change	0.8	-1.9	-2.5	1.0	3.5	3.7	0.7
Other Services	120.2	116.7	114.7	116.4	119	121.8	1.6
% Change	-0.2	-2.9	-1.7	1.5	2.2	2.4	0.3

Source: NEEP Fall 2009 Forecast

Similarly, the Professional/Scientific/Technical Services sector has performed relatively well in Sturbridge and is expected to expand both throughout the state and region. The Greater Worcester area has a strong bio-tech/pharmaceuticals component that could help to drive this sector within the area. Projections from the state anticipate that the follow subsectors are expected to grow at the fastest rate in the coming years:

- ▶ Computer Systems Design and Related Services
- ▶ Management, Scientific, and Technical Consulting Services
- ▶ Scientific Research and Development Services
- ▶ Other Professional, Scientific, and Technical Services
- ▶ Architectural, Engineering, and Related Services

Growth in the Information sector is expected to be moderate throughout the state and region and has not historically been strong within the town's economy. However, the major subsector expected to grow is Software Publishers, an industry that could potentially be easily accommodated at locations within Sturbridge.

Although the Trades, Transportation and Utilities supersector is not forecast to perform particularly well the Transportation and Warehousing sector has grown historically within the region where it has outperformed the state in terms of total percentage of employment. Sturbridge's access to the regional and Interstate highway network offers potential to share in the state's projected growth in this sector especially in warehousing and storage.

Finally, the Manufacturing sector is expected to continue to struggle overall. High-tech industries and metals manufacturing firms such as those located in Sturbridge are expected to grow and provide an existing cluster upon which future economic development efforts might be focused.

### Labor Force Characteristics

Changes in the local, regional and statewide labor force and unemployment between 2000 and October, 2009 are presented in Table 4.7. Figure 4.4 illustrates the comparative unemployment rates during this time period. As the chart illustrates, unemployment rates have fluctuated consistently for all locales throughout the decade but never returned to their lowest levels that existed in 2000. The spike in 2009 rates reflects the economic downturn that began late in 2008. Overall, the town's unemployment rate has generally remained slightly lower than the region's and the state's during this time period. In addition, growth in the town's labor force of almost 15% has considerably outpaced the WIA and statewide increases of 5.3% and 2.3%, respectively, over the decade. The labor force is typically defined as all residents 16 years of age and older. Growth in the local labor supply, despite the decline in total jobs in the town, suggests that surplus labor (either those who are unemployed or commuting elsewhere to work) is available which could provide an economic opportunity to attract new businesses to the community.

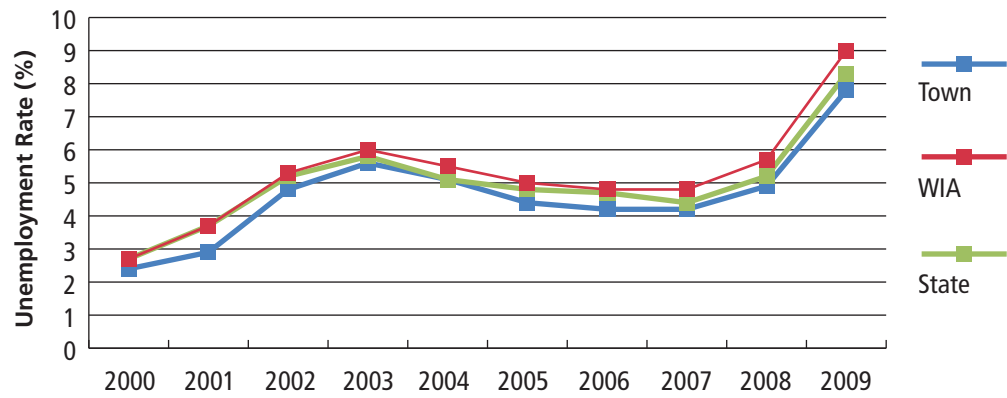
The commuting patterns of the town's labor force and workforce as of 2000 are illustrated in Table 4.8. The labor force are those who reside in town while the workforce represents people employed by Sturbridge businesses regardless of where they live. The primary commuting destination for Sturbridge residents was Sturbridge with about one-quarter (26%) of all commuters working in town. Several other communities also represent either a primary destination for Sturbridge residents or a supply of workers

for Sturbridge businesses. In particular, Worcester, Southbridge, and Charlton provide the three largest sources of jobs and workers for Sturbridge. About half of the town's residents commuted less than 30 minutes with an equivalent amount commuting 30 minutes or more, according to Census estimates. As illustrated in the right-hand column of the table, the majority of Sturbridge's workforce is drawn from one or two towns away. This indicates that there is a ready supply of labor in close proximity but may also reflect a limitation on the effective distance that local business are able to draw from due to the available types of jobs and wages. Conversely, Sturbridge residents are more likely to travel greater distances for work to locations such as Springfield, Westborough, Marlborough, and Boston and are able to do so because of the town's excellent highway access. Also of note is the fact that locations in Connecticut account for 5%-6% of both jobs for Sturbridge residents and workers for local businesses.

**Table 4.7 Labor Force and Unemployment Rate**  
**Town of Sturbridge, South Worcester WIA and Massachusetts**

	Town			
	Labor Force	Employed	Unemployed	Rate
2009*	5,122	4,729	393	7.7%
2008	5,084	4,837	247	4.9%
2007	5,107	4,885	222	4.3%
2006	5,003	4,793	210	4.2%
2005	4,916	4,702	214	4.4%
2004	4,885	4,636	249	5.1%
2003	4,795	4,527	268	5.6%
2002	4,671	4,447	224	4.8%
2001	4,553	4,420	133	2.9%
2000	4,456	4,351	105	2.4%
Change	666	378	288	5.3%
<b>% Change WIA</b>	14.9%	8.7%	274.1%	225.4%
Change	14,621	-4,199	18,820	6
<b>% Change State</b>	5.3%	-1.6%	250.7%	233.3%
Change	77,925	-137,175	215,192	6
% Change	2.3%	-4.2%	233.1%	211/1%

Figure 4.4      Annual Unemployment Rate 2000–2009\*  
Sturbridge, WIA and Massachusetts



**Table 4.8                      Commuting Patterns – 2008\***  
**Town of Sturbridge**

Sturbridge Residents by Place of Work			Sturbridge Workers by Place of Residence		
Commuters	Place of Work	% Total	Commuters	Place of Residence	% Total
1,052	Sturbridge	26%	1,052	Sturbridge	23%
611	Worcester	15%	714	Southbridge	16%
428	Southbridge	10%	239	Worcester	5%
149	Charlton	4%	177	Brimfield	4%
130	Marlborough	3%	177	Charlton	4%
85	Springfield	2%	154	Holland	3%
85	Auburn	2%	137	Warren	3%
85	Spencer	2%	114	Spencer	3%
80	Westborough	2%	106	West Brookfield	2%
72	Shrewsbury	2%	101	Brookfield	2%
70	Webster	2%	81	Wales	2%
66	Dudley	2%	78	North Brookfield	2%
57	Boston	1%	69	Monson	2%
53	Framingham	1%	69	Dudley	2%
47	Milford	1%	63	East Brookfield	1%
317	Other Worcester County	8%	494	Other Worcester County	11%
140	Other Hampden County	3%	111	Other Hampden County	2%
123	Other Middlesex County	3%	100	Hampshire County	2%
98	Norfolk County	3%	68	Middlesex County	2%
47	Hampshire County	1%	36	Norfolk County	1%
70	Other Massachusetts	2%	77	Other Massachusetts	2%
223	Connecticut	5%	259	Connecticut	6%
37	Other states	1%	38	Other states	1%

\*Includes workers 16 and older who commute to work.  
Source: NEEP Fall 2009 Forecast



Table 4.9 provides a comparison of occupations of Sturbridge's employed residents to those of the County's and the State's as of 2000, based on Census estimates. As shown, Sturbridge had a notably higher percentage of residents in Management and business related positions (20%) as compared to the County (14%) and the State (16%), and relatively comparable percentage of workers in Professional and related positions (23%–25%). Conversely, the town had surprisingly fewer residents employed in Service occupations (11%) versus 14% for both the County and the State given the high preponderance of service related jobs in the community. This would imply that local businesses like restaurants and hotels are largely reliant on non residents as a source of labor.

**Table 4.9 Occupations of Employed Population Age 16 and Over – 2000  
Sturbridge, Worcester County and Massachusetts**

Occupation	Sturbridge		County		State	
	Workers	% Total	Workers	% Total	Workers	% Total
Management, professional and related occupations	1,827	43%	137,980	38%	1,298,704	41%
Management, business and financial operations	842	20%	51,132	14%	494,551	16%
Management occupations, except farmers and farm managers	632	15%	34,570	9%	321,484	10%
Farmers and farm manager	8	0.2%	549	0.1%	3,069	0.1%
Business and financial operations	202	5%	16,013	4%	169,998	5%
Professional and related occupations	985	23%	86,848	24%	804,153	25%
Computer and mathematical	97	2%	12,004	3%	119,310	4%
Architecture and engineering	118	3%	10,107	3%	81,975	3%
Life, physical, and social science	39	1%	4,450	1%	50,319	2%
Community and social services	81	2%	6,229	2%	55,383	2%
Legal	24	1%	2,961	1%	43,102	1%
Education, training, and library	306	7%	23,472	6%	207,562	7%
Arts, design, entertainment, sports, and media	96	2%	6,578	2%	73,661	2%
Healthcare practitioners and technical	225	5%	21,047	6%	172,841	5%
Service occupations	476	11%	50,384	14%	444,298	14%
Healthcare support	64	2%	9,091	2%	68,883	2%
Protective service	67	2%	7,613	2%	65,576	2%
Food preparation and serving related	178	4%	15,496	4%	142,582	5%
Building and grounds cleaning and maintenance	128	3%	9,250	3%	85,689	3%
Personal care and service	39	1%	9,384	3%	81,568	3%
Sales and office occupations	1,148	27%	93,718	14%	444,298	14%
Sales and related	578	14%	37,733	10%	333,444	11%
Office and administrative support	570	14%	55,985	15%	485,400	15%
Farming, fishing and forestry occupations	0	0%	585	0.2%	6,642	0.2%
Construction, extraction, and maintenance occupations	354	8%	29,835	8%	235,876	7%
Construction and extraction	228	5%	16,761	5%	140,802	4%
Installation, maintenance and repair	126	3%	13,074	4%	95,074	3%
Production, transportation and material moving occupations	408	10%	53,990	15%	356,723	11%
Production	254	6%	35,205	10%	213,355	7%
Transportation and material moving	143	3%	18,685	5%	143,368	5%
<b>TOTAL</b>	<b>4,213</b>	<b>100%</b>	<b>366,942</b>	<b>100%</b>	<b>3,161,087</b>	<b>100%</b>

Other types of occupations are generally distributed on a fairly equivalent percentage between the three locales. The exception being production workers where 15% of County residents were employed compared to only 10% for Sturbridge and 11% for the State. This is a further reflection of the fact that the town has not benefitted from the relatively large manufacturing, transportation and warehousing sectors that are apparently well established elsewhere in the region.

Finally, the educational levels of Sturbridge residents are presented in Table 4.10 in relationship to the County and the State. Based on the 2000 Census, Sturbridge has a well educated labor force as evidenced by the fact that 52% had a college degree and 70% had some amount of college education, although not necessarily a degree. In fact, Sturbridge residents had a notable higher percentage of Bachelor's and Master's degrees (22% and 9%, respectively) in comparison to the County's 17% and 7%. This is reflective of the occupational characteristics noted previously and the town's higher proportion of management level workers with relatively fewer in production and service oriented positions.

**Table 4.10 Education Attainment for Population Age 25 and Over – 2000  
Sturbridge, Worcester County and Massachusetts**

	Sturbridge		% Total	
	Actual	% Total	County	State
Not graduated high school	706	13%	17%	15%
High school graduate	1,481	27%	30%	27%
Some college, no degree	961	18%	18%	17%
Associate degree	431	8%	8%	7%
Bachelor's degree	1,206	22%	17%	20%
Master's degree	494	9%	7%	9%
Professional/Doctorate degree	163	3%	3%	4%

### Tourism

As noted previously in this chapter, Sturbridge's economic base is largely supported by establishments associated with the leisure and hospitality sectors, entertainment and recreation, and retail shopping. These businesses and activities represent the core of the town's tourism and visitor economy which contribute significantly to the tax base in terms of property taxes, as well as through the expenditure of consumer dollars that provide direct wages to employees and additional secondary spending as those dollars circulate through the economy. Recent figures gathered for the State of Massachusetts as a whole, domestic and international travelers directly spent over \$15.1 billion on transportation, lodging, food,

entertainment, recreation and incidentals during 2007.<sup>2</sup> This represents an increase of 6.6% from 2006. Estimates include travel expenditures, travel-generated employment and payroll income, as well as tax revenues for state and local government. In addition, the \$15.1 billion spent directly by travelers in Massachusetts generated total output value of nearly \$24.1 billion, with the additional \$9 billion generated by secondary spending within the economy. It is estimated that the average travel dollar generated an additional 59 cents in secondary expenditures.



Tourist Information Center

The town's largest "attraction" is considered by most to be Old Sturbridge Village (OSV), a re-created historic village that offers educational and interpretive activities along with other hospitality services. In 2010, OSV attracted 273,752 visitors. Peak periods generally occur during the Summer and Fall. Other contributing establishments and activities include artisan crafts and local agricultural products, convention and visitor lodging, campgrounds and parks, restaurants, and a variety of local and

chain-store retail establishments. The town has approximately 900 hotel/motel rooms and the occupancy taxes generated by these facilities provided roughly \$520,000 in local revenues for FY2009. The town has increased its local occupancy tax from 4% to 6%, effective January 2010, at which time collections will also begin on the recently enacted meals tax, with a local assessment of 0.75% (7% total with the state's assessment). Approximately half of these funds are used for a variety of Betterment projects such as aesthetics and public safety, and the rest is dedicated for tourism or economic development.

The town's local tourism activities represent a component of a broader regional industry that are represented by the Sturbridge Townships, a group of 11 communities that are supported by the Central Mass South Chamber of Commerce. Some tourism-related establishments and activities within these townships are promoted through the chamber which also provides marketing, business networking, and training services for its members. In addition to the chamber, the Sturbridge Tourist Association (STA) and the Merchants of Sturbridge (MoS), also promote events, activities, and projects that support this component of the economy.



Old Sturbridge Village

<sup>2</sup> The Economic Impact of Travel on Massachusetts Counties 2007, A Study Prepared for the Massachusetts Office of Travel and Tourism, by the Research Department of the Travel Industry Association, Washington, D.C., October 2008

The regional nature of the area's tourism industry results in cross-attraction of visitors into and out of Sturbridge from neighboring communities. In 2007, a study was prepared under the auspices of the Sturbridge Heritage Preservation Partnership (SHPP) that examined the town's tourism economy within its regional context, identified strengths and weaknesses, and recommended a strategy for increasing and extending visitation levels to the town.<sup>3</sup> The study found that 76% of visitors spend only one day in the area and 70% participate in only one activity. Approximately 65% of the visitors report spending less than \$250. Presently, the town and region offer good highway access for visitors, with attractions that provide a sense of history, natural beauty, outdoor recreation, quaint towns with scenic drives, and "day" activities for families. Items found to be lacking include activities for complete family weekends, other historically significant locations (e.g., Plymouth), luxury retreats, and shopping. In addition, the image or "brand" of the town often varied from visitor's expectations since many equate the OSV's historic setting with the town as a whole. The study recommended that appropriate target groups for future marketing efforts should include family campers, scenery viewers, and pass-thru visitors. The recommendation to revise the town/region's brand is reflected in the Sturbridge Townships name/logo and an improved website and initial marketing efforts have already been implemented. Based on comparisons with Plymouth and North Conway, NH, other key conclusions and recommendations from the study were as follows:

- ▶ Protect the existing hospitality and retail base due to the town's high degree of economic dependency
- ▶ Protect the character of the community
- ▶ Extend visits to multiple activities and overnight stays by:
  - Leveraging major events
  - Expanding availability and variety of camping/outdoor activities
  - Improving merchandising of tourist product through better packaging
- ▶ Align visitor expectations and experience:
  - Maintain "look and feel" to sustain public perception of Sturbridge.
  - Add enhancements to encourage repeat visitors
- ▶ Address "gateway" issues that provide a more representative and appealing image for visitors as they enter the town
- ▶ Develop a marked scenic drive concept for scenery viewers
- ▶ Improve access to outdoor recreation equipment at parks
- ▶ Initiate work on regional design standards and land use and zoning considerations

3 SHPP Tourism Business Strategy Review, prepared by Ninigret Partners, 2008

- ▶ While a number of the town's tourism-related businesses are dispersed throughout the community the majority are largely concentrated along the Route 20 west corridor which forms the "backbone" of the local tourist economy while also serving the commerce needs of residents. Loosely anchored by the entrance to OSV at the corridor's east end, this one-mile section of highway extends to Brookfield Road to the west and contains a broad mixture of restaurants, small and medium-sized retail establishments, professional offices, several lodging facilities, single family homes and apartment complexes, and a few industrial uses. The town recently completed a revitalization study for this corridor, the Commercial-Tourist District Revitalization Study, with assistance from the regional planning commission.<sup>4</sup>

The vision that emerged for the Commercial-Tourist District from input obtained through this study process reflects a desire to create an attractive neighborhood and commercial center that offers the following components:

- ▶ is pedestrian-friendly
- ▶ caters to tourists and local residents alike
- ▶ offers a variety of shopping opportunities, restaurants, and inns, as well as establishments offering family entertainment during the day and night
- ▶ provides access to the town's river resources that can be passively or actively enjoyed
- ▶ provides adequate parking within a short walking distance to all of these facilities

The study documented a variety of existing conditions related to land use, zoning regulations, infrastructure, access, development opportunities, cultural/social/natural resources, as well as gathering input from stakeholders in the district. The result of this process was the formulation of a series of goals, which are listed below, and supporting actions for implementation:

- ▶ Facilitate walkability. Expand and improve sidewalks on both sides of Route 20 along the entire district
- ▶ Implement traffic calming measures to reduce travel speeds and increase predictability with regard to turning movements
- ▶ Enhance the pedestrian experience along the Commercial-Tourist District corridor by adding attractive, consistent streetscape elements
- ▶ Develop public parking spaces in this district to encourage walking between various shops and restaurants
- ▶ Establish small "pocket parks" in front setback areas to make this section more appealing to pedestrians
- ▶ Facilitate the development/redevelopment of vacant or underutilized properties to enhance this district's draw as a commercial center

4 Commercial-Tourist Revitalization Study, Town of Sturbridge, MA, prepared by the Central Massachusetts Regional Planning Commission, December 2009

- ▶ Encourage attractive, effective signage throughout the Commercial-Tourist District that is consistent with a unifying New England village theme in design and size and that is readable by passing motorists
- ▶ Facilitate development and redevelopment that is consistent with a unifying design theme for architecture/building facades of new or expanded structures and site design
- ▶ Create a physical and conceptual connection between the Commercial-Tourist District and the Quinebaug River, as well as nearby ponds and trails

### Nonresidential Development Trends

This section presents an overview of the town's recent development trends related to commercial and industrial construction, as well as the current supply of potentially developable land for these types of nonresidential uses. Table 4.11 illustrates the change in nonresidential building square footage between 2000–2009 in Sturbridge, based on a review of the town's assessment records. As shown, the town had approximately 2.5 million square feet of commercial and industrial uses as of 2000. The majority of this space, approximately 890,000 sq. ft. (35%), was contained in buildings related to retail and service type uses. Industrial buildings, which includes all types of manufacturing, warehousing, and related uses, accounted for the second largest portion with 660,000 sq. ft., or 26% of the town's total. Lodging was the third largest with 578,000 sq. ft. representing 23% of the total inventory. Restaurants and Office buildings had generally equivalent square footage totals (160,000+) with each accounting for 6%–7% of the inventory with other miscellaneous commercial uses comprising the remaining 3%.

**Table 4.11**      **Change in Nonresidential Building Square Footage 2000–2009\***  
**Town of Sturbridge**

Land Use	Total Square Footage Pre-2000	% Total	Additional 2000–2009	Average Annual Additional	Total 2009	% Total
Retail/Services	891,698	35%	15,545	1,943	907,243	34%
Lodging	577,988	23%	—	—	577,988	22%
Restaurant	166,699	7%	12,906	1,613	179,605	7%
Other Commercial*	86,147	3%	8,924	1,116	95,071	4%
Office	161,478	6%	19,956	2,495	181,434	7%
Industrial	660,034	26%	49,800	6,225	709,834	27%
<b>Total</b>	<b>2,544,044</b>	<b>100%</b>	<b>107,131</b>	<b>13,391</b>	<b>2,651,175</b>	<b>100%</b>

\*Includes auto-related uses, campgrounds and other uses

\*\*Includes land and all improvements  
Source: US Census

Between 2000 and 2009 the town added approximately 107,000 sq. ft. of new nonresidential buildings space bringing the total to 2.6 million, a growth rate of less than 0.5%. It should be noted that this does not include any additions to existing buildings that may have occurred during this time, only the

construction of new buildings. Overall, this total growth represents a relatively modest annual increase of approximately 13,400 sq. ft. on average. The majority of this increase, almost 50,000 sq. ft., was related to the construction of several industrial buildings, according to assessment records. Office construction also recorded some notable growth of almost 20,000 sq. ft. (in two buildings), followed by retail/services and restaurants which each added 13,000–15,000 sq. ft. No new construction of lodging facilities was recorded during this time period. Based on assessment data, the town has 22 lodging facilities, 17 of which were constructed before 1970. Although several of these are historic structures, the remaining older portion of the stock is likely to be at a competitive disadvantage, barring any unrecorded modernization efforts, with newer facilities in town or within the region. Along these lines is the current proposal to reposition the former American Motor Lodge on Route 20 (at the I-90 exit) as a Holiday Inn Express. Future reinvestment in existing lodging is also likely to focus on properties that have the best highway access and visibility.

Table 4.12 illustrates the assessed value of the town's nonresidential building space as of 2009. As shown, buildings totaled just over \$91 million with total property value (including land and other improvements) of almost \$170 million. This represents a net increase of approximately \$3.6 million in building valuation, a growth rate of 4% over the decade (data not shown).

Restaurant structures have the highest average value at almost \$40 per square foot followed closely by retail and lodging facilities which average close to \$39 per square foot. Office structures were valued at just over \$37 per square foot and, as is typical, industrial structures have the lowest per square foot value at \$25.

**Table 4.12 Nonresidential Property Values – 2009**  
**Town of Sturbridge**

Land Use	Building Value	Total Property Value**	% Total	Acres	Average Building Value (sq. ft.)
Retail/Services	\$35,098,600	\$66,333,300	39%	202	\$38.69
Lodging	\$22,370,600	\$36,666,200	22%	160	\$38.70
Restaurant	\$7,177,900	\$14,187,600	8%	74	\$39.96
Other Commercial*	\$2,576,900	\$10,118,300	6%	439	\$27.11
Office	\$6,808,400	\$13,792,200	8%	31	\$37.53
Industrial	\$17,843,819	\$28,597,019	17%	140	\$25.14
<b>Total</b>	<b>\$91,876,219</b>	<b>\$169,694,619</b>	<b>100%</b>	<b>1,046</b>	<b>\$34.65</b>

\*Includes auto-related uses, campgrounds and other uses

\*\*Includes land and all improvements

Source: US Census

Also illustrated in Table 4.12 is that fact that commercial and industrial structures occupy parcels containing just over 1,000 acres, based on assessment records. This represents just over 4% of the town's approximate 24,000 total acres.



An estimate of the town's future development potential for nonresidential uses is presented in Table 4.13. The town's zoning provides seven districts that are primarily dedicated to the development of commercial and industrial uses. These include four commercial districts (Commercial, Commercial II, Commercial-Tourist, Historic Commercial), two industrially oriented districts (General Industrial and Industrial Park), and a Special Use district that allows a mixture of residential and nonresidential uses.

**Table 4.13 Development Potential of Vacant Nonresidential Land – 2009  
Town of Sturbridge**

Zoning District	# Parcels	Total Acres	Development Potential		
			Category 1	Category 2	Category 3
Commercial	28	54	43	7	4
Commercial-Tourist	6	8	0	0	8
Historic Commercial	1	1	0	0	1
General Industrial	5	68	35	33	0
Industrial Park	6	69	69	0	0
Special Use	14	153	0	58	95
<b>Total</b>	<b>60</b>	<b>353</b>	<b>147</b>	<b>98</b>	<b>108</b>

Cat 1 = No Major Limitations – Good Frontage, Sewer Access and Lot Size  
 Cat 2 = At least one limitation – No Frontage, Small Lot Size, No Sewer  
 Cat 3 = Two or more limitations – No Frontage, Sewer, and/or Small Lot Size  
 Source: Sturbridge Assessment Records and RKG Associates

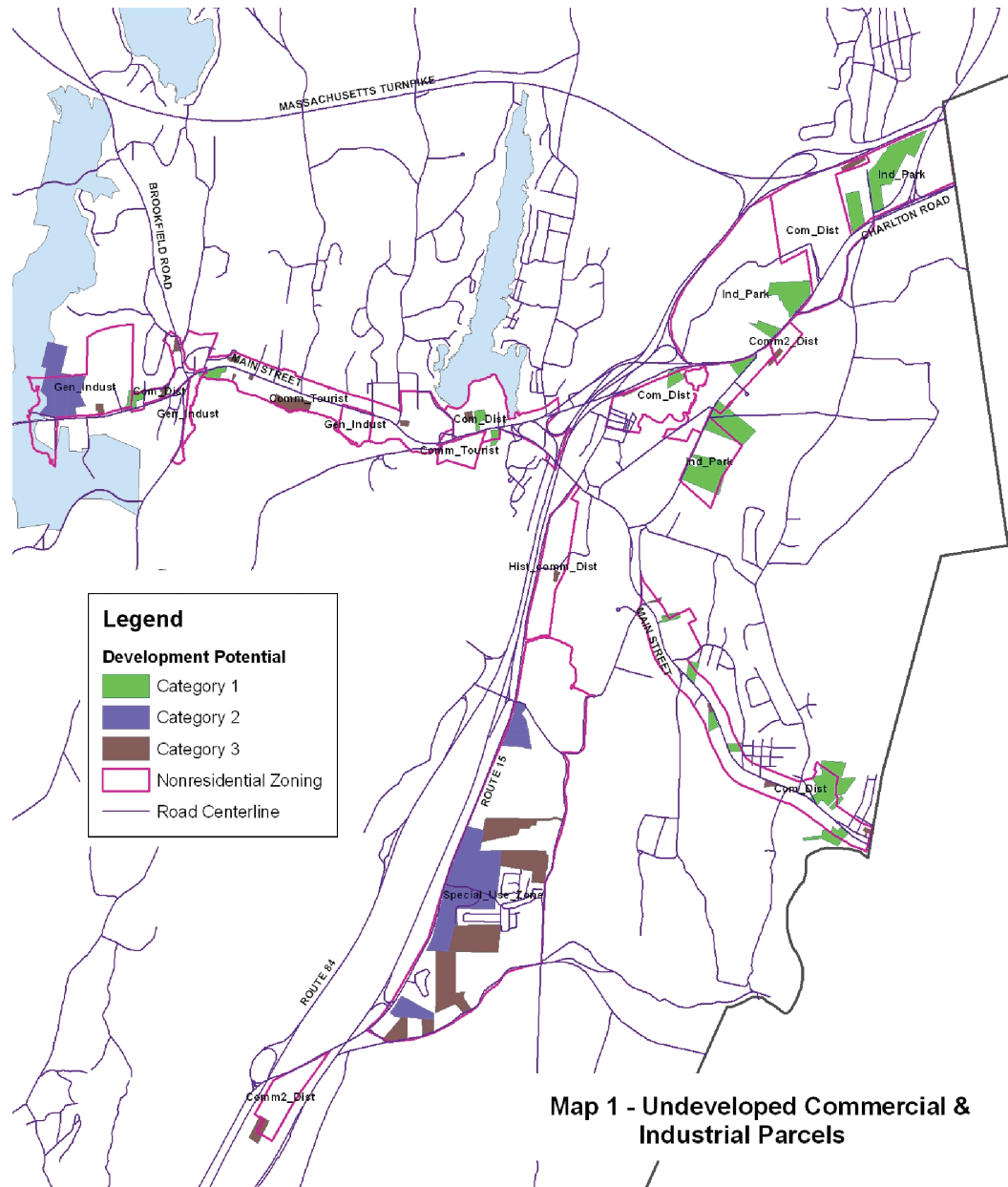
A review of the town's assessment records, in conjunction with its digital parcel map and geographic information system (GIS), identified a total of 60 vacant parcels remaining in the nonresidential zoning districts noted above. These parcels, which contain a reported 353 acres, represent a wide spectrum of site characteristics and ownership patterns that will affect their future development potential. A total of 147 acres were ranked as Category 1 indicating these parcels have good access/highway frontage, adequate parcel size, and availability of municipal sewer, making them most readily developable. These parcels are dispersed along the Route 20 corridor with some additional sites on Route 131. Included in these parcels are four of the town's five Priority Development Sites (PDS), indicating they are listed in the state's 43D program that is intended to streamline the development review process.

- ▶ 51 Technology Park Road;
- ▶ 90 Charlton Road;
- ▶ 198 Charlton Road;
- ▶ 178 Main Street; and
- ▶ 660 Main Street.

The largest concentration of vacant land, 153 acres, is located in the Special Use District on Route 15. However, as illustrated in the table, these properties are limited by the lack of municipal sewer which reduces the development potential considerably. Only 58 acres were estimated to have adequate parcel size and highway frontage to make it relatively easy to establish commercial or industrial uses on these sites. However, other zoning requirements associated with this district and the Town's Planned Unit Business Development (PUBD) overlay criteria create further limitations for the likelihood of development on these properties. Virtually no good development sites exist in the Commercial-2 District, which is not included in the table for this reason.

Although the town has designated five PDSs in recent years (as noted above), overall, the town's options of good, shovel-ready sites are quite limited. While the total acreage is relatively large, as discussed above, the individual sites are prone to be fragmented, smaller in size, lacking good access, and without proximity to municipal sewer. These circumstances will place the town at a competitive disadvantage with other communities in the region regarding its ability to attract the types of nonresidential development it may want to support its tax base, employment opportunities, and level of services. It should be noted that this assessment of development potential does not include the possibility of additions or expansion of existing facilities.

Map 1 Undeveloped Commercial & Industrial Parcels



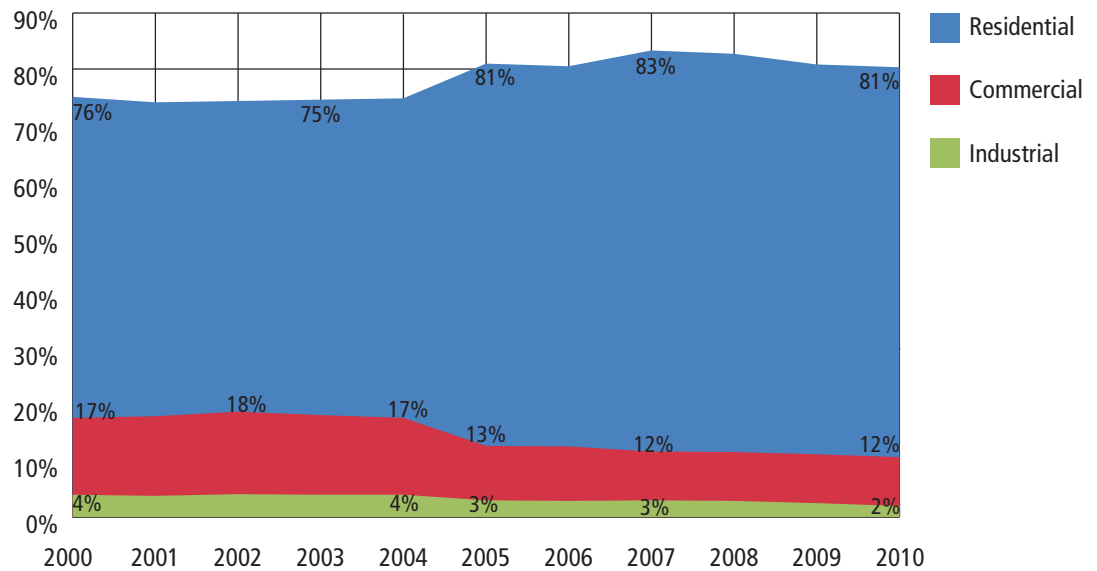
## Municipal Tax Base

The change in Sturbridge's real and personal property valuation between 2000–2010 is presented in Table 4.14. As shown, the town had approximately \$1.2 billion in assessed value as of 2010, a figure that has increased by 137%, or 9% annually, over the course of the decade. Like most communities, values over the last two years have decreased to some degree due to national economic downturn and overvaluing in the housing market. The town's total assessed value dipped by -2.9% in 2009 and 8.3% for the 2010 tax year. Residential property, which accounts for the largest portion of the town's tax base, grew the most rapidly of all property types with an average annual increase of 9.8% over ten years. Personal property, which includes equipment, machinery, furnishings, fixtures, etc., also grew at a commensurate rate of 9.1% on a yearly basis. In contrast, commercial property value increased by only 5.7% annually and industrial property by 4.9%. As a result of these varying growth rates, residential property increased from 76% to 81% of the town's total assessed value while commercial valuation decreased from 17% to 12%, as shown in Figure 4.5. The industrial portion of the town's tax base declined more moderately from 4% to 2% during this time period. Personal property, which is not represented in the figure, remained fairly constant at 4% of total valuation.

**Table 4.14**      **Property Valuation by Class 2000–2010**  
**Town of Sturbridge**

FY	Residential	% Change	Open Space	Commercial	% Change	Industrial	% Change	Personal Property	% Change	Total	% Change	Eval. Ratio
2000	\$385,329,532	—	\$ —	\$85,375,331	—	\$17,915,800	--	\$20,139,888	—	\$508,760,551	--	0.95
2001	\$396,037,632	2.8%	\$ —	\$93,750,671	9.8%	\$18,161,300	1.4%	\$21,661,045	7.6%	\$529,1610,648	4.1%	
2002	\$502,388,420	26.9%	\$ —	\$121,475,780	29.6%	\$26,702,300	47.0%	\$23,441,200	8.2%	\$674,007,701	27.3%	0.98
2003	\$520,218,887	3.5%	\$ —	\$122,935,313	1.2%	\$26,285,900	-1.6%	\$24,483,800	4.4%	\$693,923,900	3.0%	
2004	\$552,363,787	6.2%	\$ —	\$123,742,613	0.7%	\$27,336,500	4.0%	\$27,651,600	12.9%	\$731,094,500	5.4%	0.80
2005	\$862,458,624	56.1%	\$ —	\$141,153,676	14.1%	\$32,514,500	18.9%	\$26,632,900	-3.7%	\$1,062,759,701	45.4%	
2006	\$961,403,644	11.5%	\$ —	\$157,048,556	11.3%	\$33,614,200	3.4%	\$31,499,149	18.3%	\$1,183,565,549	11.4%	0.95
2007	\$1,066,412,392	10.9%	\$ —	\$158,764,508	1.1%	\$32,783,600	-2.5%	\$30,912,841	-1.9%	\$1,288,873,341	8.9%	
2008	\$1,109,173,767	4.0%	\$ —	\$171,575,845	8.1%	\$33,539,088	2.3%	\$38,762,800	25.4%	\$1,353,051,500	5.0%	0.95
2009	\$1,069,381,181	-3.6%	\$ —	\$166,193,431	-3.1%	\$30,786,588	-8.2%	\$47,676,400	23.0%	\$1,314,037,600	-2.9%	
2010	\$978,346,271	-8.4%	\$642,700	\$148,557,249	-10.6%	\$29,011,799	-5.8%	\$48,020,600	0.7%	\$1,205,578,619	-8.3%	NA
Change	\$594,016,799		NA	\$63,181,918		\$11,095,999		\$27,880,712		\$696,818,068		
% Change	154%		NA	74%		62%		138%		137%		
Annual Change	9.8%		NA	5.7%		4.9%		9.1%		9.0%		

**Figure 4.5** Property Valuation as Percentage of Total 2000–2010  
Town of Sturbridge



**Table 4.15** Tax Rate by Class 2000–2010  
Town of Sturbridge

FY	Residential	Open Space	Commercial	Industrial	Personal Property
2000	\$18.37	\$ —	\$18.37	\$18.37	\$18.37
2001	\$18.72	\$ —	\$18.72	\$18.72	\$18.72
2002	\$16.44	\$ —	\$16.44	\$16.44	\$16.44
2003	\$17.61	\$ —	\$17.61	\$17.61	\$17.61
2004	\$18.68	\$ —	\$18.68	\$18.68	\$18.68
2005	\$12.35	\$ —	\$17.09	\$17.09	\$17.09
2006	\$11.80	\$ —	\$16.48	\$16.48	\$16.48
2007	\$10.94	\$ —	\$17.50	\$17.50	\$17.50
2008	\$11.32	\$ —	\$15.44	\$15.44	\$15.44
2009	\$12.66	\$ —	\$14.74	\$14.74	\$14.74
2010	\$14.55	\$14.55	\$14.55	\$14.55	\$14.55
Change	(\$3.82)	NA	(\$3.82)	(\$3.82)	(\$3.82)
% Change	-21%	NA	-21%	-21%	-21%
Annual Change	-2.3%	NA	-2.3%	-2.3%	-2.3%

\*Includes auto-related uses, campgrounds and other uses

\*\*Includes land and all improvements

Source: US Census

Overall, the property valuation growth rates discussed above illustrate that the town has become more dependent on the residential portion of the tax base to support the costs of financing municipal services throughout the decade. In an effort to address this disparity a split tax rate was instituted in 2005 where residential properties were taxed at a different (and lower) tax rate than nonresidential properties, as shown in Table 4.15. However, as of 2010, the town reverted back to a single tax rate.

Estimates provided by the State's Department of Revenue Administration indicate that the average residential tax bill (based on the average value of a single family house) in Sturbridge increased from \$2,380 to \$4,044 between 2000 and 2010, a 70% rate of growth. Despite this increase, Sturbridge's ranking within the state regarding this indicator remained fairly constant at the 44th percentile (out of 340 towns and cities). This means that the town's residential taxes have increased at a comparable rate with the state as a whole and that the town remains near the middle of all communities in terms of the relative tax burden on single family homes.

## Strategic Opportunity Areas

Throughout the process of updating this master plan public input has been sought by means of various forums and surveys in order to gauge the concerns and desires of Sturbridge residents and businesses. While the comments received from these sources covered a broad spectrum of topics and issues there were a number of consistent areas that seemed to be voiced more frequently with regards to economic development. This section highlights those topics as well as other strategic issues and opportunities that have been identified through the research and preparation of this plan.

### Strategic Planning Focal Points

- A. Need to support and maintain the existing business base
  - 1) Improve outreach and information services
  - 2) Provide flexible regulatory environment
  - 3) Increase support/opportunities for small businesses
- B. Need to diversify the existing business base—too much reliance on retail and restaurants
  - 1) Attract clean alternative businesses and industries that will provide higher paying jobs
  - 2) Need to broaden tourism related offerings (provide additional family related activities and other feature facilities that will entice visitors to extend their stays)
  - 3) Balance economic development with protecting community character
  - 4) Expand small retail shopping alternatives

- C. Increase natural resource related activities (e.g. use of trails, rivers, natural areas, recreation facilities) as a component of the town's tourism attractions
  - 1) Access to the Quinebaug River
  - 2) Continue to improve trails and promote their use
- D. Improve conditions in the Commercial Tourist District
  - 1) See concept plan in Chapter 2 for streetscape improvements and related amenities
  - 2) Establish gateways at both the east and west ends of the district
- E. Ensure adequacy of economic marketing and infrastructure systems
  - 1) Improve focus and coordination among existing local/regional tourism and economic development groups
  - 2) Expand the town's current economic development marketing efforts
  - 3) Ensure that the infrastructure and utility systems are adequate to support existing and future levels of economic development

### Strategic Opportunities and Issues

#### *Economic Development Oversight and Implementation*

Maintaining a successful economic development program can be a challenging task for smaller communities like Sturbridge. Economic development will continue to become more competitive within the region as communities grow and attempt to balance the cost of residential services with additional commercial and industrial development. Sturbridge has a significant base of commercial and industrial uses that have been attracted to the town over the past years due to the availability of suitably zoned land combined with good highway access and utility systems. In addition, tourism aspects of the town and region have also contributed to this growth. However, the availability of vacant, readily developable land, combined with limitations regarding sewer capacity and highway congestion, will make future economic expansion more complex and less certain.

Oversight of the town's economic development activities are divided amongst a number of groups that address various aspects of tourism promotion, marketing and solicitation, and business outreach. Some groups have both a local and regional function and there is an overlap of focus and purpose among some of these entities. The level of coordination and cooperation between these and other economic

development groups has not achieved a sustained level which, if not resolved, could hamper the town's ability to formulate a cohesive and consistent tourism strategy. In addition, most of the responsibilities of these organizations are assumed by volunteers (most of whom are local business men and women) which places limitations on what can realistically be achieved. The lack of professional staffing and dedicated funding to support economic development, combined with potentially conflicting goals or actions of existing groups, will limit, and potentially hamper, the town's future economic development efforts.

#### *Diversified Economic Base*

As discussed in this chapter, Sturbridge's economic base is heavily dependent on leisure & hospitality businesses, such as hotels and restaurants, as well as a large number of retail firms. Therefore, insuring the continued success of these businesses will be key to maintaining a significant portion of the local jobs and non-residential tax base. However, with this master plan the town has an opportunity to promote more diversity in its economic base that will help to minimize potentially adverse impacts if sustained losses were to occur in these two dominant sectors. Therefore, the town is approaching a critical juncture in its land planning strategy regarding how the relatively limited supply of commercial and industrial land will be developed in the future. The recommendations in this plan will need to strike a balance between supporting leisure, hospitality and recreational components of the tourism industry while also encouraging development in other areas that will allow the town to capture its share of regional growth sectors. Some areas the town may be able to capitalize on through future marketing efforts include the following:

- ▶ Expand on the existing clusters of optics/electronics/metals/machinery manufacturing businesses presently located in the town and region
- ▶ Add a natural resources/recreation facilities component to the existing tourism base through expansion of outdoor activities related to trail networks, river/water access, and other associated activities
- ▶ Capitalize on the "green" technologies momentum by marketing to these types of firms as well as encouraging small business growth in these sectors
- ▶ Position the town to capture its share of expected growth in health care

#### *Growth in Health Care Demand*

Harrington Hospital, a regional health care facility, is a 114-bed acute care hospital located in the adjoining Town of Sturbridge that provides medical and surgical inpatient care, 24-hour emergency services, psychiatric care, pediatrics and obstetrical care, and oncological (cancer) treatment. The facility has over 900 employees and is served by 140 doctors and 170 nurses. The hospital also operates, or is associated with, numerous satellite facilities throughout the region, some of which are located in Sturbridge, including primary and specialty care doctors, diagnostic imaging, laboratory services, and physical therapy. Over the last several years Harrington Hospital has transformed the former Hubbard Hospital in Webster into a full-service outpatient center and is constructing a new 20,000 sq. ft. medical office/imaging services building in Charlton (on Route 20) that will provide further outreach of community services.



*Highway System*

Sturbridge is fortunate to have exceptional access to the Interstate highway network as well as supporting secondary state roadways such as Routes 20, 131 and 15. Its crossroads location at the intersection of I-84 and I-90 has contributed to the town's historic levels of economic development and will continue to offer future opportunities if adequately maintained. It will be important to ensure that high levels of service be maintained and that adjoining land areas be reserved for their highest and best uses to support the town's economic development goals.

*Utility Systems*

The availability of municipal water and wastewater treatment systems can play a pivotal role in the a community's economic development capacity and ability to compete with other locations in the region. Most of the town's commercial and industrial zoning districts are served by either the Sturbridge or Southbridge municipal wastewater treatment plants. According to the recently completed Sturbridge Wastewater Management Plan (WMP), both treatment plants are at or nearing capacity and will require upgrades to support existing and future development. The WMP calls for a 500,000 GPD upgrade of the Sturbridge treatment plant but does not recommend extension of sewer lines to the Special Use zoning district along Route 15. The Board of Selectman voted in early 2011 that the sewer system extension to the Route 15 area be tabled until the completion of the Wastewater Treatment Plant upgrades and a determination of acceptable flows. Additionally, consideration should be given to identifying and procuring at least 10 acres of suitable land in the area for groundwater discharge. Grant money will be sought to fund this effort. Adequate water and sewer capacity, in conjunction with a well functioning highway network, will help to ensure that the town remains well positioned to compete with development sites located within the region.

*Regional Development and Collaboration*

Economic development has both a local and a regional perspective. Locally, it provides the nonresidential tax base that helps to support the provision of services and facilities for residents while also providing jobs. Similarly, business development in neighboring towns also provide jobs for Sturbridge residents as well as expanding the supply of goods and services. However, the regional availability and success of businesses, industries, and institutions, such as the hospital in Southbridge, also creates a situation where the whole is greater than the sum of the parts when attempting to attract future economic growth. Therefore, it is important that Sturbridge give positive consideration to projects in other communities and work cooperatively with these towns, and appropriate regional organizations, to support regional development.

In Charlton, a site plan had been approved in 2008 for construction of 515,000 square feet of retail shopping center space on Route 20 at Center Depot Road. However, due to the economic downturn the project is presently on hold. The facility would have included 12 retail buildings and prospective tenants are still reportedly interested in the location although no new developer has yet to emerge. The town has an approximate total of 450 acres along the Route 20 corridor zoned for both commercial and

industrial uses. Recent developments have included small to medium-sized buildings (5,000–15,000 sq. ft.) of retail and office buildings, as well as some warehouse and distribution space.

## Recommendations

1. **Foster economic sustainability by focusing on growth and expansion of existing businesses through implementation of pro-business policies and regulations, financing infrastructure construction, and cooperative marketing efforts.**
  - Create a more integrated approach to economic development within the town that promotes a shared vision and implementation strategy for the key economic development partners. Furthermore, a successful tourism industry requires that the town maintain a “good product” and market it on a continual basis. Cooperation and support amongst the town’s tourism-related businesses and the organizations involved in promoting economic development is also of vital importance. The town government’s role in supporting these efforts is equally important.
  - Establish a more cohesive approach for promoting economic development by providing incentives and/or directives intended to bring all existing economic development and tourism-related oversight groups together.
    - Support proposed marketing/branding recommendations from the SHPP analysis
    - Support the designation of scenic ways
    - Finalize and implement commercial building design guidelines to ensure that the town’s image reflects community character and visitor expectations
  - Create a database of town businesses and available development sites.
  - Encourage closer cooperation of marketing and events activities with Old Sturbridge Village.
    - Consider initiating a trolley service between OSV and the Commercial-Tourist District during peak months
  - Consider creation of a business incubator to support the establishment and growth of small businesses. Examine potential for a joint regional approach for operating such an entity with neighboring towns.
    - Promote small businesses by highlighting their operations and successful endeavors
    - Promote a town policy that encourages purchasing goods and services from small businesses and/or, local businesses in general
    - Examine the potential for creating a local investment pool geared towards supporting the establishment and expansion of small businesses that would be funded from both public and private sources

- Maintain a “pro-business” environment within town government.
  - Continue to examine town policies and procedures, and revise as needed, to ensure that they do not discourage local business operations and initiatives.
  - Identify key position on town staff that is responsible for economic/business coordination, monitoring, and outreach. Alternately, consider establishing a new position to fill this role on either a part- or full-time basis. This position could support the town’s economic marketing efforts to attract new development and also function as a liaison between tourism groups, town government, and businesses.
  - Conduct periodic and regular business outreach efforts to existing businesses to identify issues and needs and how best to address these concerns.
  - Establish a program that provides recognition of excellence for existing businesses.
  - Take a more proactive approach to all aspects of economic development, including definition of vision and strategic imperatives, as well as encouragement and coordination of joint marketing initiatives.
- Consider making available additional tax or financing incentives to existing businesses or as tools for attracting future development.
  - The town is established as an Economic Target Area (ETA) under the state’s Economic Development Incentive Program (EDIP) which allows for exemptions (total or partial) from local real and personal property taxes for businesses that commit to increasing jobs and making private investment in the project. If the town agrees to a local real property tax reduction (5%–100% for 5–20 years) for future incremental taxes, the business also becomes eligible for a 5% state investment tax credit as well as exemption from local personal property taxes.
- Examine town-owned vacant or underutilized land for possible “highest and best use” as future economic development sites. Some of the town’s conservation land may be compatible with active, outdoor commercial recreation uses that could be privately operated and provide an additional component of the local tourism economy.
- Ensure that there is an adequate supply of suitably zoned industrial land available to support future development. In order for this land to serve the town’s needs it must offer a variety of sites, both in terms of size and availability of infrastructure, that is not insurmountably restricted by natural constraints.
- Implement the Board of Selectmen vote to determine acceptable wastewater flows after Wastewater Treatment Plant upgrades and identify suitable land for groundwaste discharge. It is essential that the town maintain adequate sewer infrastructure to help it maintain a competitive advantage over other development sites in the region.

## 2. Promote economic development from a regional perspective

- Support efforts of the Central Massachusetts Regional Planning Commission (CMRPC) to strengthen and expand the region's economic base through preparation and implementation of its Comprehensive Economic Development Strategy (CEDS). Continue to identify priority development sites for inclusion in the CEDS to ensure potential access to federal funding for eligible project costs.
- Encourage growth in the town's hospitality, entertainment, and recreation businesses by supporting and strengthening regional efforts to promote tourism.
- Continue to participate in the Southern Worcester County Community Development Corporation's (SWC CDC) beginning efforts as a means to foster regional cooperation among neighboring towns (Charlton, Douglas, Dudley, Oxford, Southbridge, Sturbridge, and Webster) for economic and social development initiatives.
- Examine the potential for establishing a small business incubator facility on a cooperative basis with neighboring towns.

## 3. Prepare a Corridor Improvement Plan for the Commercial-Tourist District

The Commercial-Tourist District includes a variety of retail shops, services, lodging establishments, and other uses that represent a portion of the town's leisure and hospitality economy which is supported both by the region's tourism industry as well as local residents. There is very limited opportunity for new development along the corridor and the current zoning regulations do not provide adequate incentives to stimulate significant private investment. Therefore, it is suggested that the town initiate a corridor improvement plan which would involve a detailed physical analysis of existing conditions, identify infrastructure improvements (both public and private), and establish a cooperative public process that would help to bring property owners together with the town to achieve common goals. The following are the primary components that should be contained in such a plan in conjunction with other recommendations outlined in the Commercial-Tourist District Revitalization Study recently completed by the CMRPC:

- Develop a scaled base map showing parcel boundaries, building footprints, parking areas, rights-of-way, utilities, and other existing features to use for identifying future planning and investment activities. This map(s) would be used to illustrate, among other items, the following:
  - Potential redevelopment sites
  - Landscaping and other aesthetic improvements
  - Shared driveway access potential
  - Short- and long-term parking improvements
  - Pedestrian amenities (sidewalks, walkways, pocket parks, etc.)

- Potential river access points
- See the Concept Plan (Figure 2-1) for the western part of this district included in Chapter 2 that incorporates some of these improvements.
- Develop a Capital Improvement Plan for all recommended infrastructure upgrades and identify potential public/private funding sources.
- Identify potential redevelopment sites currently occupied by structures needing significant renovation or other “non-contributing” properties that do not support the district’s objectives.
- Revise zoning bylaws to allow more flexibility in types and scale of uses permitted in the district. Implement this in conjunction with Town’s updated design guidelines to ensure that future development remains in character with community objectives.
- Identify potential locations for centralized, shared parking facilities. Such sites might coincide with private redevelopment initiatives or selected demolition of non-contributing properties.
- Create conceptual site plans for redevelopment on selected sites. Selection of sites would ideally be a collaborative effort with property owners looking to expand or redevelop existing structures or could be used to offer alternative redevelopment options of non-contributing properties that need to be repositioned within the marketplace.
- Establish a façade improvement fund to assist property owners in improving the appearance of their businesses. Create conceptual façade design plans for selected sites and/or interested property owners.
- Explore public/private financing options for renovating or redeveloping the mill on the corner of Holland Road and Route 20 site into artisan’s space, a small business incubator facility, or other appropriate use for the district. Revise the zoning regulations to support intended alternative uses. It is very possible that renovation costs could exceed the value of this property and as such, consideration should be given to conducting a feasibility study as a first step.

#### 4. Create new Entertainment and Recreation district on Route 20

Consider establishing a new zoning district, centered around the former motel known as The Lodges (owned by OSV and recently used as the town offices), as a focal point for the Commercial-Tourist district. Creation of this district would require the assemblage of a number of existing buildings and parcels that have a combined area of approximately 90 acres. This district should allow for the creation of entertainment, recreation, or other appropriate tourism-oriented uses that could act as anchor for the Commercial-Tourist district and create better linkage with Old Sturbridge Village. If all this land could be assembled as one site it could potentially be redesigned to resemble a town common with new uses clustered around a common open space or other use. Permitted uses in this district should serve to broaden the tourism and recreational offerings in the community by fostering more year-round and family-oriented activities. These might include outdoor recreation activities that capitalize on the sites

access to the river and potential linkages to existing or planned trail networks. Redevelopment of this area will need to balance these broadened types of land uses with appropriate design standards and building scale. It is recommended that a conceptual site development plan be created for this entire district in order to illustrate the town's goals for the area to potential developers. Creation of this



Route 20

conceptual plan should, if possible, be a cooperative effort between the town and OSV to help ensure that the plan will support long-term needs of the village as well. Potential development will be limited by proximity to the river and its related resource zone restrictions. This plan should also explore the potential for integrating the state highway garage facility into this district and reconfiguring the roadway connection to Route 131 in order to expand development potential (Refer to Map 2).

#### 5. Expand Business/Industrial zoning on east end of Route 20

In order for the town to be competitive with neighboring towns (as well as the Greater Worcester market as a whole) in its ability to attract professional, high tech, and manufacturing businesses, it must provide a variety of readily available building space or suitably zoned vacant land. To address this need the town should consider increasing its available acreage for business park or industrial uses by rezoning land on the south side of Route 20 adjacent to the Charlton town line (Refer to Map 2). A review of site conditions would need to occur prior to final rezoning recommendations. This area, which is presently zoned Commercial 2 and Residential is mostly undeveloped but does include a few existing houses. This area is one of the few remaining locations in the Town that has significant undeveloped acreage with good highway access and proximity to municipal sewer. Its location across Route 20 from the Town's Technology Park businesses is also a positive attribute towards rezoning consideration. Regulations for this zoning district should allow uses that are non-retail in nature that help to diversify the town's economic base by encouraging businesses that focus attention on attracting new industry and jobs in various sectors such as energy efficiency, renewable energy and sustainable product manufacturing, precision manufacturing and engineering, health care and biotechnology, and software engineering.

#### 6. Create new-mixed use, medical zone on Route 131

As discussed in this chapter, the Health Care sector has been, and is expected to continue as a relatively strong employment growth area in the future. The location of Harrington Hospital in Southbridge is one of the primary drivers of health care service growth in the region. Sturbridge has experienced moderate employment growth in this sector but has limited sites readily available to capture potential demand for medical offices and related uses. Therefore, it is recommended that the town consider rezoning land adjacent to the Southbridge town line, on the north side of Route 131, for medically

oriented uses. Such rezoning could allow for a mixture of residential and medical office/clinic uses that could combine age-restricted housing, congregate care facilities, or similar residential uses with on-site medical facilities (Refer to Map 2).

#### **7. Revise purpose and development requirements of the Special Use District**

The Special Use District regulations are not clear in establishing intended development objectives for this area resulting in market uncertainty which, combined with the lack of utilities, creates significant deterrent to potential development. In addition, requirements of the Planned Unit Business District (PUBD) overlay zoning, which requires 25–50 acres, 40% open space, and a special permit for major uses, are also quite restrictive. This location has perhaps the town's best direct access from the Interstate highway, but lacks municipal sewer and has numerous existing residential uses that create potential conflicts with future commercial or industrial uses. This location is considered well-suited for either tourism related uses or manufacturing/distribution sites, but not both concurrently. It is recommended that the town consider the following changes for this area:

- Revise zoning in Special Use District to clarify economic development priorities:
  - Decide if the district will focus on entertainment/recreation, manufacturing or healthcare/medical
  - Restrict non-contributing uses (e.g. do not allow residential uses)
  - Address water service and wastewater treatment within the district once plant capacity issues are resolved and groundwater discharge options have been explored
    - Identify financing sources including DIF, grants, user financed and town bonding support
  - Revise regulations to allow development by right (minimize special permit requirements) at reasonable density to encourage investment and finance of required utilities
    - If municipal sewer cannot be extended to the district within a reasonable time-frame, permitted density will need to adjusted accordingly

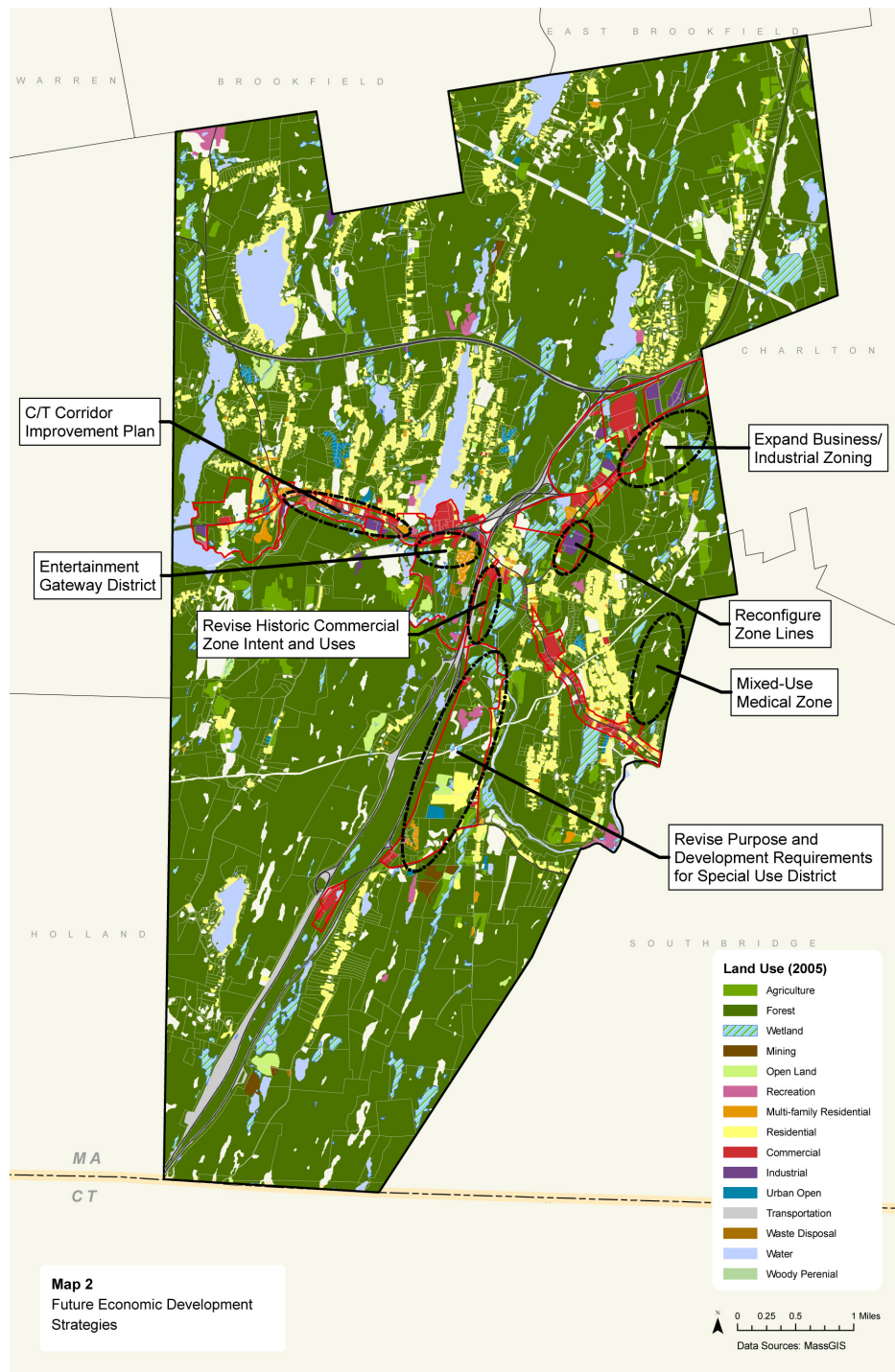
#### **8. Other Zoning/Regulatory Related Issues**

- Consider revising the historic commercial zone along Route 15 (Refer to Map 2). It is recommended that the regulations be revised to reflect existing hospitality-related uses while providing appropriate protections for the historic nature of the area. Additionally, the boundaries should be extended to include all of Publick House property. There is very little undeveloped land in this district so that future development would most likely involve redevelopment or alterations to existing uses.
- Nonresidential zoning regulations need a general overhaul with regard to permitted uses and dimensional requirements.

- Existing regulations tend to allow residential and other nonrelated uses which creates land use conflicts and limits available acreage for nonresidential uses
- The Town's zoning bylaws provide a list of permitted uses for each of the nonresidential zoning districts which excludes all other uses if not included in the list. In most cases, the permitted uses are very limited or outdated thus restricting many uses that should be reasonably considered. It is recommended that these uses be revised and expanded to reflect current land use standards and market conditions.



Map 2 Future Economic Development Strategies



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## 5. Natural, Historic and Cultural Resources

### Introduction

Sturbridge boasts many natural, historic and cultural resources, and it is particularly known for its open spaces, wetlands, forests, farmland, wildlife, and the iconic tourist destination Old Sturbridge Village. Residents have long valued these resources, seeing them as an integral part of the community. While Sturbridge has experienced significant land use changes over the years, the town strives to maintain its character and traditions as it manages its growth going forward. The preservation of historic places, natural resources and cultural assets is key to achieving this goal.

### Natural, Historic and Cultural Resources Goals

- ▶ Provide better public access to water resources for passive recreation.
- ▶ Preserve water resources through stormwater management and lakefront zoning protection.
- ▶ Integrate natural, historic and archaeological resource identification, documentation, and evaluation into local planning.
- ▶ Develop and strengthen local planning and protection measures for natural and historic resources.
- ▶ Incorporate specific historic preservation objectives in community revitalization and economic development efforts.
- ▶ Create and enhance cultural opportunities in Sturbridge.

### Natural Resources

Sturbridge is rich in natural resources. From forests to ponds and rivers, these resources add to the town's rural character, providing residents and visitors with scenic views and recreational opportunities. They also serve many important environmental and ecological purposes such as providing habitat for wildlife.

Many of the natural features in town are water resources, such as the Quinebaug River, which runs in a southeasterly direction to Southbridge. This and other waterways are an integral part of the town's landscape and groundwater supply.

Open space, conservation land, forests and parks are other significant resources in town. Wells State Park, for example, is a 1,400-acre woodland park that is popular among hikers and campers. Adjacent to Walker Pond, the property features 60 campsites and more than 10 miles of trails.

Because natural resources are important to Sturbridge residents, the Town has worked to preserve them through bylaws and land acquisitions. For example, the Town, in partnership with the state Department of Fisheries and Wildlife (DFW), bought 826 acres of land from Old Sturbridge Village in 2006.<sup>1</sup> The land is used for passive recreation as it has trails, ponds and streams.<sup>2</sup> The state owns a conservation restriction on the property, which prohibits development of the land. This land acquisition and restriction has resulted in a large corridor of green space in town—from the Leadmine Wildlife Management Area to Wells State Park.<sup>3</sup>

Additionally, the Town was able to acquire over 100 acres of land, at no cost to the Town, in a public/private partnership between a developer and the DFW. As a result, the Rudy Dumas Farm was incorporated into the McKinstry Brook Wildlife Management Area.

### Existing Conditions

The following section describes the current state of natural resources in Sturbridge. It specifically addresses geology and soils, water resources, vegetation, fisheries and wildlife, and scenic resources.

### Soils, Topography and Geology<sup>4</sup>

This section discusses the characteristics of the soils, topography and geology in Sturbridge. It largely draws on information from past studies, including the 2005 Open Space and Recreation Plan and the 2008 draft Sturbridge Comprehensive Wastewater Management Plan.

#### *Soil Characterization*

There are six main soil types in town: Paxton-Woodbridge-Ridgebury, Brookfield Brimfield, Canton-Montauk-Scituate, Chatfield-Hollis, Freetown Swansea-Saco, and Merrimac-Hinckley-Windsor.

- ▶ **Paxton-Woodbridge-Ridgebury soils:** This is the predominant soil type in Sturbridge, located in the western and northeastern sections of the town. These soils consist of glacial till uplands and ridges dissected by small drainage ways, and they have a firm to very firm substratum, which restricts water movement.
- ▶ **Brookfield-Brimfield soils:** Located in the southeastern corner of town, this soil type consists of upland hills and ridges with rock exposures throughout.
- ▶ **Canton-Montauk-Scituate soils:** These soils are located in the southeastern part of the town. Generally well drained, this soil type consists of soils on upland hills and rolling glacial till flats.

1 Town of Sturbridge website, [http://www.town.sturbridge.ma.us/Public\\_Documents/F0000F20A/preservation](http://www.town.sturbridge.ma.us/Public_Documents/F0000F20A/preservation)

2 Penny Dumas, Community Preservation Committee.

3 Sturbridge Community Preservation Committee, [http://www.town.sturbridge.ma.us/Public\\_Documents/F0000F20A/preservation](http://www.town.sturbridge.ma.us/Public_Documents/F0000F20A/preservation)

4 Sturbridge Comprehensive Wastewater Management Plan draft, Tighe and Bond, 2008; Sturbridge 2005 Open Space and Recreation Plan

- ▶ **Chatfield-Hollis soils:** These soils are located west of Walker Pond and near the Charlton town line. This soil type consists of well-drained to somewhat excessively drained soils on hills and ridges.
- Freetown-Swansea-Saco soils:** Located in the central part of town along the Quinebaug River, this soil type consists of soils on broad flats with small depressions. The soils are very poorly drained.
- ▶ **Merrimac-Hinckley-Windsor soils:** These soils are located in and around the center of town, particularly along Route 84, the Quinebaug River and Cedar Pond. This soil type is found on broad, flat plains and in rolling to steep areas, and the soils are excessively or somewhat excessively well drained.

### *Topography*

Terrain in Sturbridge is hilly. Elevations range from a low of about 510 feet to a high of about 1,100 feet above sea level. The ridgelines generally run north to south with lower elevations in between. These lower areas include many wetlands and water bodies. Much of this topography has been influenced by the last glacial period, which was more than 12,000 years ago.

The topography, among other natural features, is considered in development plans under the Town's Open Space Residential Development (OSRD) bylaw adopted in 2009. The bylaw encourages "less sprawling and more efficient forms of development" that preserves open space and conforms to existing topography and natural features.<sup>5</sup> Allowed by special permit, OSRDs must include at least 50 percent open space.

### **Water Resources**

Water resources include watersheds, surface waters, wetlands, stormwater, groundwater and drinking water resources. Such resources are plentiful in the town of Sturbridge as there are many ponds, lakes and streams in addition to the Quinebaug River. The great ponds, in particular, are a valued asset in town. See Figure 5-1.

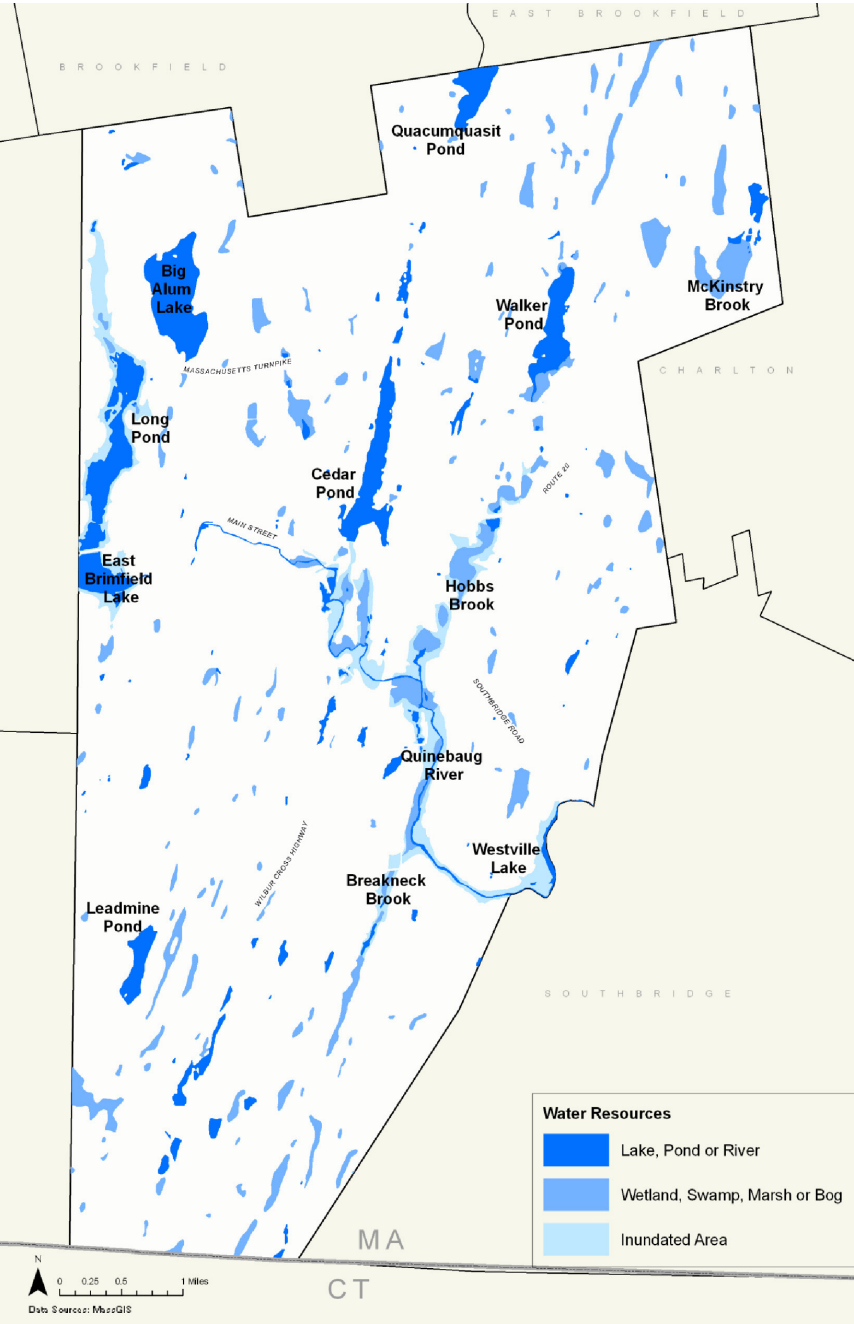
### *Watersheds*

Sturbridge is primarily located within the Quinebaug River Watershed, which is in the southern part of central Massachusetts. Covering 850 square miles, the watershed extends south into Connecticut and western Rhode Island. To the north/northwest is the Chicopee River Watershed, to the west is the Connecticut River Watershed and to the east is the French River Watershed.<sup>6</sup>

<sup>5</sup> Sturbridge Zoning Bylaws, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5)

<sup>6</sup> Massachusetts Executive Office of Energy and Environmental Affairs, [http://www.mass.gov/Eoeea/docs/eea/water/watersheds\\_map.pdf](http://www.mass.gov/Eoeea/docs/eea/water/watersheds_map.pdf)

**Figure 5.1      Sturbridge Water Resources**



The Quinebaug River stretches about 65 miles, 19 of which are in Massachusetts.<sup>7</sup> Its watershed is heavily forested and contains 54 lakes and ponds. Together with the French River Watershed and Quinebaug-Shetucket River Valley, it forms the Thames River Watershed.

### Surface Waters



Cedar Lake

Rivers, streams, lakes and ponds serve many different functions in Sturbridge, including habitat for wildlife and areas for recreational activities. Residential areas are also largely centered around lakes and ponds in town.

Part of the Quinebaug River is located in Sturbridge, as was mentioned earlier. The river runs in a southeasterly direction through the central part of town. There is a six-mile canoe trail on the river, running from Holland Pond to East Brimfield Lake. Hamant Brook, a stream located on the grounds of the old Camp Robinson Crusoe property, also offers recreational opportunities as it is a popular fishing spot. There are several walkable trails on the property. Breakneck Brook is located within the Breakneck Wildlife Management Area.

There are also seven major open water bodies in town, according to the 2005 Open Space and Recreation Plan. They include Cedar Lake (Pond), Walker Pond, Leadmine Pond, Big Alum Lake, East Brimfield Lake, Long Pond, Westville Lake, Breakneck Pond and Quacumquasit Lake, also known as South Pond. The following descriptions come from the Natural, Cultural and Historic Resources focus group.<sup>8</sup>

- ▶ **Big Alum Lake:** Covering roughly 195 acres, the lake can primarily be accessed via residential routes, though there is a walking route around the lake, which is more than 3 miles long. There is also a public boat ramp at the end of Clarke Road.
- ▶ **East Brimfield Lake:** This 360 acre lake straddles Sturbridge and neighboring town Brimfield. Connecting to the lake to the north is Long Pond, which can be accessed at a fishing area off of Champeaux Road. There are two public access ways to East Brimfield Lake, both off of Route 20. Several activities are allowed in the area, including motorized boating, fishing (license required), picnicking, canoeing and hunting in forested wetland and upland areas (license required).

<sup>7</sup> Ibid, French and Quinebaug Rivers Watershed, [http://www.mass.gov/?pageID=eoeeterminal&L=4&L0=Home&L1=Air%2C+Water+%26+Climate+Change&L2=Preserving+Water+Resources&L3=Massachusetts+Watersheds&sid=Eoeea&b=terminalcontent&f=eea\\_water\\_french-quinebaug&csid=Eoeea](http://www.mass.gov/?pageID=eoeeterminal&L=4&L0=Home&L1=Air%2C+Water+%26+Climate+Change&L2=Preserving+Water+Resources&L3=Massachusetts+Watersheds&sid=Eoeea&b=terminalcontent&f=eea_water_french-quinebaug&csid=Eoeea)

<sup>8</sup> Natural, Cultural and Historic Resources focus group, Issues Paper draft, Sept. 4, 2010.



- ▶ **Cedar Lake:** Located in the north-central section of town, this lake is roughly 183 acres. The Town's recreational beach is located near the southwest end of the lake, and Sturbridge Host Hotel on Route 20 is on the south end. Hotel guests or restaurant patrons can access a small beach on the lake. There is also a small area on the west side of the lake that is a popular fishing site.
- ▶ **Walker Pond:** This 104 acre body of water is located in the northeast corner of town, east of Wells State Park. The park provides access to the pond with its admission fee for campers only.
- ▶ **Quacumquasit Lake:** Also known as South Pond, it is located in the northeastern section of town, near the Brookfield town line. There is a small beach at the north end, off of Lake Road. It is 218 acres in size.
- ▶ **Westville Lake:** This 23 acre lake is located near the Southbridge town line and was created by the construction of the Westville Lake Dam in 1962. Westville Lake Recreation Area, which is operated by the U.S. Army Corps of Engineers, includes picnic facilities and athletic fields. There are also hiking and biking trails and fishing spots around the lake, though swimming is not allowed.
- ▶ **Leadmine Pond:** This 53 acre lake is located at the southwestern corner of town.

The Sturbridge Recreation Department operates the Town Recreation Area at Cedar Lake, mentioned above. The Recreation Area includes tennis and basketball courts and is home to a Town-sponsored summer camp.

The Sturbridge Annual Town Meeting established the Sturbridge Lakes Advisory Committee (SLAC) in 2007. This committee is made up of a representative from each of the five Lake Associations (Big Alum, Cedar Lake, South Pond, Walker Pond, and Leadmine Pond), one representative from East Brimfield Reservoir/Long Pond, one from the Board of Selectmen, and one from the Conservation Commission. The objectives of SLAC include:

- ▶ inventory the current state of the lakes (current water quality and conditions, watershed description, recreational uses and public access, active lake management, etc.);
- ▶ identify potentially synergistic interests in town-planning, recreation, public lands (trails) or ecotourism;
- ▶ provide a draft mission statement; and
- ▶ define communication protocols between town boards and lake associations.

Among the more significant issues to address, SLAC identified water quality, aquatic invasive species, boating regulations, overcrowding on the water, parking, and development of the watershed.<sup>9</sup>

9 "Report to the Sturbridge Board of Selectman from the Lakes Advisory Committee: Report and Recommendations," October 2008

## Wetlands

Wetlands occur along the streams, rivers and creeks of Sturbridge. In particular, they are located near the Quinebaug River, Hobbs Brook, McKinstry Brook, Hamant Brook and Breakneck Brook. They provide groundwater and aquifer recharge, moderate changes in water supply, prevent pollution by filtering contaminants, provide food and habitat for wildlife, provide flood storage, and add to the natural landscape.

Wetlands are protected under the Massachusetts Wetlands Protection Act (MGL c. 131 § 40), which was originally enacted into law as the Hatch Act in 1972 and amended by the 1996 Rivers Act. The law aims to protect public and private water supplies, prevent storm damage and pollution, protect wildlife habitat and fisheries, reduce the effects of potential flooding and protect groundwater supplies.<sup>10</sup> Under the Act, work within wetland resource areas and their buffer zones cannot occur without approval from the Sturbridge Conservation Commission.

Like other Massachusetts communities, the Town of Sturbridge has adopted a local wetlands bylaw that is more stringent than the state law.<sup>11</sup> Enacted in 2002, it serves to not only protect wetlands and natural resources but also provide erosion and sedimentation control and protect water quality, rare species habitat, recreational values, and agriculture and aquatic activities.<sup>12</sup> Activities within 200 feet of wetlands require review and approval by the Commission so as to ensure there will be “no significant adverse impact” to the wetlands.<sup>13</sup> In addition, the local bylaw creates a 25-foot “no disturb” buffer and mandates that new structures be at least 50 feet from any wetlands, though waivers can be granted.

## Floodplains

Floodplains—areas adjacent to waterways that are inundated with water during times of increased flow—are also protected in Sturbridge. Specifically, within the Town’s Zoning Bylaws is a Flood Plain District, which seeks to “protect the public health, safety and general welfare, to protect human life and property from the hazards of periodic flooding, to preserve the natural flood control characteristics and the flood storage capacity of the flood plain, and to preserve and maintain the ground water table and water recharge areas within the flood plain.”<sup>14</sup>

In the Flood Plain District, structures cannot be built or substantially improved, and earth or other materials cannot be filled or dumped without a special permit granted by the Planning Board.<sup>15</sup> Some uses such as agricultural and outdoor recreational uses are allowed in the district as long as “they are permitted in the underlying district and they do not require structures, fill, or storage of materials or equipment.”<sup>16</sup>

10 Wetlands Protections Act regulations, <http://www.mass.gov/dep/service/regulations/310cmr10a.pdf>

11 According to the Massachusetts Association of Conservation Commissions, 195 MA cities and towns have adopted non-zoning wetlands bylaws or ordinances.

12 Town of Sturbridge website, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_ConsInfo/conservation](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_ConsInfo/conservation)

13 Ibid, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_ConsInfo/Regulations/Introduction1.1](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_ConsInfo/Regulations/Introduction1.1)

14 Sturbridge Zoning Bylaws

15 Ibid.

16 Ibid.

These kinds of restrictions help protect against disruptions to floodplain areas and the water-holding capacity of those areas. When such disruptions occur, flooding beyond the boundaries of floodplains can take place, which can potentially damage roads and buildings.

The Army Corps of Engineers, which owns land within the floodplain of the Quinebaug River, also provides flood control in the area. There is a dam along the Quinebaug River at Westville Lake on the town's border with Southbridge. It is part of network of six dams maintained by the Corps to "relieve the effects of flooding along the major rivers of the Thames River Basin."<sup>17</sup>

### Vernal Pools

Vernal pools are seasonal depressions that typically hold water during certain times of the year, generally in the fall or winter. They are breeding grounds for a host of amphibians and invertebrate animals. As of January 2010, there were 46 certified vernal pools in Sturbridge, according to the Natural Heritage Endangered Species Program (NHESP) of the DFW.<sup>18</sup> These vernal pools are protected under several state and federal laws, including the Wetlands Protection Act and the Federal Clean Water Act. The Town's local wetlands bylaw includes a provision that creates a 200-foot buffer around certified and potential vernal pools.

### Water

#### *Groundwater*

In Sturbridge, groundwater resources can be found in the areas along the Quinebaug River and Hamant Brook. Aquifer areas in the central part of town—such as those in the Quinebaug River valley—have higher yields, estimated at greater than 300 gallons per minute. Other areas have yields closer to 10 to 100 gallons per minute.

The Town adopted a Groundwater Protection District in 2002, which was updated in 2009 to include the area for well #4. The overlay district limits the types of uses allowed in delineated aquifers or recharge areas.<sup>19</sup> It requires a special permit for certain activities such as those that "render impervious" more than 15 percent or 2,500 square feet of any lot, and it prohibits other uses such as landfills.<sup>20</sup>

#### *Drinking Water Supply*

As mentioned in the Public Facilities and Services chapter, the Town of Sturbridge provides public water service to most of the suburban residential, commercial and industrial zones. As of mid-2010, the system had nearly 1,700 connections, serving roughly 4,616 people.

<sup>17</sup> Westville Lake, Army Corps of Engineers website, <http://www.nae.usace.army.mil/recreati/wvl/wvlfc.htm>

<sup>18</sup> DFW website, Natural Heritage Endangered Species Program, Vernal Pools, [http://www.mass.gov/dfwele/dfw/nhesp/vernal\\_pools/vernal\\_pool\\_data.htm](http://www.mass.gov/dfwele/dfw/nhesp/vernal_pools/vernal_pool_data.htm)

<sup>19</sup> Sturbridge Zoning Bylaws

<sup>20</sup> Ibid

The source of water is three active wells south of Main Street or Route 20. (See Figure 8.4 in the Public Facilities and Services chapter.) These wells are located 130 to 500 feet from the east bank of the Quinebaug River.<sup>21</sup> The Town is also constructing a fourth well off of Shattuck Road that is expected to come online in the spring of 2011.

### *Stormwater Management*

Communities are required to manage stormwater runoff under federal law. This is because stormwater carries nutrients and pollutants from lawns, fields, roads, construction sites, and other sources into waterways and sewer systems. Sturbridge has taken many steps to manage and filter stormwater runoff. A Continuous Deflective Separation (CDS) unit has been installed, for example, at the Millyard Marketplace to help filter stormwater that runs off the road.<sup>22</sup>

Stormwater management planning is also incorporated into various development review processes in town. For example, the Town adopted a Stormwater Bylaw and the standards are incorporated into the Planning Board regulations. A stormwater management permit and plan are required when other permits are needed for land disturbing activities. Additionally, applicants for a special permit to develop an OSRD must include a narrative explanation as to the proposed systems for stormwater drainage and the potential onsite impacts and on abutting properties.<sup>23</sup> As stated in the OSRD bylaw, the Planning Board encourages developers to use “Soft Stormwater Management Techniques and other Low Impact Development techniques” that allow ground infiltration and reduce impervious surfaces.

Similarly, best practices for stormwater management—such as use of rain gardens and roof water collection—are encouraged under Site Plan Review. Stormwater Management Plans are also required for projects on Priority Development Sites, which are those designated by the Town for expedited permitting.

### **Vegetation and Forest Resources**

Nearly 18,000 acres of land in Sturbridge—or approximately 75 percent of the total land area—is forested.<sup>24</sup> The forests are northern mixed hardwood, and they include a variety of tree species, including red and white oak, red maple, white ash, white pine and eastern hemlock.

One of the many forested lands in Sturbridge is 266-acre Opacum Woods, a permanently protected conservation area owned by the Opacum Land Trust.<sup>25</sup> The property has ponds, swamps, vernal pools and historic sites, and it is home to a numerous plant species.

Town wide, there are two endangered plant species, according to the NHESP. Table 5.1 shows species in Sturbridge that have been designated by the state as endangered, threatened, or species of special concern.

<sup>21</sup> Tighe and Bond, 2008.

<sup>22</sup> Town of Sturbridge website

<sup>23</sup> Sturbridge Zoning Bylaws.

<sup>24</sup> 2005 Sturbridge Open Space and Recreation Plan

<sup>25</sup> Opacum Land Trust website, [http://www.opacumlt.org/opacum\\_woods.html](http://www.opacumlt.org/opacum_woods.html)

**Table 5.1 NHESP Rare Plant Species**

Taxonomic Group	Scientific Name	Common Name	MESA Status	Most Recent Observation
Vascular Plant	<i>Adlumia fungosa</i>	Climbing Fumitory	SC	2008
Vascular Plant	<i>Asplenium montanum</i>	Mountain Spleenwort	E	1946
Vascular Plant	<i>Clematis occidentalis</i>	Purple Clematis	SC	1998
Vascular Plant	<i>Corallorhiza odontorhiza</i>	Autumn Coralroot	SC	1984
Vascular Plant	<i>Eriophorum gracile</i>	Slender Cottongrass	T	1997
Vascular Plant	<i>Liatris scariosa</i> var. <i>novae-angliae</i>	New England Blazing Star	SC	1934
Vascular Plant	<i>Lipocarpa micrantha</i>	Dwarf Bulrush	T	2007
Vascular Plant	<i>Lygodium palmatum</i>	Climbing Fern	SC	1937
Vascular Plant	<i>Platanthera flava</i> var. <i>herbiola</i>	Pale Green Orchid	T	1933
Vascular Plant	<i>Poa saltuensis</i> ssp. <i>languida</i>	Drooping Speargrass	E	2000
Vascular Plant	<i>Ranunculus pensylvanicus</i>	Bristly Buttercup	SC	2008

Source: Natural Heritage and Endangered Species Program  
 E = Endangered, T = Threatened, SC = Special Concern

### Fisheries and Wildlife

The natural spaces in Sturbridge are home to many different species of wildlife. These spaces include everything from vernal pools to forests to rivers. Three waterways in town have been stocked with trout by the state this year: Big Alum Pond, Long Pond and the Quinebaug River.<sup>26</sup>

Large sections of Sturbridge have been identified by the NHESP as “Core Habitat” sites, which are the most important areas in the state for maintaining and protecting biodiversity.<sup>27</sup> Delineated during the BioMap2 and biodiversity assessment, the Core Habitats for wetland, forest, aquatic, plant, and wildlife species include the southwestern corner of town and the area around Wells State Park, and the Core Habitats for freshwater biodiversity include Long Pond, East Brimfield Lake and the Quinebaug River.<sup>28</sup> These resources are shown in Figure 5-2.

NHESP has also designated Priority Habitats for rare species throughout Massachusetts. These areas are home to state-listed rare plants and animals, and habitat alterations within the areas require review by the NHESP.<sup>29</sup> In Sturbridge, Priority Habitats are largely located along the Quinebaug River through the central part of town and in the areas around Long Pond, East Brimfield Lake and Wells State Park.

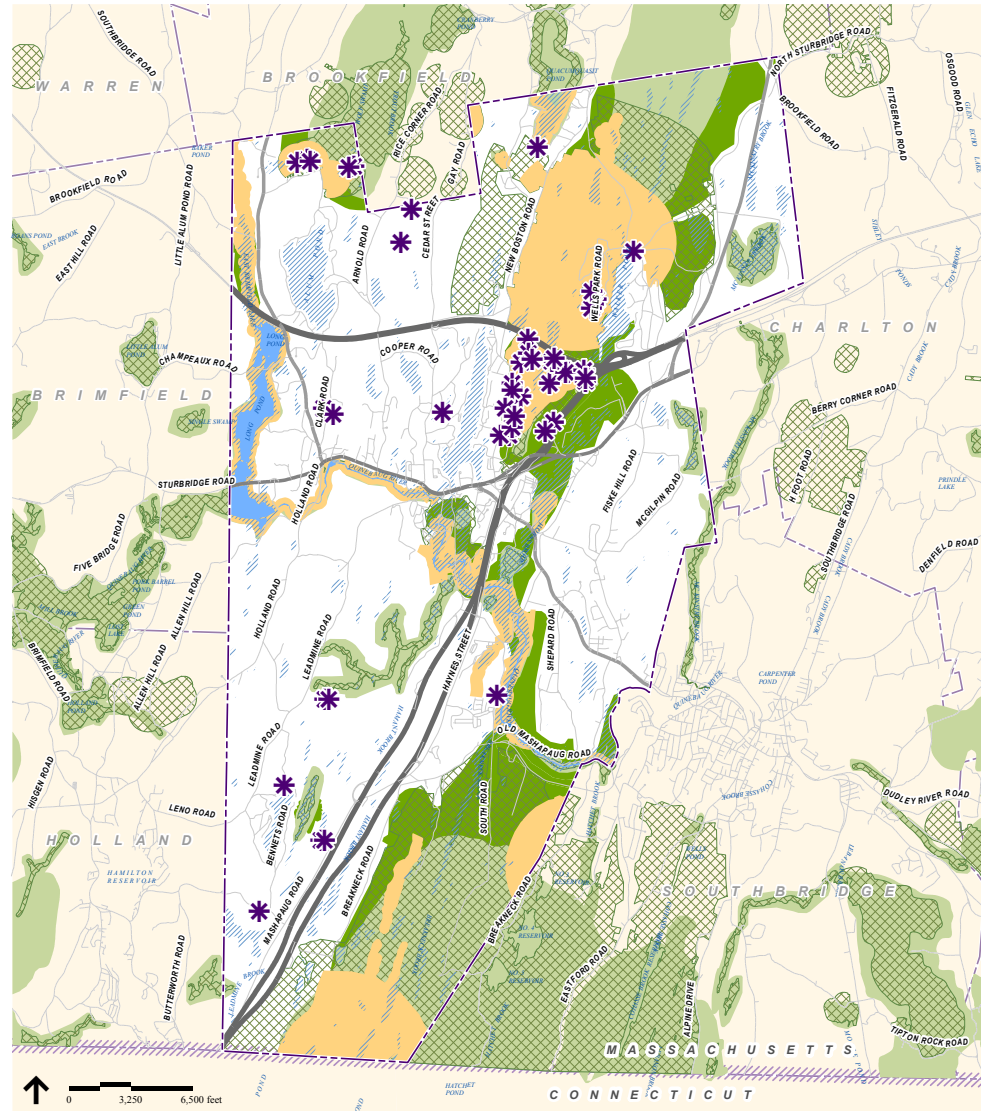
26 DFW website, Natural Heritage Endangered Species Program, Trout-Stocked Waters  
[http://www.mass.gov/dfwele/dfw/recreation/fishing/trout/trout\\_waters\\_cd.htm](http://www.mass.gov/dfwele/dfw/recreation/fishing/trout/trout_waters_cd.htm)

27 Ibid, Biomap and Living Waters, [http://www.mass.gov/dfwele/dfw/nhsp/land\\_protection/twnrpts/sturbridge\\_core\\_habitats.pdf](http://www.mass.gov/dfwele/dfw/nhsp/land_protection/twnrpts/sturbridge_core_habitats.pdf)

28 Ibid, An Interactive BioMap and Living Waters, [http://www.mass.gov/dfwele/dfw/nhsp/land\\_protection/interactive\\_map.htm](http://www.mass.gov/dfwele/dfw/nhsp/land_protection/interactive_map.htm)

29 Ibid, Priority Habitats and Estimated Habitats for Rare Species,  
[http://www.mass.gov/dfwele/dfw/nhsp/regulatory\\_review/priority\\_habitat/priority\\_habitat\\_home.htm](http://www.mass.gov/dfwele/dfw/nhsp/regulatory_review/priority_habitat/priority_habitat_home.htm)

Figure 5.2 Wildlife Habitats



Source(s): MassGIS

**Legend**

- NHESP Certified Vernal Pools
- NHESP Living Waters Core Habitats
- Water Resources
- NHESP Priority Habitats of Rare Species
- NHESP BioMap Core Habitat
- BioMap2 Core Habitat
- BioMap2 Critical Natural Landscape

Vanasse Hangen Brustlin, Inc.

Figure 5.2  
Wildlife Habitats

Sturbridge Master Plan  
Sturbridge, Massachusetts

In addition, MassWildlife has identified waters in Sturbridge—and across the state—that are known to have coldwater fisheries resources.<sup>30</sup> They include McKinstry Brook, Hamant Brook and Hatchet Brook. These waters were defined as coldwater fisheries resources if they met at least one of the following criteria: brook, brown or rainbow trout reproduction has been determined; slimy sculpin, longnose sucker, or lake chub are present; or the water is part of the Atlantic salmon restoration effort or is stocked with Atlantic salmon fry.

There are two endangered species in Sturbridge, according to the NHESP. One of those species, the Indiana Myotis (a mid-sized bat), is listed as “endangered” by both the State and U.S. Fish and Wildlife Service. Table 5.2 identifies the status of rare animal species in Sturbridge.

**Table 5.2 NHESP Rare Animal Species**

Taxonomic Group	Scientific Name	Common Name	MESA Status	Federal Status	Most Recent Observation
Amphibian	<i>Ambystoma opacum</i>	Marbled Salamander	T		2003
Bird	<i>Haliaeetus leucocephalus</i>	Bald Eagle	E		1999
Butterfly/Moth	<i>Callophrys hesseli</i>	Hessel's Hairstreak	SC		1997
Fish	<i>Notropis bifrenatus</i>	Bridle Shiner	SC		1999
Mammal	<i>Myotis sodalis</i>	Indiana Myotis	E	E	1938
Mammal	<i>Sorex palustris</i>	Water Shrew	SC		1996
Mussel	<i>Alasmidonta undulata</i>	Triangle Floater	SC		2004
Mussel	<i>Strophitus undulatus</i>	Creeper	SC		2004
Reptile	<i>Glyptemys insculpta</i>	Wood Turtle	SC		2005

Source: Natural Heritage and Endangered Species Program  
E = Endangered, T = Threatened, SC = Special Concern

### Scenic and Unique Resources

Sturbridge has a rural character and boasts many scenic resources, including roads, woodlands and water bodies. In 2005, the Town adopted a Scenic Road Bylaw that aims to “protect the scenic quality and character of certain roads within the Town of Sturbridge.”<sup>31</sup> Specifically, within the public right-of-way in designated scenic roads, stone walls cannot be destroyed, trees cannot be removed, and roads cannot be repaired or reconstructed without approval of the Planning Board.

<sup>30</sup> Ibid, Coldwater Fisheries Resources, [http://www.mass.gov/dfwele/dfw/fisheries/conservation/cfr/cfr\\_home.htm](http://www.mass.gov/dfwele/dfw/fisheries/conservation/cfr/cfr_home.htm)

<sup>31</sup> Town of Sturbridge General Bylaws, [http://www.town.sturbridge.ma.us/public\\_documents/SturbridgeMA\\_Bylaws/1022F598F.0/General%20Bylaws%20Updated%202008%20Final.pdf](http://www.town.sturbridge.ma.us/public_documents/SturbridgeMA_Bylaws/1022F598F.0/General%20Bylaws%20Updated%202008%20Final.pdf)





Quinebaug River

In addition to roads, scenic resources in town include Wells State Park, Westville Lake Recreation Area, the Quinebaug River, Long Pond, Opacum Woods and Tantiusques. Acquired by the Trustees of Reservations in 1962, Tantiusques is a 57-acre site that was the center of one of New England's first mining operations.<sup>32</sup> The site, which was mined for graphite between the mid-17th century and the early 20th century, was listed in the National Register of Historic Places in 1983.<sup>33</sup>

The Town Common area in the center of town is a National Register Historic District, which was established in 1977. Extending along Main Street between Hall Road and I-84, the district includes 47 properties, including Town Hall.<sup>34</sup> As mentioned in the Public Services and Facilities chapter, Town Hall and the Center Office Building are both listed in the National Register of Historic Places. The appearance of both buildings has been improved through recent rehabilitation work.

Another major amenity is Old Sturbridge Village. The open air historic museum depicts and interprets New England village life of the early 19th century. It was established in the 1940s, and it currently covers more than 200 acres. With its historic buildings, costumed interpreters, educational programs, and collection of artifacts, it has long been a major tourist attraction in the town.

### Environmental and Management Challenges

Public access to the town's natural, cultural and historic resources is limited, inconsistent or in some cases, non-existent, according to the Focus Group. Access to the lakes in Sturbridge is of particular concern as the points of access are poorly defined. This means many of the lakes and other resources cannot be fully enjoyed by residents or visitors alike. Improving access would allow more people to not only take advantage of these resources but to better appreciate, value and potentially protect them. The Town has taken steps toward this end, having recently formed the Sturbridge Lakes Advisory Committee, which seeks, in part, to improve public access to the lakes.

Development and redevelopment around the lakes is another major issue. Over the years the Town has seen an increasing number of summer lakefront cottages being converted from seasonal homes to year round residences. As a result, the Town regularly reviews applications for Special Permits and Orders of Conditions pursuant to the Wetlands Protection Act to tear down and rebuild homes near lakes, and it

32 The Trustees of Reservations, <http://www.thetrustees.org/places-to-visit/central-ma/tantiusques.html#t5>

33 Waymarking website, [http://www.waymarking.com/waymarks/WM4QMC\\_Tantiusques\\_Graphite\\_Mine](http://www.waymarking.com/waymarks/WM4QMC_Tantiusques_Graphite_Mine)

34 Sturbridge Reconnaissance Report, <http://www.mass.gov/dcr/stewardship/histland/reconReports/sturbridge.pdf>



has been difficult to determine what constitutes an appropriate development given the location.<sup>35</sup> Specifically, the Town wants to continue to allow people to improve their properties but seeks to ensure the lakes are protected as well. Stormwater runoff from impervious surfaces and septic system discharge can affect water quality.

According to the 2005 Open Space and Recreation Plan, there have been concerns about the health of Cedar Lake given the presence of aquatic weeds and fecal coliform. The Town, however, has extended sewer lines along much of the lake's shoreline as means of preventing contaminant flow from septic systems into the lake.<sup>36</sup> The water quality of the lake is also monitored.

### Historic and Archaeological Resources in the Town of Sturbridge



Town Common

The Town of Sturbridge has a rich history represented in physical cultural resources, its historic and archaeological resources, which include buildings, structures, objects, burial grounds, landscapes, and archaeological sites. These historic and archaeological resources provide a valuable material record of the history of Sturbridge and significantly enhance the quality of life in the town. They enhance the scenic qualities of the landscape, establish community character and identity, and in large part define what is unique about the Town of

Sturbridge. The historic properties and sites that comprise the cultural landscape in Sturbridge are both finite and non-renewable. Therefore, this section of the Master Plan presents a plan to assist in the management of Sturbridge's rich and varied historic resources.

The following section of the Master Plan contains information associated with the identification and evaluation of historic and archaeological resources in Sturbridge. This section provides a brief overview of the Massachusetts Historical Commission's Inventory of Historic and Archaeological Assets of the Commonwealth as well as the State and National Registers of Historic Places, and notes the properties and districts in Sturbridge that are included in both the State and



Oliver Wight Tavern

<sup>35</sup> Jean Bubon, Town Planner

<sup>36</sup> 2005 Open Space and Recreation Plan

National Registers. The tools and programs that could potentially be utilized by the Town for historic preservation purposes can be found in Appendix 2.

## Identification of Historic and Archaeological Resources

The identification and documentation of historic and archaeological resources in the Town of Sturbridge is a fundamental research and preservation planning process designed to provide basic information on the current location, appearance, and condition of historic resources throughout the community. Evaluation of their significance and resultant recognition through their listing in the State Register of Historic Places and National Register of Historic Places is an important additional step. Properties that have been documented on state inventory forms are, after acceptance by the Massachusetts Historical Commission, included in the Inventory of Historic and Archaeological Assets of the Commonwealth (the Inventory). Properties that have been evaluated and are determined significant through an official review and approval process (local landmarks and districts, National Register-listed properties, properties with preservation restrictions) are listed in the State Register of Historic Places. Only properties that have been determined significant through a state and federal nomination and approval process are listed in the National Register of Historic Places. The Inventory and State and National Registers of Historic Places are described below.

As noted in more detail below in Appendix 2, the National Register of Historic Places is the official federal list of districts, sites, buildings, structures, and objects that have been determined significant in American history, architecture, archaeology, engineering, and culture. The State Register of Historic Places was established in 1982 as a comprehensive listing of buildings, objects, structures, and sites that have received local, state or national designations in Massachusetts based on their historical or archaeological significance.

### Inventory of Historic and Archaeological Assets

The Massachusetts Historical Commission's (MHC) Inventory of Historic and Archaeological Assets (the Inventory) is a statewide list that contains information about all properties that have been documented on a MHC inventory form. In order to be included in the Inventory, a property must be documented on one of several types of MHC inventory forms, which is then entered into the MHC database. This searchable database, known as MACRIS, is now searchable online at <http://www.sec.state.ma.us/mhc>. The inventory forms for all of Sturbridge's documented properties (excluding archaeological sites) are available online at MACRIS in PDF version.

### *Documented Above-ground Properties*

According to the MACRIS, Sturbridge's Inventory documents over 200 above-ground properties ranging from the turn of the 18th century to the late 20th century. The documented properties include the Sturbridge Town Common, Sturbridge Fairgrounds, Fiskdale Mills and workers' housing, and the small community of Snellville, as well as many houses, commercial buildings, and religious structures. Much of this inventory was completed between 1971 and 1974 by members of the Sturbridge Historical Commission. A list of the inventoried properties is included in Appendix 3.

A reconnaissance survey of Sturbridge's heritage landscapes was undertaken in 2007 as part of a wider survey of the communities within both the John H. Chafee Blackstone River Valley National Heritage Corridor and the Quinebaug and Shetucket Rivers Valley National Heritage Corridor. Although the survey did not document properties on MHC forms, a number of priority landscapes were identified. These priority landscapes are the Quinebaug River, the Barrett Farm, Fiskdale, the Town's ponds, Sturbridge Town Common National Register District, Hobbs Property, and Old Sturbridge Village. The report is online at: <http://www.mass.gov/dcr/stewardship/histland/reconReports/sturbridge.pdf> and the map which shows their location at: [http://www.mass.gov/dcr/stewardship/histland/reconReports/sturbridge\\_map.pdf](http://www.mass.gov/dcr/stewardship/histland/reconReports/sturbridge_map.pdf).

The reconnaissance report actually functions more as a planning document; it contains a number of valuable and insightful recommendations which are incorporated into this master plan.

### *Documented Archaeological Sites*

According to MHC's site file records, there are 48 documented historical archaeology sites within the town of Sturbridge. One of the sites, the Tantiusque Lead Mine Historic Archaeology Site (STU-HA-45), is located within the Tantiusque Reservation, which is listed in the National and State Register of Historic Places. Otherwise, none of the other sites have been determined individually eligible for listing in the National Register of Historic Places.

Site types include an historic lead mine (Tantiusque Mine STU-HA-45), the Haynes harness and carriage shop (STU-HA-40), the Fording Place at Tantiusque (STU-HA-39), and the Wight Saw Mill (STU-HA-18). Because of swiftly flowing and powerful streams, many area sites date to the industrial periods, including the Fiskdale Mill Complex (1826–1888) (STU-HA-43), the Upper Mill Dam Site (STU-HA-41), and elements associated with the Grand Trunk Railroad (STU-HA-34).

There are 18 prehistoric archaeological sites documented in the town of Sturbridge. Site types include lithic flake find spots (19-WR-756, Mt. Dan Road Native American Findspot), rockshelters (19-WR-688; the Forest Lane Rock Shelter), and an abrading stone indicative of woodworking (19-WR-337 Westville Dam). None of these sites contains extensive archaeological information and none is listed in the National or State Registers of Historic Places.

Please note that no information concerning archaeological resources, especially their locations, can be disclosed in documents prepared for public review in order to protect the sites from possible looting or vandalism. For additional information regarding archaeological resources in the Town of Sturbridge, please contact the State Archaeologist at the MHC.

To date, there have been 8 professional archaeological surveys conducted in the Town of Sturbridge. These include reconnaissance surveys of the Westville Dam (Ritchie and Lance 1988), an intensive archaeological survey along Main Street (Holmes et al. 1993), a reconnaissance survey of the East Brimfield Dam and Reservoir (Ritchie and Lance 1988), an historic properties management plan of East Brimfield Lake (Atwood 1998, 2000), an intensive survey of the Massachusetts Country Club (Milne & Ritchie 2000) and a combined reconnaissance and intensive survey at Big Alum Pond (Binzen and Wendt 2003). This research identified both historical period and ancient Native American sites, but none that met eligibility criteria for listing in the National Register of Historic Places as individual sites. That said, these surveys have been limited to specific project impacts, by and large, and it is possible that additional, unreported sites exist. Sensitive areas for prehistoric (ancient Native American) site include relatively level, elevated land forms within close proximity to potable water, on well-drained sandy soils, or adjacent to specific resources, such as knappable stone, or clay that can be formed into pottery. EuroAmerican sites are probably along Contact Period trails, at fording places in rivers in streams, near well-travelled highways, and where primary trails or highways intersect.

Although access to Old Sturbridge Village records and information about archaeological investigations are not currently accessible, Ed Hood at Old Sturbridge Village has considerable knowledge about Sturbridge archaeological sites that are not on file at the MHC.

### State and National Registers of Historic Places

The Town of Sturbridge has a single historic district and two individual properties listed in the State and National Register of Historic Places. The Sturbridge Common Historic District, which includes 47 buildings, was listed in 1977. The Sturbridge Center School at 301 Main Street is a contributing resource in this district; the building is protected by a Preservation Restriction, which was placed on the building in 1999. Buildings which are protected by Preservation Restrictions are automatically included within the State Register of Historic Places. The two individually listed properties are the Oliver Wight House on Main Street (listed in 1982) and the Tantiusque Reservation Site near Leadmine Road (listed in 1983).

The Sturbridge Historical Commission has compiled a very preliminary list of pre-1850 structures, but further work needs to be done to determine the historical or architectural significance of these and potentially other buildings.

### Old Sturbridge Village

Old Sturbridge Village (OSV), in part because of its name and location, is sometimes perceived to be a museum of Sturbridge's history. Rather, it is a living museum whose purpose is "to provide modern Americans with a deepened understanding of their own times through a personal encounter with New England's past. The museum is a nonprofit educational institution. Its collections, exhibits, and programs present the story of everyday life in a small New England town during the years 1790 to 1840".<sup>37</sup> The Articles of Organization filed for the Quinebaug Village Corporation, as it was known at the time, states that it was created to establish "a model village that depicts specimens and reproductions of the New England architecture and antiquities, the arts, crafts, trades, and callings commonly practi[c]ed in and about New England villages prior to the expansion of the industrial expansion...".<sup>38</sup> OSV was originally founded "for the educational benefit of the public"<sup>39</sup>. It changed its name to Old Sturbridge Village in November 1950.

This is an important distinction, because OSV does not purport to be a resource for local Sturbridge history. At the same time, it represents a great opportunity to bolster the Town's efforts to identify, study, inventory, and potentially display historic and archeological artifacts from the Town's history. The Town should seek to develop a more direct working relationship with OSV to determine how it can leverage this opportunity to enhance an understanding of the Town's heritage.

### Preservation-related Tools and Programs

Sturbridge already has important planning tools in place to document current conditions within the town, identify issues of concern to town residents, and to develop strategies for action. In Appendix 4 a variety of planning tools and programs (both voluntary and regulatory) are identified that are available for preservation planning purposes in the Town of Sturbridge.

### Cultural Resources

Sturbridge is home to a host of cultural resources, including groups, events and traditions. These resources help shape the community's sense of place and draw tourists to the area. This section, which is based on the work of the Natural, Cultural and Historic Focus Group, outlines the many cultural resources available in Sturbridge.

- **Stageloft Repertory Theater:** This theater, which has been in Sturbridge since 1994, provides live adult and youth productions throughout the year.<sup>40</sup> Theater workshops for youth are also held in the summer.

<sup>37</sup> <http://www.osv.org/museum/index.html>

<sup>38</sup> July 15, 1938 Quinebaug Village Corporation Articles of Organization

<sup>39</sup> Ibid

<sup>40</sup> Stageloft Repertory Theater, [www.stageloft.com/](http://www.stageloft.com/)

- ▶ **Hayloft Dancers:** This square dance club has been dancing in the area since 1960.<sup>41</sup> The club hosts a variety of events, including square dance lessons and special dances at Hayloft Barn in Sturbridge.
- ▶ **Mass Motion Dance:** This dance company has offered dance training in Sturbridge since 1983.<sup>42</sup> Classes include ballet, jazz, tap, hip hop and Irish Step.
- ▶ **Joshua Hyde Library:** The public library provides a variety of programs for adults and children, including book discussions and presentations.
- ▶ **Concerts on the Common:** The Sturbridge Recreation Department holds a series of concerts on the Sturbridge Town Common during the summer. Performances have ranged from country music bands to a Beatles tribute band.
- ▶ **Sturbridge Harvest Festival:** This annual festival is held in October on the Common and at the Publick House. It features a pumpkin decorating contest, mini-train rides, children's games and a marketplace with vendors and artists.<sup>43</sup>
- ▶ **Feast and Fire:** This annual event occurs during the Fourth of July weekend and includes a parade, picnic buffet, entertainment and a bonfire.
- ▶ **Sturbridge Lions All American River Race:** This annual canoe race takes place in April. It is a timed race that covers more than six miles between Turners Field and Westville Lake.<sup>44</sup>

Many of the programs listed above are supported by small grants from the Sturbridge Cultural Council. The 7-member local Cultural Council aims to “foster the support of programs in the arts, humanities and interpretive sciences.”<sup>45</sup> It reviews and approves grant applications on a calendar year basis, with FY2010 grants helping fund school music programs, theater productions, storytelling programs and an “eco-art” project, among other programs.<sup>46</sup>

## Recommendations

### Recommendations for Natural Resources

- ▶ Continue to develop, maintain and improve public access to water resources, open space and trails. The Sturbridge Lakes Advisory Committee should continue to look for ways to improve public access to the lakes in particular. Strengthening the Town's partnerships with lake associations and improving collaboration among the groups should be a priority.

41 Hayloft Steppers Square Dance Club, <http://www.hayloftsteppers.org/>

42 Mass Motion Dance, <http://www.massmotiondance.com/>

43 Publick House, [http://www.publickhouse.com/harvest\\_festival.htm](http://www.publickhouse.com/harvest_festival.htm)

44 <http://www.angelfire.com/ma3/sturbridgelions/events.html>

45 Sturbridge Cultural Council, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_BoardCmt/cultural](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_BoardCmt/cultural)

46 Massachusetts Cultural Council, [http://www.mass-culture.org/lcc\\_detail\\_overview.asp?coun\\_enum=273](http://www.mass-culture.org/lcc_detail_overview.asp?coun_enum=273)

- ▶ Consider adopting a Low Impact Development (LID) bylaw to minimize post-development stormwater runoff and further protect the town's water resources and surface and groundwater drinking supplies. Ideally, such a bylaw should apply town-wide, but it could be targeted specifically to areas that are especially sensitive from an environmental perspective. Review the design, construction, and maintenance of stormwater "best management practices" both by the Town and private developers to ensure that the Town is taking advantage of the most recent and effective approaches to LID.
- ▶ Continue monitoring the water quality of the lakes to determine which, if any, are in need of cleanup or protection.
- ▶ Consider enacting a lakes overlay district for the areas surrounding all of the lakes in town or only those of specific concern. The overlay district would help protect water quality, maintain natural beauty and minimize negative impacts of new development or redevelopment projects around the lakes. It could control building heights, densities, setbacks, stormwater management, and grade changes, among other issues.
- ▶ In conjunction with efforts to provide greater public access to the Quinebaug River, ensure that any new access points protect river water quality and shoreline vegetation.
- ▶ Using this Plan and the soon to be updated Open Space and Recreation Plan, the Conservation Commission should lead an effort to identify critical resource areas encompassing streams, ponds, vernal pools, floodplain, wildlife habitat, wetlands and other water bodies for conservation and preservation. This information could be used to guide future land use decision-making and potential regulations.
- ▶ Along with the continued development of walking trails through recently acquired open spaces, evaluate opportunities and locations that could be used to facilitate wildlife crossings and connect habitat areas within the town.
- ▶ Seek funding through NHESP, DFW, and other partners to fully evaluate and document the wildlife habitat values and natural communities in Sturbridge.
- ▶ In the course of updating the zoning bylaw, ensure that any revisions consider and incorporate appropriate best practices for such environmental protections as stream buffers or shoreline setbacks.

#### **Recommendations for Historic, Archaeological, and Cultural Resources**

- ▶ The Historical Commission should continue its work to inventory the built environment, identify properties eligible for listing in the National Register of Historic Places, and pursue such listings.
- ▶ Consider the preparation of a community-wide archaeological inventory which would identify areas of archaeological sensitivity that would aid in future planning and development efforts.
- ▶ Educate residents about the importance of maintaining the historic character of Sturbridge and its importance to their economic, aesthetic, and cultural investment in their community.
- ▶ Initiate and support local by-laws that will encourage preservation of historic assets.



- ▶ Study and consider the possibility of an Architectural Preservation District (APD) by-law, which would provide binding and non-binding review of exterior changes to buildings within designated APD districts.
- ▶ Continue developing more in-depth regional partnerships and programs with organizations with similar preservation and educational goals, including OSV; The Last Green Valley, Inc. (TLGV), the non-profit organization which oversees the Quinebaug-Shetucket Rivers National Heritage Corridor and the nearby Blackstone River Valley National Heritage Corridor; and the Trust for Public Land.
  - Create opportunities to work with OSV and these other organizations to co-sponsor cultural events, walking tours, and share resources to enhance understanding of the Town's history.
- ▶ Continue the preservation and improved access to important Town documents by seeking additional CPA funds and other likely funding sources.
- ▶ Continue to support the Town's implementation of the CPA for historical preservation.
- ▶ Consider modifying the demolition delay bylaw to include buildings more than 50 years of age and to extend the delay period to one year.
- ▶ Use arts to create a local identity for residents, capitalize on tourist attractions to make the Town a destination for annual cultural events (music festivals, art shows, poetry contests, open artisan studio events, etc).





## 6. Open Space and Recreation

### Introduction

Open space and recreational resources are an important part of any community as they add to residents' quality of life and contribute to a community's appeal. Open spaces also play a crucial role in the protection of water, wildlife and other natural resources. Recognizing their importance, the state of Massachusetts encourages communities to create and update an Open Space and Recreation Plan (OSRP). Communities with state-approved OSRPs are eligible for grant programs to fund the acquisition of open space and development of recreational facilities.

Sturbridge is in the final stages of updating its OSRP, which was written in 1999 and updated in October 2005. The Town's Open Space Committee expects to complete the latest plan in 2011.

This chapter incorporates information from the 2005 OSRP, updating information when possible from the 2011 Draft Plan. It will provide an overview of existing open space and recreational resources, examine current and future needs, and make recommendations to meet those needs. Additional information regarding parks and recreational facilities is provided in the Public Services and Facilities chapter, and natural resources including water and wildlife are discussed in the Natural, Historic and Cultural Resources chapter.

### Open Space and Recreation Goals

These goals are the same as those found in the 2011 Open Space and Recreation Plan.

- ▶ Preserve the small town New England character of Sturbridge.
- ▶ Educate residents and others about the importance of open space preservation for passive recreation, habitat protection and water supply protection.
- ▶ Increase the inventory of open space within the town by fee, conservation restriction, donation or easement in perpetuity. Give emphasis to these parcels that create green corridors, protect our water supplies and natural, cultural and historic resources, and provide access to our recreational resources.
- ▶ Expand outdoor recreational opportunities, both passive and active for all Sturbridge residents regardless of age or ability.
- ▶ Encourage the appropriate use of public lands and recreational resources as a tool to promote sustainable tourism and enhance economic development within the community.
- ▶ Protect and enhance drinking water supplies.
- ▶ Promote a cooperative and regional approach to open space and resource protection.

### Community Setting

As discussed in the Housing chapter, Sturbridge's population has grown rapidly since 2000, outpacing its neighboring communities as well as the state. Projections also show this trend continuing through 2030. At the same time, the amount of agricultural and open undeveloped land continues to shrink.

This combination of factors has raised awareness and concern among Sturbridge residents, who want to preserve remaining open spaces in town, protect natural resources, and meet the recreational needs of the growing population. According to the Open Space and Recreation issue papers, the Town's basic open space goals are to protect watersheds, protect wildlife corridors and investigate the potential to acquire properties that meet these goals.<sup>1</sup>

In recent years, the Town has made a concerted effort to purchase and conserve undeveloped land. In 2001, voters passed the Community Preservation Act (CPA), which has provided the Town with revenue to acquire open space. As mentioned in the Natural, Historic and Cultural Resources chapter, the Town, in partnership with the state Department of Fisheries and Wildlife, bought 826 acres of land from Old Sturbridge Village in 2006 and now uses it for passive recreation.

Beyond preservation efforts, the community has recognized the need to properly manage and maintain the land the Town has acquired as well as any new recreational facilities the Town develops. There has also been a desire for more resources to fund both development and maintenance activities.

### Open Space and Recreational Resources

More than a quarter of the land in Sturbridge—nearly 6,500 acres of the Town's total land area of 24,923 acres—is protected or recreational open space.<sup>2</sup> This includes everything from permanently-restricted conservation land to recreational properties owned by the Town or private parties. Figure 6.1 shows the open space resources and ownership in Sturbridge. Some but not all privately-owned land that falls under the state's special taxation program Chapter 61 is included in Figure 6.2.

The state owns approximately 56 percent of the protected open space in Sturbridge (See Table 6.1). For example, the Massachusetts Department of Conservation and Recreation owns Wells State Park. The Town is also a major owner of open space in Sturbridge. Town-owned properties include Shumway Farm, Heins Farm, property recently purchased from Old Sturbridge Village, the Town Common and numerous recreational open spaces. A complete inventory of open space in Sturbridge is expected to be included in the Town's updated OSRP.

<sup>1</sup> Open Space issues paper, October 20, 2010

<sup>2</sup> MassGIS 2010 Protected and Recreational Open Space

The degree to which open space and recreational land is protected is important, particularly as communities grow and face increasing development pressures. Open space that is protected in perpetuity, for example, means natural areas will continue to be available for residents and visitors to enjoy. Such open space will also protect wildlife habitat, wetlands, forested areas, and natural resources.

**Table 6.1 Protected Open Space**

Owner		Acres	% of Total Open Space
Federal	Hobbs Brook Conservation Area, Westville Dam, East Brimfield Lake, and Streeter Point Recreation Area	877.30	15%
State	Wells State Park, and Leadmine, McKinstry Brook, Wolf Swamp, and Breakneck Brook Watershed Management Areas	3,289.50	56%
Municipal	Conservation Commission	1,147.66	19%
Land Trust	Opacum Land Trust and Trustees of Reservations	376.31	6%
Other		233.01	4%
Total		5,923.78	100%

Source: MassGIS 2010, Tighe and Bond, Town Planning Department

Notes: These are GIS-calculated areas.

This includes land (water supply) owned by the City of Southbridge.

Over 5,900 acres of open space and recreational land is permanently protected, as shown in Table 6.2. This high level of protection has been achieved through several means, including conservation restrictions. There is a conservation restriction, for example, on Opacum Woods, which is owned by the Opacum Land Trust.

**Table 6.2 Open Space by Level of Protection**

Level of Protection	Acres	% of Total Open Space
Perpetuity and Article 97	5,924	61%
Short term	3,142	32%
None or protection level unknown	695	7%
Total	9,761	100%

Source: MassGIS 2010, Tighe and Bond, Sturbridge Planning Department

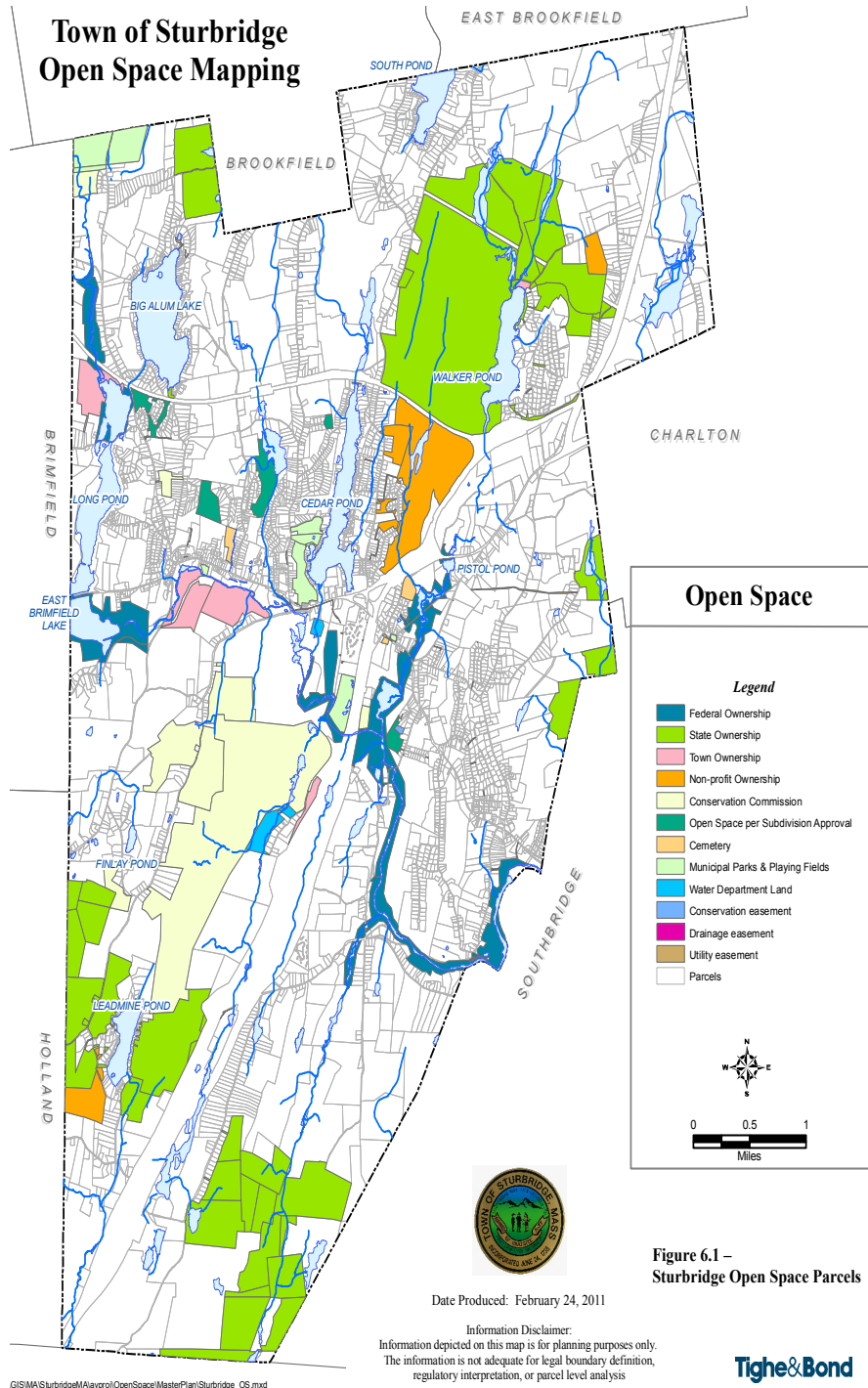
Table 6.3 shows the amount of land in Sturbridge held under Chapter 61, 61A or 61B, which are managed for forestry, agricultural or recreational purposes. Chapter 61 is a legislative act that offers property owners tax benefits in exchange for maintaining their properties for those uses. These lands are considered to only be temporarily protected, however, as they can be developed and converted into other uses. If an owner decides to sell or use the land for another purpose, the Town can recover some of the tax benefits—through back taxes—and has an option to buy the land.

**Table 6.3**      **Temporarily Protected Open Space in Sturbridge**

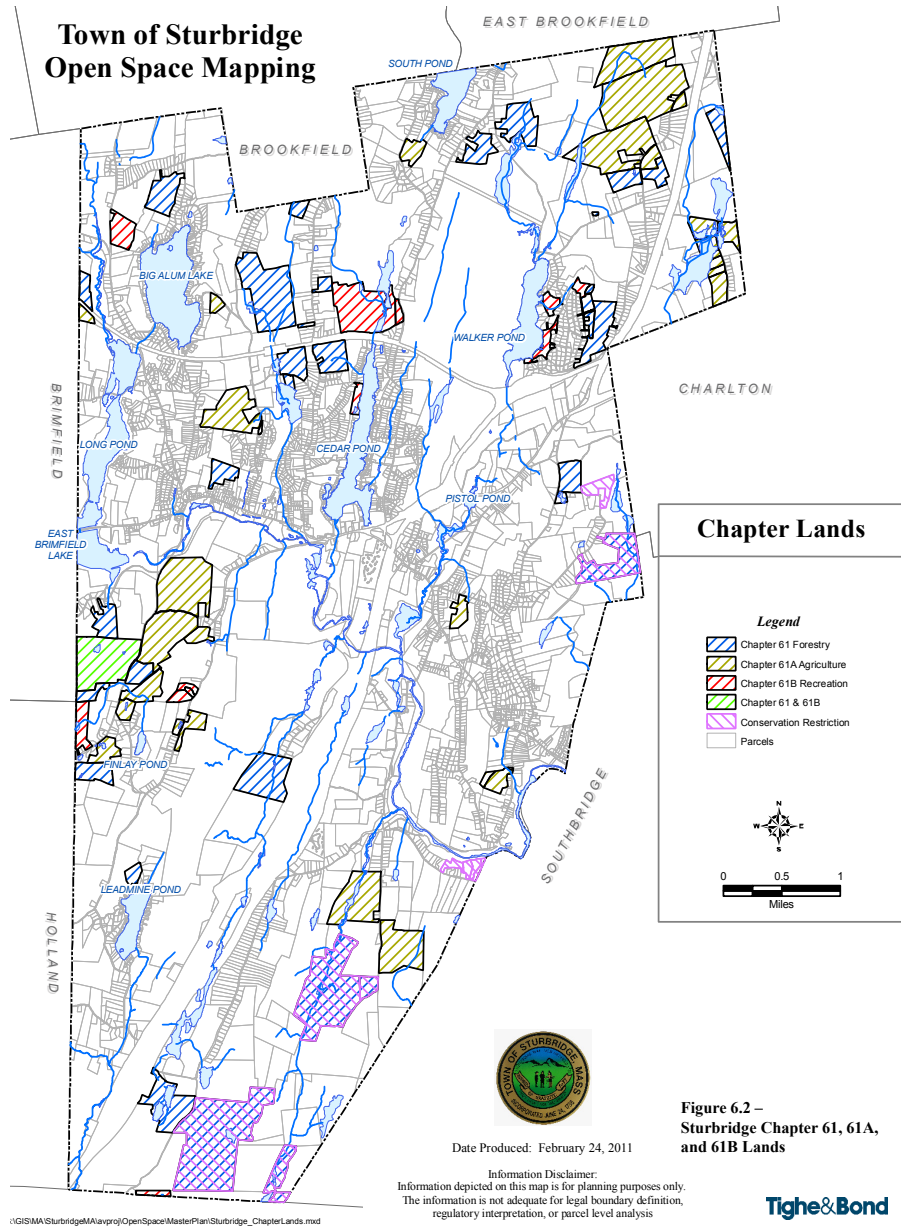
Type of Ownership	Acres	% of Subtotal Temporarily Protected Open Space	% of Total Open Space
Chapter 61 Forestry	1,363	43.4%	14%
Chapter 61A Agriculture	1,356	43.1%	14%
Chapter 61B Recreational	423	13.5%	4%
Total	3,142	100%	32%

Source: Sturbridge Assessor

Figure 6.1 Open Space Ownership



**Figure 6.2 Sturbridge Chapter 61, 61A and 61B Lands**



## Open Space Needs and Efforts

As mentioned earlier, the Town has worked to purchase and conserve open space in the community in recent years, particularly since the passage of the CPA in 2001. The Town's Community Preservation Committee (CPC) recognizes the need to continue to preserve open space in the community for both active and passive recreation as well as natural resources protection. Its open space goals include the following:<sup>3</sup>

- ▶ Protect and preserve critical natural resources and wildlife habitat
- ▶ Protect surface and groundwater quality and quantity
- ▶ Preserve, enhance and connect, where feasible, large parcels currently in agriculture, open space and recreational use, and other undisturbed natural areas
- ▶ Develop sustainable land uses on Town-owned properties, such as eco-tourism
- ▶ Create trail linkages, including new trails, bike paths, walkways and greenways
- ▶ Increase public awareness and support of open space conservation



Trailhead

The Town is actively pursuing several of these goals. For example, trail development has become a focus in the community. Given the Town's natural amenities and geographic location, there are opportunities to not only create trails within Sturbridge but also develop linkages with trails, open spaces and parks in the region. A subcommittee of the Town's Trail Committee—the Recreational Trails Master Plan Steering Committee—has funds to hire a consultant to create a Trails Master Plan.

The Trails Committee is also working to develop trails on open space properties in Sturbridge. Largely through volunteer efforts, the committee has spearheaded the development of many trails in town. Trails that have been completed, improved or are under construction include the following Heins Farm Conservation Land trails: Pond Loop, Stafford Turnpike, and Cabin Loop, and the following Leadmine Mountain Conservation Land trails: Arbutus Park and Old Growth.<sup>4</sup> Other trails are currently being developed.

Meanwhile, the Town's Open Space Committee is working to update its OSRP, which will outline specific goals and objectives for open space acquisition, preservation and management. Priorities for acquiring open space will likely be included. The 2005 OSRP recommended that land the Town purchase should either "protect present or future water supplies, sensitive natural resource areas, provide

<sup>3</sup> Town website, Community Preservation Committee, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_BoardCmt/preservation](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_BoardCmt/preservation)

<sup>4</sup> Erin Jacque, Conservation Agent



public access to natural resources, connect existing open space land, or provide recreational facilities or amenities, particularly in settled areas.<sup>5</sup>

In addition to the preservation of open space, the 2005 OSRP identified several other community goals. They included the provision of recreation facilities, strengthening of regulations to protect street trees, maintaining of the Town's character, and limiting of detrimental effects to the natural environment as a result of too much development.<sup>6</sup> The community has also recognized the need to create or improve public access to open space areas in Sturbridge, particularly around the lakes and to the Quinebaug River.

### Recreational Facility Needs

As noted in the Public Services and Facilities chapter, there are many recreational programs in Sturbridge but a limited number of facilities for those programs. Recreational facilities include the following.<sup>7</sup>

- ▶ Town Barn—two regulation-sized ball fields and one overlay non-regulation-sized soccer field
- ▶ Burgess Elementary School—two non-regulation-sized softball fields and two non-regulation-sized baseball fields
- ▶ Turners Field—one non-regulation-sized baseball field
- ▶ Tantasqua Regional Schools—fields used when schedules allow

Given the lack of facilities in Sturbridge, there has been a push in recent years to examine the field situation in town and pursue the development of new facilities. As mentioned earlier, a 2007 Field Study Subcommittee report made recommendations as to specific field needs.

Following that report, the Recreation Committee selected a designer, Waterfield Design Group, to create plans for new fields at two properties.

Preliminary proposals call for three softball fields, one multi-purpose overlay field, a kayak launch ramp, fitness trail, and picnic area at the Shepard property; and two new ball fields (one Major League baseball and one Little League baseball field), one

new multi-purpose field, two basketball courts, a playground and a bocce court at the Town Barn behind the DPW garage facility. A concession stand, restrooms, and parking would also be provided.



Westville Lake Recreation Area

5 Sturbridge, Massachusetts 2005 Open Space and Recreation Plan

6 Ibid.

7 Open Space issues paper, October 20, 2010

In addition to public facilities, there are several privately-owned recreational areas in Sturbridge, including Outdoor World, Yogi Bear Campground, Hamilton Rod and Gun Club, and Hemlock Golf Course. They offer residents and tourists a wide range of activities, including camping, fishing, swimming and picnicking. Wells State Park offers all of these activities and more. For example, at the state-owned park, visitors can enjoy cross country skiing, horseback riding, snowmobiling and hunting. The Westville Recreation Area, owned by the US Army Corp of Engineers, offers similar recreational activities in addition to field sports.



Cedar Lake Recreation Area

Another popular spot in Sturbridge is the Town-owned Cedar Lake Recreation Area, which is home to the Recreation Department's summer program. As noted in the Public Services and Facilities chapter, the Cedar Lake Recreation Area is in need of improvements. Parking should be expanded, the skate park needs new ramps, and the tennis and basketball courts need to be reconstructed.

A number of other recommendations for improving and expanding recreation facilities have been made by the Recreation Focus Group. They include the following:

- ▶ Develop a football field, community center and multi-use sports field to accommodate residents of all ages and recreational interests
- ▶ Develop an all-season facility
- ▶ Encourage the construction of pocket parks in new and existing large subdivisions
- ▶ Expand parking at existing fields
- ▶ Provide handicap-accessible trails for bicycles and wheelchairs
- ▶ Investigate the feasibility of developing a picnic pavilion facility on river land

Recreational opportunities could be expanded in Sturbridge if a project called The Sturbridge Arena is developed. The proposed project calls for the construction of an indoor sports arena, outdoor fields, disc golf course and an adjacent building to contain concessions, retail and restrooms near Interstate 84. The project, expected to cost \$2.1 million, would be built on 28.4 acres of land at 17 Kelly Road and 90 River Road.<sup>8</sup> According to initial plans, the indoor sports arena would be used for an array of indoor sports, including lacrosse, field hockey, soccer, flag football, baseball and softball. The Sturbridge Zoning Board of Appeals has approved variances for height, and an application to the Planning Board for Site Plan Approval and Special Permit is expected.

## Management Needs

As the Town has acquired acres of open space in recent years and continues to work to develop new recreational fields, management needs are growing. These include a need to maintain existing parks and fields and to potentially increase staff and resources to perform the work. The Town also does not have a formal maintenance plan for recreational facilities, but could establish a property maintenance program that specifically outlines what generally needs to be accomplished at each facility every month. In addition to mowing and field maintenance, it would include a schedule for trash removal, irrigation of the facilities, and arranging for port-a-john maintenance, for example. This would allow the Town to determine how to allocate its staff over the course of the year, recognizing that park and field demand is greatest during the warmer months. Staffing requirements are then based on the actual time spent on each activity and are assigned accordingly.

Currently, the Town's Recreation Department, staffed by a part-time Recreation Coordinator, is responsible for maintaining parks and recreational facilities in Sturbridge.<sup>9</sup> The Department of Public Works provides the labor. (As noted in the Public Services and Facilities chapter, fields that are on School Department property are maintained by the schools.)

The Town's Open Space Committee is responsible for advocating for open space and coordinating open space issues in Sturbridge. It also oversees implementation of the OSRP and evaluates properties that are being considered for open space acquisition, including Chapter 61 land.

## Recommendations

The updated OSRP, when complete, will include goals, objectives and detailed action items related to the Town's open space and recreational needs. In recognition of that, the following recommendations are broader in nature and are meant to serve as longer-range, policy-oriented goals. (See the Natural, Historic and Cultural Resources chapter and Public Services and Facilities chapter for related recommendations.)

- ▶ Continue to identify, prioritize and preserve open space and recreation resources based upon pre-determined criteria for prioritizing acquisitions. The Open Space Committee should be prepared to purchase high priority properties—including Chapter 61 land—when it becomes available. This includes coordinating and communicating with the CPC to help ensure funding is available when needed.
- ▶ Research and monitor funding opportunities for the creation or preservation of open spaces. The Massachusetts Executive Office of Housing and Economic Development website provides information about numerous sources of funding.<sup>10</sup> See also the Division of Conservation Services,

<sup>9</sup> Lynne Girouard, Recreation Coordinator

<sup>10</sup> Massachusetts Executive Office of Housing and Economic Development website, Open Space Creation/Preservation, [http://www.mass.gov/?pageID=ehedterminal&L=4&L0=Home&L1=Community+Development&L2=Community+Planning&L3=A+Guide+to+State+Development+Resources&sid=Ehed&b=terminalcontent&f=dhcd\\_cd\\_resourceguide\\_openspace&csid=Ehed](http://www.mass.gov/?pageID=ehedterminal&L=4&L0=Home&L1=Community+Development&L2=Community+Planning&L3=A+Guide+to+State+Development+Resources&sid=Ehed&b=terminalcontent&f=dhcd_cd_resourceguide_openspace&csid=Ehed)

which administers the Local Acquisitions for Natural Diversity (LAND) Grant Program and PARC — Parkland Acquisitions and Renovations for Communities program.<sup>11</sup>

- ▶ Expand public access to open spaces, particularly around the lakes and along the Quinebaug River. This entails working with the state as well as property owners.
- ▶ Maintain and enhance existing open spaces and recreational facilities. The Town should develop a maintenance plan for Town-owned properties and incorporate any major improvements into the Town's larger Capital Improvement Plan. The Town should also examine whether additional staff should be brought on (or whether the Recreation Coordinator's position should be expanded to full time) to oversee and maintain open spaces, parks and recreational facilities. A volunteer group could also be established to help maintain the properties and augment the Town's capacity.
- ▶ Management plans should be developed for each major town-owned facility. In addition to planning for the routine maintenance of the facility and grounds, long-term capital needs and repairs can be identified and scheduled. A cooperative arrangement between the Town and the various leagues and sports associations will enhance this effort. This would create a shared understanding of what it takes to accomplish certain tasks, how to ascertain staffing needs, how to identify specific needs, and how to rectify any deficiencies. It would also be useful to track the costs involved with the various items in the maintenance plan so that long-range projections could be made for allocating staff and fiscal resources.
- ▶ Similarly, the Town should encourage the creation of "friends of" groups to provide stewardship of other parks. These groups can help to sponsor cleanups and similar activities, as well as flag issues that the Town may need to address but may not be aware of.
- ▶ Provide recreational opportunities for all ages. As suggested by the Recreation Focus Group, the Town should consider developing a community center, football field and multi-use sports field to expand the type of recreational activities available in Sturbridge.
- ▶ Continue developing trails, particularly those that connect existing open spaces and improve access to lakes, rivers and other natural resources. New trails should be handicap-accessible and multi-use, serving walkers, runners, bicyclists and wheelchairs. Any trail construction should follow recommendations that arise out of the Trails Master Plan, which is under development.
- ▶ Capitalize on small vacant properties to create pocket parks and other open spaces. The development of pockets parks should also be encouraged in residential projects.
- ▶ Increase public awareness of open space and recreational facilities.

<sup>11</sup> Massachusetts Division of Conservation Services website, [http://www.mass.gov/?pageID=eoeasubtopic&L=5&L0=Home&L1=Grants+%26+Technical+Assistance&L2=Grant+%26+Loan+Programs&L3=Division+of+Conservation+Services+\(DCS\)&L4=Grant+Programs+offered+by+Division+of+Conservation+Services&sid=Eoeaa](http://www.mass.gov/?pageID=eoeasubtopic&L=5&L0=Home&L1=Grants+%26+Technical+Assistance&L2=Grant+%26+Loan+Programs&L3=Division+of+Conservation+Services+(DCS)&L4=Grant+Programs+offered+by+Division+of+Conservation+Services&sid=Eoeaa)



# 7. Transportation

## Introduction

**Positioned at the junction of two major Interstate highways, I-84 and I-90, Sturbridge has excellent regional access to major urban areas. This regional interstate proximity brings benefits in terms of convenient access but also brings high traffic volumes and speeds, which compromises pedestrian, bicyclist and driver safety. For this reason, the location of Sturbridge at the junction of I-84 and I-90 is considered to be both a strength and weakness in terms of transportation and land use balance. In addition, Sturbridge’s Main Street, Route 20, is a state-owned roadway.**

The 1988 Sturbridge Master Plan identified traffic as one of Sturbridge’s most pressing issues. During the public outreach efforts for this Master Plan, Sturbridge residents reiterated similar transportation-related themes from the 1988 Master Plan including:

- ▶ Develop an identity and sense of arrival into Sturbridge through the creation of distinct gateways and streetscaping, especially given the number of tourists coming to the area;
- ▶ Balance the need to facilitate traffic flow with desires to make the roadways more walkable and bikeable; calm vehicle traffic speeds where appropriate (especially through the Commercial Tourist District (CTD) along Route 20);
- ▶ Eliminate sign clutter and improve wayfinding to the key destinations;
- ▶ Ensure that paratransit service meets the expanding needs for elderly and disabled residents; and
- ▶ Make public transportation more available.

Over the last 30 years, Sturbridge has experienced rapid residential growth. The population is expected to continue to increase due to the availability of land, the relatively low cost of house lots, and the proximity and access to major highways.

Looking forward, the added demands on Sturbridge’s transportation system from residential growth, tourism, and economic development could counter the transportation, driver and pedestrian/bicyclist safety, aesthetic, and community visions of the Town unless land use decisions and transportation infrastructure enhancements are made in a coordinated, multimodal, and sustainable manner.

This Transportation Element of the Sturbridge Master Plan identifies the range of transportation issues, needs, and deficiencies over the near and long-term and establishes goals and recommendations for physical enhancements and policy.

### Transportation Goals

As the Master Plan process progressed and input from community members was received, the following were common goals and needs for transportation in Sturbridge:

- ▶ Develop an identity and sense of arrival into Sturbridge through the creation of distinct gateways and streetscaping, especially given the number of tourists coming to the area; prioritize Route 20 through the CTD.
- ▶ Balance the need to facilitate traffic flow with desires to make the roadways more walkable and bikeable and calm vehicle traffic speeds where appropriate (especially through the Commercial Tourist District along Route 20).
- ▶ Eliminate sign clutter and improve wayfinding to the key destinations.
- ▶ Make public transportation more available and increase opportunities for residents to walk and bicycle safely around Sturbridge.
- ▶ Develop access management and traffic impact study guidelines.
- ▶ Establish a collaborative working relationship with MassDOT.
- ▶ Develop a transportation plan that emphasizes safety and compliance with ADA requirements for sidewalks, crosswalks, and intersections.

### Regional Context

Regionally, Sturbridge is positioned very close to major employment centers easily accessed by I-90 and I-84. Sturbridge is approximately 60 miles southwest of Boston, 20 miles southwest of Worcester, 35 miles east of Springfield, and 45 miles northeast of Hartford. While positioned close to these urban centers, Sturbridge has retained the character of a low-density, rural area.

### Regional Planning

For the development of a Master Plan, it is important to acknowledge and understand the transportation planning and land use efforts of the adjacent communities to ensure that recommendations are consistent and complimentary across municipal bounds. Regional planning agencies (RPAs) play a key role in the development and execution of a municipality's Master Plan. As overseers of a larger area, RPAs help ensure that adjacent communities' plans are complementary. CMRPC is the RPA for Sturbridge.

These plans include:

- ▶ **Southbridge** – Southbridge’s Long Term Plan recommends attracting new business and industry to the town and planning for a new access road to the Airport Industrial Park. A long term goal involves working with the Central Massachusetts Regional Planning Commission (CMRPC) to evaluate the potential of a new I-90 interchange with Route 169.
- ▶ **Charlton** – Charlton’s Master Plan recommends clustering heavy traffic generators where they can be served by existing major roadways, such as Route 20; and consideration of an east-west connector in the southern part of town. Charlton’s land use planning goals include: encouraging the use of Flexible Development Zoning to help preserve the rural character; locating industrial and regional office and commercial development along Route 20 and certain areas of Route 169 and certain areas of Route 31; and revising and upgrading zoning bylaws and subdivision regulations.
- ▶ **East Brookfield** – East Brookfield’s transportation recommendations include enhancing public transportation alternatives, including the development of a Park & Ride facility near the town center and extension of the Worcester branch of the MBTA commuter rail. The availability (and potential impact) of these facilities to Sturbridge residents should be explored further.  
  
East Brookfield has also developed land use planning goals including conducting a feasibility study for a business/industrial park within a portion of the Route 49 Commercial District and expanding zoning bylaws to enhance economic development options.
- ▶ **Brimfield** – Brimfield’s Community Development Plan has outlined several key strategies including prioritizing the maintenance of Route 20, increasing the Town’s limited commercial tax base, and focusing on well-managed development along Route 20.
- ▶ **Holland** – Holland’s Community Development Plan identifies the goal of enhancing the potential for small-scale economic development through zoning and other regulatory strategies.

### Statewide Transportation Improvement Program (TIP)

The Transportation Improvement Program (TIP) and Air Quality Conformity Determination is an intermodal program of transportation improvements produced annually by the Central Massachusetts Metropolitan Planning Organization (CMMPO). The TIP serves as the implementation arm of the CMMPO’s 25-year Regional Transportation Plan by incrementally programming funding for improvements over the next four-year period. It programs federal-aid funds for transit projects and state and federal aid funds for roadway projects.



The following two projects in Sturbridge are noted in the 2011–2014 TIP:

- ▶ **Grand Trunk Trail** – Construction of a 0.75 mile bikeway (design of the bikeway was included in the 2010 TIP); and
- ▶ **I-84** – Pavement rehabilitation and maintenance.

Reconstruction of Route 148 (Fiskdale Road) in Brookfield from Molasses Hill Road to the Sturbridge town line, including Webber Road is included in the TIP.

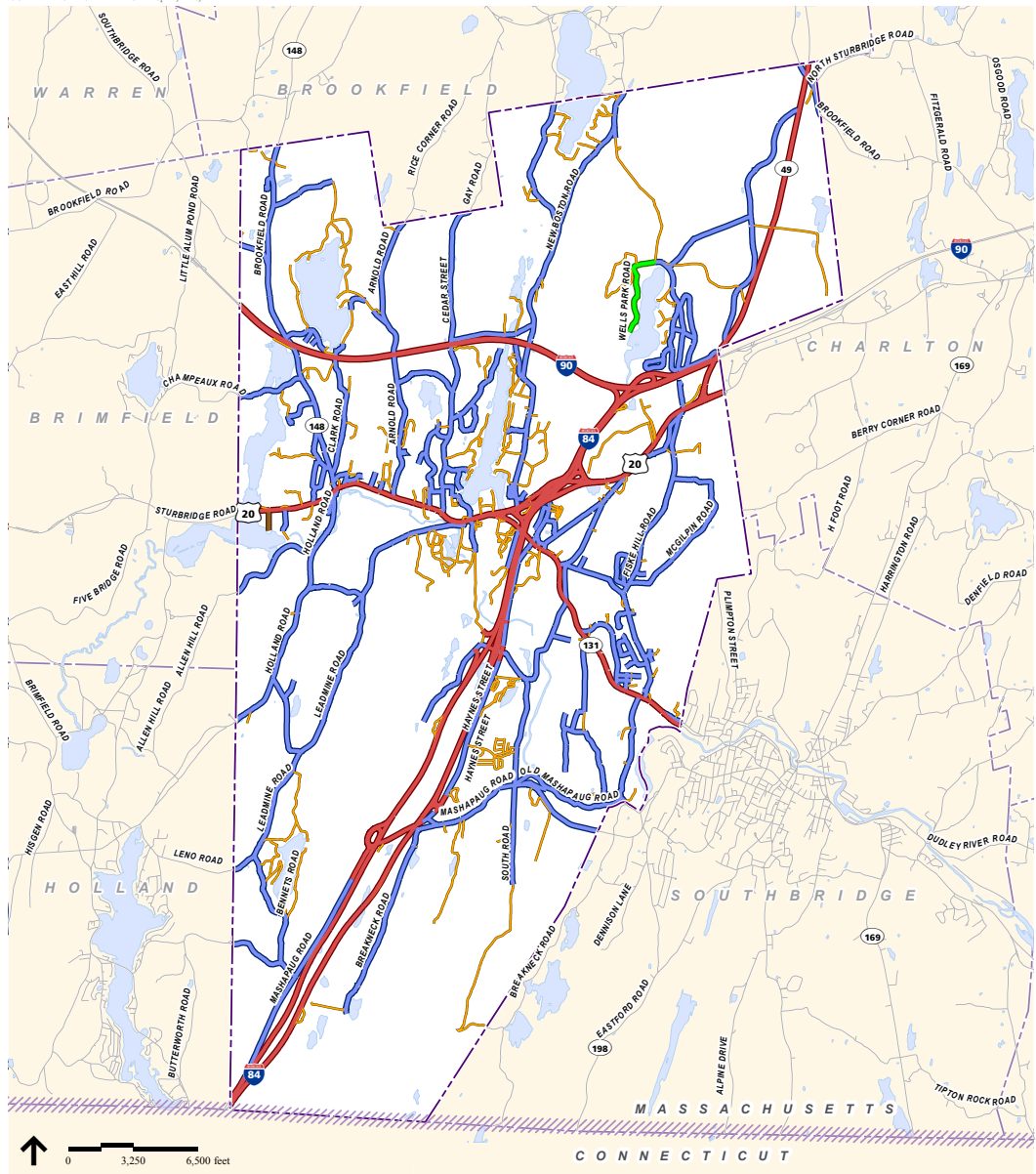
### Existing Conditions

Mobility in and around Sturbridge is the central theme of the Transportation Element of the Master Plan. The sections below discuss the components that comprise the existing transportation network in Sturbridge.

#### Roadway Jurisdiction/Functional Classification

The jurisdiction of roadways in Sturbridge is depicted on Figure 7.1 and summarized on Table 7.1. The jurisdiction of a roadway indicates the ownership and responsibility for maintenance, enhancements, and repairs.

Figure 7.1 Roadway Jurisdiction



Source(s): MassGIS

### Legend

#### Jurisdiction

- MassDOT
- Town/Public
- Private/Unaccepted
- State Park
- Army Corp

**VHB** Vanasse Hangen Brustlin, Inc.

Figure 7.1  
Roadway Jurisdiction

Sturbridge Master Plan  
Sturbridge, Massachusetts

**Table 7.1 Jurisdiction of Roadways in Sturbridge**

Roadway Ownership	Length (miles)	Length (%)
Town-owned roads	80	43%
Private roads unaccepted by the Town	58	31%
MassDOT roads (I-90, I-84, Route 20, Route 131, Route 49)	48	25%
Other (State Park, Army Corp of Engineers)	1	1%
Total	187	100%

Source: Office of Geographic Information (MassGIS), Commonwealth of MA Information Technology Division

While the majority of the roadway system falls under the jurisdiction of the Town of Sturbridge (80 miles, or 43 percent), the critical gateway roadway through the CTD, Route 20, is under MassDOT control.

The functional classification of roadways in Sturbridge is depicted on Figure 7.2 to the right and summarized in Table 7.2 below. A roadways functional classification indicates its design function—to serve local demands with multiple driveways to maximize access; or to serve regional demands with limited access points to maximize mobility.

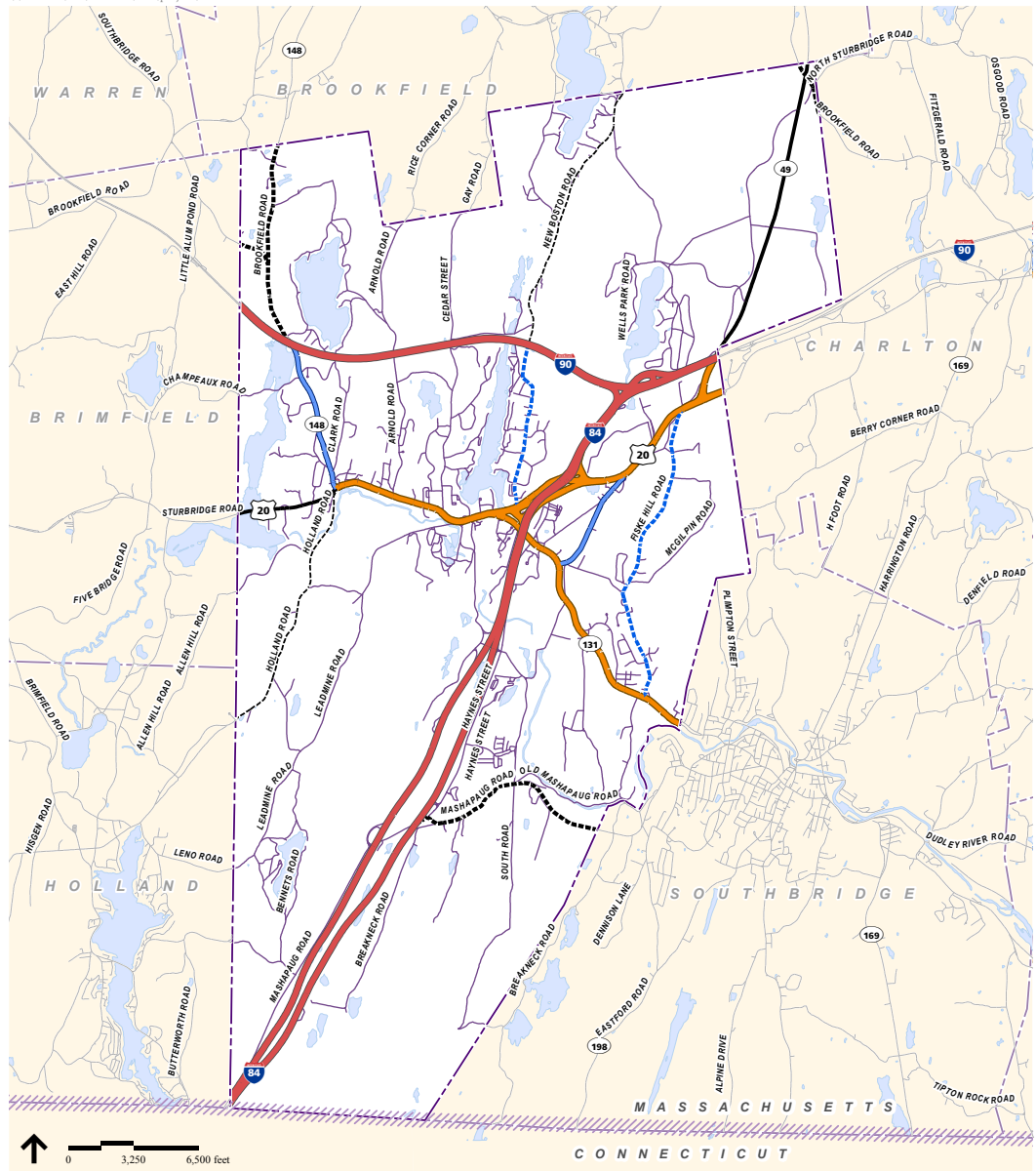
**Table 7.2 Functional Classification of Roadways in Sturbridge**

Functional Classification	Length (miles)	Length (%)
Local Roads (Rural and Urban)	125	66%
Interstates (I-90 and I-84)	27	14%
Urban Principal Arterials* (Route 20 and Route 131)	13	7%
Rural Minor Collectors* (Route 148)	5	3%
Rural Major Collectors*	5	3%
Urban Collectors*	5	3%
Rural Minor Arterials*	4	2%
Urban Minor Arterials* (Route 148)	3	2%
Total	187	100%

Source: Office of Geographic Information (MassGIS), Commonwealth of MA Information Technology Division

\*Eligible for Surface Transportation Program (STP) federal funding for improvements.

Figure 7.2 Roadway Functional Classification



Source(s): MassGIS

#### Legend

##### Functional Classification

- Interstate
- Urban Principal Arterial
- Urban Minor Arterial
- - - Urban Collector
- - - Rural Major Collector
- - - Rural Minor Collector
- Rural and Urban Local

**VHB** Vanasse Hangen Brustlin, Inc.

Figure 7.2

Roadway Functional Classification

Sturbridge Master Plan  
Sturbridge, Massachusetts

The majority of the roadways in Sturbridge are classified as local roadways totaling 126 miles, or 66 percent of the total roadway miles in Sturbridge. Interstate highways (I-90 and I-84) comprise 27 miles or 14 percent. Route 20 and Route 131 are classified as urban principal arterials since they serve as the primary links to the interstate highway system.

### Roadway Network

Vehicular traffic in Sturbridge is carried on several key roadways. The major east-west roadways in Sturbridge are Route 20 and Route 131. The major north-south roadways in Sturbridge are Route 148, New Boston Road, Route 15, and Route 49.

Two interstate highways travel through the Town. The Massachusetts Turnpike (I-90) is an east-west interstate that connects Boston to New York State. The nearest access point to I-90 is located at the regional connection with Interstate 84 (I-84) in Sturbridge. I-84 is a north-south interstate that provides access to Connecticut and points southwest. The northern terminus of I-84 is at I-90 in Sturbridge.

#### *Route 20*

Route 20 parallels I 90 to the south and provides regional east-west access. Route 20 is under the jurisdiction of MassDOT. There are three distinct areas along Route 20 through Sturbridge with varying character and transportation-related issues.

#### *Route 49 to I-84*

The eastern segment of Route 20 from Route 49 to the interchange of I 84 is a four lane cross-section with turning lanes at key intersections. Speed limits along this stretch range from 45 to 50 miles per hour (mph). The adjacent land uses vary as Route 20 travels from east to west. Near Route 49, land uses are spread out with few curb cuts. As the road travels west towards the interchange of I-84, land uses become more tailored to tourism with hotels, restaurants, and retail uses with multiple curb cuts. There are no sidewalks in this area of Route 20. Safety is an issue for this entire stretch of Route 20 and in particular at the following intersections:

- ▶ **Route 20 and Fiske Hill Road/Picker Road** – Left-turns are prohibited from Fiske Hill Road; however, vehicles illegally make this movement. Additionally, although left-turns from Picker Road are permitted, the movement is difficult given the speed of through traffic along Route 20.
- ▶ **Route 20 and Hall Road** – Left-turns out of Hall Road are extremely difficult across a 4-lane cross-section on Route 20. Route 20 speeds, limited gaps, and many nearby curb cuts combine to make it difficult to turn left from Hall Road.
- ▶ **Route 20 and Comfort Inn/Cracker Barrel driveway** – Similar to the Hall Road intersection, the high speed of traffic on Route 20, limited gaps, nearby curb cuts, and the proximity to the I-84 ramps makes it difficult to access Route 20. There have been multiple serious injury crashes at this intersection.

#### *I-84 to Cedar Street*

From the interchange of I-84 to Cedar Street, Route 20 provides a four-lane cross section with turning lanes at key intersections. A concrete median divides eastbound and westbound traffic. There is a desire to provide a more scenic streetscape and gateways along this stretch of Route 20 to convey a sense of arrival and help calm vehicle speeds. Speed limits along this stretch range from 30 to 35 mph. The adjacent land uses in this area are primarily tailored to tourism with hotels, restaurants, and retail uses. Sidewalks are present along both sides of Route 20 from Route 131 to Cedar Street. Route 20 has recently been repaved from New Boston Road to just west of Cedar Street. The following intersections in this area of Route 20 have safety and/or congestion issues:

- ▶ **Route 20 and New Boston Road** – Left turns out of New Boston Road are extremely difficult due to Route 20 speeds coupled with the proximity to the I-84 ramps. As redevelopment plans for the hotel parcel in the northwest corner progress, concerns at this intersection should be taken into consideration.
- ▶ **Route 20 and Route 131** – Traffic congestion and confusing signage are the primary concerns at this intersection. Additionally, Route 131 east of this intersection and Route 20 west of this intersection are both known as “Main Street,” which is confusing to tourists and those unfamiliar with the area. The intersection consumes a large amount of land with large islands.
- ▶ **Route 20 and Stallion Hill Road** – Access to Old Sturbridge Village (OSV) is provided at the Stallion Hill Road intersection. Drivers coming from the east must use a jughandle at Stallion Hill



Signage clutter along Route 20

Road (left-turns are prohibited). Although there is directional signage for the jughandle, drivers often make an illegal left turn from Route 20 to Stallion Hill Road after missing the jughandle turn.

There is an overabundance of signs along this portion of Route 20 which include different shapes, sizes, and colors of traffic advisory/street signs, directional signs, and commercial business signs. These signs, intended to provide direction and guidance, has actually had the opposite effect of confusing and distracting most drivers unfamiliar with the area. Some are out-of-date and should be removed. While the Sturbridge Zoning Bylaws include a “Signs” chapter which regulates the number, size, style, and location of signage throughout the Town, modifications to this bylaw could be considered to address signage clutter concerns and require a consistent approach to the placement and look of wayfinding signs in public view.

#### *Cedar Street to Route 148*

Approximately one-mile of Route 20 from Cedar Street to Route 148 is designated as the CTD. A Commercial/ Tourist District Revitalization Study was conducted in December 2009 by CMRPC. The recommendations of this study, along with input from the community have been incorporated in this section.



Route 20 in the CTD is known locally as Main Street and is two lanes with no median. The posted speed limit is 35 miles per hour, although traffic in this portion of Route 20 typically moves at an estimated average speed of 35–45 miles per hour. This one-mile corridor is part of a larger stretch of road, between Bates Hill Road and Route 131, which has been deemed as one of 32 “high crash corridors” in the Central Massachusetts region. Additionally, the following intersections in this area of Route 20 have safety and/or congestion issues:

- ▶ **Route 20 and Cedar Street** – This signalized intersection was included in the Route 20 repaving project. There is a desire to provide a more attractive streetscape at this location.
- ▶ **Route 20 and Arnold Road** – The separate left- and right-turn lanes for the Arnold Road approach can be problematic. A driver exiting Arnold Road to head west on Route 20 blocks the sight line of a driver exiting Arnold to head east on Route 20. Sight distance improvements should be explored for this approach. The turning lanes were added as the necessary first step toward getting a traffic light at the intersection.



Worn pedestrian path along Route 20 illustrates a desire line.

The adjacent land uses in this area have a small town scale; however the pedestrian accommodations do not reflect this. Sidewalks exist along the entire northern side of the roadway. Along the south side of the road in this stretch, sidewalks occur in only about one-third of the area, including a 100-foot length of brick walkway in front of the Sturbridge Marketplace, and a similar stretch in front of the Yankee Peddler.

Where sidewalks are not present, worn paths or “cow paths” were observed that confirm pedestrian activity and desire lines. Many sidewalks have obstructions such as utility poles and many have not yet been upgraded to be ADA compliant.

There are approximately six crosswalks that exist in this district, however only one of them (at Cedar Street) has pedestrian signals (without countdown timers). The design of the existing crosswalks is very basic, with white painted lines that are fading. Several crosswalks lack ADA compliant ramps from the sidewalk to the crosswalks or where there are ramps, there is not a level landing area on the sidewalk. There are no detectable warning pads on the crosswalks or sidewalks to help blind pedestrians identify the vehicular the conflict points at intersection and midblock crosswalk locations. The condition of the crosswalks, together with a lack of adequate sidewalks discourages pedestrians from walking along the corridor.

The Route 20 CTD lacks adequate parking supply to accommodate the residents, services, and businesses in the town. On-street parking is not permitted in this portion of Route 20 and there are no municipal parking lots. There are a number of areas where parking lots adjacent to the roadway have no curbing to define areas of entry or exit. This results in motor vehicles moving in an uncontrolled manner, and creates a potential hazard for pedestrians walking through these areas.

The overhead utility wires and poles are seen as a visual eyesore to the character of this area of Main Street and there is local desire to have them either buried or relocated. Moreover, utility poles typically obstruct pedestrians in areas of narrow sidewalks.



Sidewalk obstruction and steep grass slope along Route 20.

### Route 131



Typical Route 131 cross-section

Route 131 begins at Route 20 and travels southeast to the Southbridge town line. Route 131 is known locally as Main Street and is a two-lane cross-section with turning lanes at key intersections. Route 131 is under the jurisdiction of MassDOT. Speed limits along the corridor range from 25 to 30 mph near Route 20 to 35 to 40 mph east of Route 15. The roadway links Route 20 and the hospitality/entertainment zone with the historic Town Hall, Town Common, and then Southbridge center and the Harrington Hospital medical district to the south. Route 131 is currently undergoing a repaving and intersection modification, and

sidewalk construction project. There is a desire to provide a more scenic streetscape, particularly at Farquar Road, Willard Road, and at the Public Safety Complex. The following intersections along the Route 131 corridor have safety and/or congestion issues:

- ▶ **Route 131 and Route 15** – Potential increases to traffic and truck volumes are of concern due to the future potential recreational development of Route 15.
- ▶ **Route 131 and Hall Road** – Traffic flow at this location is influenced by the Route 131 through traffic speeds of 40 mph.



- ▶ **Route 131 and Shepard Road** –The existing grade of Shepard Road creates sight distance issues for turning vehicles. There is also high truck traffic volumes related to activities at the Southbridge Landfill.
- ▶ **Route 131 and Fiske Hill Road** – This intersection is currently under construction and the new design aims to increase safety and provide for more efficient traffic flow.

#### *Route 148*

Running north/south to the west of I-84, Route 148/Brookfield Road is two-lanes and provides access between Brookfield and the Tantasqua Regional High School in the north and Route 20. The roadway becomes Holland Road south of Route 20. Although a numbered route, Route 148 is not a state highway and is under Town jurisdiction. Speed limits along the corridor range from 30 mph near Route 20 to 45 mph north of Route 20. The majority of the corridor consists of residential uses.

#### *Route 15 (Mashapaug Road/Haynes Street)*

Running north/south and parallel to I-84, this two-lane roadway provides access between Connecticut and Route 131 and to a number of the Town's natural resource areas. Although a numbered route, Route 15 is not a state highway and is under local jurisdiction. Speed limits along the corridor range from 45 to 50 mph. While the majority of the corridor is undeveloped, the Town's economic development objectives include potentially expanding recreational opportunities along this corridor.

Buses travelling I-84 between Boston and New York City typically make a rest stop on Route 15. There is a desire to potentially modify the bus routes to include an official stop along Route 15. The creation of a Park and Ride lot on Route 15 could encourage use of the bus and commuter service. Careful attention should be paid towards retaining the tree buffer along the perimeter of the lot.

#### *Route 49*

Running north/south east of I-84, Route 49/Podunk Pike is two-lanes and provides access between East Brookfield and Route 9 in the north and terminates at Route 20 in the south. Route 49 is under the jurisdiction of MassDOT. Speed limits along the corridor range from 35 mph near Route 20 to 55 mph north of Route 20. The majority of the corridor is undeveloped due to wetlands, Wells State Park, and existing single-family homes on residentially zoned parcels that have frontage on Podunk Road and Route 49.

#### *Fiske Hill Road*

Running north/south east of I-84, Fiske Hill Road is one lane in each direction and provides access between Route 20 in the north and Route 131 in the south. Fiske Hill Road is under the jurisdiction of the Town of Sturbridge. The majority of the corridor is residential in nature. The roadway is often used as a north-south cut-through for vehicles traveling between Route 20 and Route 131 and speeding was observed to be an issue.

## Vehicular Traffic

To gain an understanding of existing travel patterns and to provide a basis for recommendations, historical traffic data, trip distribution patterns, and transportation mode choice data were obtained.

### Traffic Volumes

Table 7.3 summarizes traffic volumes and growth on various roadways throughout Sturbridge using MassDOT<sup>1</sup> and CMRPC<sup>2</sup> historical traffic volume data.

**Table 7.3** Traffic Volumes on Select Roadways in Sturbridge

Route	Source	Count Date	Average Daily Traffic Volume*
I-84 north of Route 20	MassDOT	2009	62,300
Route 49 north of Route 20	CMRPC	2008	8,000
Route 148 south of I-90	CMRPC	2008	6,800
Fiske Hill Rd. south of Route 20	CMRPC	2008	2,800
Fiske Hill Rd. north of Route 131	CMRPC	2008	3,700
Route 20 at Brimfield T.L.	CMRPC	2008	8,400
Route 131 at Southbridge T.L.	CMRPC	2008	14,000
Arnold Rd. north of Route 20	CMRPC	2008	1,100
Cedar St. south of I-90	CMRPC	2008	1,100
Route 15 south of Route 131	CMRPC	2008	1,800
I-90 between Exits 9–10	MassDOT	2006	95,000

Source: MassDOT and CMRPC traffic count data

\*Average daily traffic volumes expressed in vehicles per day (vpd).

As would be expected, traffic volumes along I-90 and I-84 are the highest in Sturbridge, carrying approximately 95,000 and 62,300 vehicles per day (vpd), respectively. Route 131 carries the next highest number of vehicles with 14,000 vpd, followed by Route 20 with 8,400 vpd, Route 49 with 8,000 vpd, and Route 148 with 6,800 vpd. Fiske Hill Road carries between 2,800 vpd and 3,700 vpd. Arnold Road, Cedar Street, and Route 15 accommodate more local traffic with volumes less than 2,000 vpd.

1 <http://www.mhd.state.ma.us/default.asp?pgid=content/traffic01&sid=about>, accessed October 12, 2010

2 <http://www.cmrpc.org/Regional-Traffic-Counting.aspx>, accessed October 12, 2010

*Journey-to-Work*

A review of US Census journey-to-work data<sup>3</sup> for Sturbridge residents reveals commuting trends—specifically work location and mode choice. Table 7.4 summarizes these data.

**Table 7.4** 2000 Census Journey-to-Work Data for Sturbridge Residents

Location of Employment	Percent of Sturbridge Residents
Sturbridge	26%
Worcester	15%
Southbridge	11%
Marlborough	3%
Charlton	3%
Auburn	3%
Springfield	2%
Spencer	2%
Webster	2%
Westborough	2%
Shrewsbury	2%
Dudley	1%
Framingham	1%
Boston	1%
Other*	26%

Source: US Census, 2000, Census Transportation Planning Package, Part 3 – CT, MA, RI, May 2004

\*Other towns and cities not listed comprise less than one percent each of employment locations of Sturbridge residents.

This table shows that approximately 26 percent of Sturbridge residents were also employed in Sturbridge in 2000. The top commuting destinations for residents that are employed outside Sturbridge were Worcester (15 percent) and Southbridge (11 percent).

The majority of the remaining commute destinations are neighboring towns and employment centers near Worcester and I-495. Approximately 1 percent of Sturbridge residents work in Boston.

3 US Census, 2000, Census Transportation Planning Package, Part 3, 2004

**Table 7.5** 2000 Census Journey-to-Work Data for Sturbridge Workers

Location of Residence	Percent of Sturbridge Workers
Sturbridge	22%
Southbridge	15%
Worcester	5%
Warren	4%
Charlton	4%
Brimfield	4%
Holland	3%
Spencer	3%
West Brookfield	2%
Brookfield	2%
Dudley	2%
Monson	2%
North Brookfield	2%
Wales	2%
Thompson, CT	2%
East Brookfield	1%
Holden	1%
Oxford	1%
Belchertown	1%
Other*	22%

Source: US Census, 2000, Census Transportation Planning Package, Part 3 – CT, MA, RI, May 2004

\*Other towns and cities not listed comprise less than one percent each of employment locations of Sturbridge residents.

Table 7.5 shows where people employed in Sturbridge begin their commutes. Of all the people that work in Sturbridge, approximately 22 percent also live in Sturbridge. Approximately 15 percent of people employed in Sturbridge resided in Southbridge and 5 percent in Worcester. The majority of the remaining locations of residence of Sturbridge employees are neighboring towns, including one town in Connecticut.

### Mode Choice

Similar to the journey-to-work evaluation, Table 7-6 summarizes the mode choice for Sturbridge residents and Sturbridge workers.

**Table 7-6 Sturbridge Journey-to-work Mode Choice**

Mode	Percent of Employed Sturbridge Residents	Percent of Sturbridge Workers
Single-Occupant Automobile	84%	82%
Multiple-Occupant Automobile	9%	12%
Transit	1%	0%
Walk/Bicycle	1%	1%
Other	0%	1%
Work at Home	5%	4%
<b>Total</b>	<b>100%</b>	<b>100%</b>

Source: US Census, 2000, Census Transportation Planning Package, Part 3 – CT, MA, RI, May 2004

Approximately 93 percent of Sturbridge residents take a car to work—either alone (84 percent) or with others (9 percent). Approximately five percent of Sturbridge residents work from home. Transit and walk/bicycle modes rounded out the survey results; approximately two percent of Sturbridge residents either utilized transit or walked/ bicycled.

Approximately 94 percent of Sturbridge workers take a car to work—either alone (82 percent) or with others (12 percent). Approximately four percent of employees of businesses in Sturbridge work from home. Walk, bicycle, other, and transit modes comprise approximately two percent of Sturbridge workers. Less than one percent of Sturbridge workers utilized transit.

The low transit mode share for Sturbridge residents and workers reflects the limited public transportation options in the Town. This lack of public transportation options was cited as a weakness of the Town by residents at the Public Forum.

### Safety

In addition to intersection issues noted in previous sections, the following intersections in Sturbridge were noted as “Medium Priority” in the CMRPC 2006–2008 Highway Safety Report:

- ▶ Route 20 and Route 49/Podunk Pike;
- ▶ Route 20 and Fiske Hill Road; and
- ▶ Route 20/Main Street and Stallion Hill Road.

Further, Route 20 between Bates Hill Road and Route 131 was deemed as one of 32 “high crash corridors” by CMRPC for the years 2004–2006.

### Transit

Public transportation opportunities are limited in Sturbridge. Sturbridge is a member of the Worcester Regional Transit Authority (WRTA) but does not have fixed-route service. The WRTA does provide on-demand service through South Central Mass Elderbus, Inc. Elderbus is a private paratransit transportation company, under contract with the WRTA that provides transportation to the elderly and disabled in Sturbridge.

MassRIDES sponsors a commuter van service from Sturbridge to Boston with a Park and-Ride lot at the Bethlehem Lutheran Church (located at junction of Route 131 and Route 20).

There is no passenger rail service in Sturbridge.

### Pedestrians and Bicycles

In the Public Forum on November 21, 2009, residents stated that building and/or repairing sidewalks is the most pressing transportation need. The presence and condition of pedestrian accommodations along the major roadways throughout Sturbridge has been discussed in previous sections and a series of issues have been identified. These issues/needs include:

- ▶ Lack of sidewalks on both sides of Route 20/Main Street in the CTD;
- ▶ Condition of existing sidewalks on Route 20/Main Street in the CTD; many existing sidewalks have obstructions such as telephone poles and are not ADA compliant;
- ▶ Crosswalk design and visibility;
- ▶ Need for signage to reinforce vehicle and pedestrian awareness; and
- ▶ Need to improve pedestrian and bicycle traffic on rural residential and suburban residential roads.

When considering new construction or rehabilitation of existing sites, consideration should be made to encourage safe pedestrian movement. Potential references to design pedestrian facilities could include the Walkable Communities proposal, CMRPC Walkable Communities, CMRPC 2007 Growth and Transportation Survey, and community input.

There are currently no dedicated bicycle facilities in Sturbridge. However, eight in ten Sturbridge residents favor the Town providing more dedicated bike routes. These routes would meet the desires of the residents, as well as add to the tourism diversity. For example, the Cape Cod Rail Trail has had a tremendously positive impact on tourism and economic development.

### Bridges

There are several bridges in Sturbridge that are routinely inspected by MassDOT using National Bridge Inspection Standards (NBIS). The primary purpose of the NBIS is to locate, evaluate, and act on existing bridge deficiencies to ensure that the bridges are safe for the traveling public. Each NBIS bridge is inspected at regular intervals of two years with certain types or groups of bridges requiring inspections at less than two-year cycles.

Table 7-7 summarizes the seven bridges in Sturbridge that are classified as “structurally deficient” or “functionally obsolete” by NBIS standards. Structural deficiencies are characterized by deteriorated conditions of significant bridge elements and reduced load-carrying capacity. Functional obsolescence is a function of the geometrics of the bridge not meeting current design standards based on traffic demands carried, including lane or shoulder widths or horizontal/vertical curvature. Neither type of deficiency indicates that a bridge is unsafe.

**Table 7-7 Sturbridge Deficient/Obsolete Bridges**

Bridge #	Bridge Carrying	At	Owner	Year Built	Year Rebuilt	Deficiency
S-30-003	Farquahar Road	Quinebaug River	Town of Sturbridge	1938	1956	Functionally Obsolete
S-30-004	Haynes Street	Quinebaug River	MassDOT	1961		Structurally Deficient
S-30-007	Holland Road	Quinebaug River	Town of Sturbridge	1956		Functionally Obsolete
S-30-023	Route 20/Main Street	Long Pond	MassDOT	1958		Functionally Obsolete
S-30-036	I-84 westbound	Route 15	MassDOT	1970		Functionally Obsolete
S-30-041	I-84 eastbound	Quinebaug River	MassDOT	1970		Functionally Obsolete
S-30-043	I-84 westbound	Route 20 eastbound	MassDOT	1973		Functionally Obsolete

Source: MassDOT NBIS Master List 2008

The Sturbridge DPW indicated three bridges under local jurisdiction that are in need of repair and should be prioritized:

- Holland Road;
- Champeaux Road; and
- Farquahar Road.

Both Holland Road and Farquahar Road were noted by MassDOT to be “functionally obsolete” by NBIS standards. All of these bridges have immediate structural and support needs. These bridges were installed and designed 50 to 60 years ago when Sturbridge had substantially less traffic.

## Future Conditions

The next step in the planning process is to identify growth trends in the area (see Chapter 3 for population and housing forecasts). These trends are often based on previous traffic volume patterns (as described in Table 7-3), past and forecasted population growth, and major development projects.

## Future Challenges and Opportunities

As described in Chapter 4, Economic Development, Sturbridge's population has steadily grown over the last six decades and is expected to continue growing through 2030 due in part to its accessibility to major highways. Increases in population in the future will lead to increased vehicular traffic along both the minor and major roadways in Sturbridge. These increased traffic volumes will impact the ability of existing transportation infrastructure to handle the increased demand placed on it, particularly during the morning and evening peak hours. In order to avoid operational and safety issues along roadways and at intersections in the Town, alternative modes of transportation should be investigated further. These alternatives could include expanded shuttle bus service, car pooling, public transportation, telecommuting, and improved pedestrian and bicycle accessibility.

## Recommendations

Sturbridge transportation must meet the needs of its residents, commuters (traveling through town), tourists, and commercial trucking through vehicular, public transportation, bicycle and pedestrian means. Transportation must be convenient, safe, aesthetically pleasing and environmentally friendly as it meets the complex needs of residents and travelers. A thorough transportation plan which ties Sturbridge in with neighboring communities, and connecting to the greater region, is essential to ensure a sustainable system over the long-term. The recommendations described in this section are based upon this framework.

### Recommendations

Taking into account the existing and future issues, needs, and the goals of the transportation element, the following specific recommendations have been developed.

While funding sources have not been identified for these recommendations, there are many candidate sources including:

- ▶ Surface Transportation Program (STP) federal funding for eligible roadways (Route 49, 20, 131, 148, and 15);
- ▶ Public Works Economic Development Grants (PWED);
- ▶ Commercial Development Block Grants; and
- ▶ Chapter 90 funding for Town-owned roads.



### 1. Roadways

**Issue:** Need to improve the traffic flow, character, and safety of roadways in Sturbridge.

#### **Recommendations:**

For state-owned roadways, these recommendations would have to be vetted with MassDOT. The Town should work with MassDOT to consider elements of these recommendations for further study that could be included in the TIP. Since Route 20 is included in a list of high-crash corridors compiled by CMRPC for the years 2004–2006, Surface Transportation Program (STP) funds could potentially be used for safety improvements.

#### *1.1 Develop Distinct Gateways*

Both the Sturbridge Heritage & Preservation Partnership Study and the Commercial/Tourist District Revitalization Plan reflect the community desire for an attractive gateway at each end of the Main Street section of Route 20. The specific areas that could serve as gateways include New Boston Road and/or Route 131 to the east and Route 148 to the west. If feasible from a right-of-way and traffic flow standpoint, roundabouts at these locations would serve the dual role of creating a gateway and calming traffic thereby improving conditions for pedestrians and bicyclists.

#### *1.2 Develop Scenic Streetscapes*

Durable landscaping that is close to the highway or along medians can increase the driver's awareness of the immediate environment and alter behavior, resulting in slower speeds and a safer street.

The following streetscape strategies should be considered:

- ▶ Consider a landscaped median on Route 20, with particular attention to New Boston Road to Route 131, the CTD and the Route 49 intersection area;
- ▶ Creating an attractive landscape on both sides of Route 20 in the area of New Boston Road. Improve both advertising, business, and directional signage to address sign clutter;
- ▶ Consider replacing overhead utilities with underground services in the CTD;
- ▶ Consider replacing the existing street lighting with period lighting in the CTD. Lighting for sidewalks needs to be lower, pedestrian scale, and more closely spaced than conventional “cobra head” street lights;
- ▶ Design ADA compliant sidewalks that include a landscaping buffer between the sidewalk and roadway in CTD;
- ▶ Replace the existing faded crosswalks with imprinted/textured crosswalks at intersections and mid-block locations along Route 20 through the CTD.

### 1.3 Consider Traffic Calming Measures

Traffic calming involves changes in street alignment and other physical measures to reduce traffic speeds in the interest of street safety and livability. The following traffic calming elements could be considered for the CTD along Route 20:

- ▶ Curb extensions/bump outs/neckdowns along with complimentary on-street parking;
- ▶ Narrowed travel lanes and widened shoulders with potential for bike lanes (Route 20 and Route 131);
- ▶ Rumble strips (only in non-residential/non-business areas due to noise);
- ▶ Raised crosswalks; and
- ▶ Roundabouts.



Example of a roundabout from North Haven, New York

Two other areas of Route 20 were noted to have vehicular speeding and safety issues. Recommendations to calm traffic in these areas include:

- ▶ **Route 20 westbound at I-90 ramps:** Install a transverse rumble strip on Route 20 westbound just after the ramp from I-90. This would alert drivers to the dangerous intersection ahead and slow the traffic to a safer speed.
- ▶ **Route 20 from Route 49 to I-84:** Consider the following centerline/median treatments:
  - Widen the double yellow line and install a centerline rumble strip within these yellow lines on Route 20 from Route 49 to the median east of Route 84; or
  - Consider extending the landscaped median from Route 84 potentially as far as Route 49, as a means of improving safety through access management with the added benefits of traffic calming and aesthetic improvement.

### 1.4 Access Management and Compact Development

Develop access management and traffic impact study guidelines and incorporate them into the zoning bylaw and subdivision regulations. Minimizing curb cuts and greater separation between driveways improve safety, appearance, and the viability of roadways. An access management approach would benefit Route 131 where there is an abundance of driveways and strip malls.

Review the zoning bylaws and consider amendments that would encourage mixed-use (residential, office, retail) and compact/clustered development in areas already served by transportation infrastructure.

### *1.5 Bridge Repairs*

Prioritize bridge repairs along:

- ▶ Holland Road;
- ▶ Champeaux Road; and
- ▶ Farquahar Road.

### *1.6 Fiske Hill Road*

Fiske Hill Road has been noted as a north-south cut-through street between Route 20 and Route 131 and speeding was observed to be an issue. Given the residential nature of the corridor, several traffic calming measures could be considered. One measure involves “residential area” signage to reinforce the character of the roadway. To reduce cut-through traffic, the Town could consider restricting all or a portion of the roadway to one-way southbound. This measure could present an undue burden on residents of the neighborhood and/or result in unwanted impacts to other roadways in the Town. For these reasons, further study would be required prior to moving forward with this alternative. Should a one-way southbound roadway be deemed feasible and desirable, pedestrian and/or bicycle accommodations could be enhanced along the corridor. If further study reveals that cut-through traffic is only an issue during the peak hours, turning restrictions could be considered in place of conversion to a one-way roadway.

## *2. Intersections*

**Issue:** A number of intersections in Sturbridge are problematic. Traffic flow, character, and safety need to be improved. For intersections with state-owned roadways, these recommendations would have to be vetted with MassDOT.

### **Recommendations:**

#### *2.1 Route 20 and Fiske Hill Road/Picker Road*

Consider more visible signage and geometric improvements to reinforce the northbound Fiske Hill Road left-turn prohibition at this intersection. Additionally, consider geometric improvements to improve turning movements at this intersection, particularly the left-turns from Picker Road to Route 20 eastbound.

### *2.2 Route 20 and Hall Road*

Left-turns out of Hall Road have been noted as extremely difficult. The potential installation of a flashing or fully operational traffic signal in front of the Comfort Inn could assist motorists exiting Hall Road as well. The proximity of Hall Road to the Comfort Inn driveway should be considered as improvements for this stretch of Route 20 progress.

### *2.3 Route 20 and Comfort Inn/Cracker Barrel driveway*

Similar to the Hall Road intersection, the high speed of through traffic on Route 20 in conjunction with nearby curb cuts and the proximity to the I-84 ramps has created a hazardous condition. Installation of a flashing or fully operational traffic signal at this location should be considered to alleviate the safety issues. This recommendation would require more engineering feasibility, concept design, and right-of-way impact review.

### *2.4 Route 20 and New Boston Road*

Left turns out of New Boston Road have been noted as extremely difficult. A flashing traffic signal and improved warning signage should be considered for this location. A fully operational traffic signal at this location could also be considered. Given the proximity to the I-84 off-ramps, advanced warning signage, sight distance improvements, and geometric modifications to the inbound ramp would likely be necessary to slow traffic to a safe speed in advance of the traffic signal. Additionally, the traffic signal itself would operate most efficiently as a fully-actuated signal whereby the phase for New Boston Road is only activated when a vehicle is present on this approach. This recommendation would require an engineering evaluation including a signal warrant analysis. As redevelopment plans for the hotel parcel in the northwest corner progress, a more detailed engineering review should be conducted to implement these improvements.

### *2.5 Route 20 and Route 131*

Traffic congestion and confusing signage have been noted at this intersection. If feasible from a right-of-way and traffic flow standpoint, installation of a roundabout with landscaped central island could help to ease traffic congestion. This recommendation would require more engineering feasibility, concept design, and right-of-way impact review. Streamlining of signage and removal of signage “clutter” should also be considered.

### *2.6 Route 20 and Stallion Hill Road*

Even with the existing directional signage, drivers often make illegal left-turns from Route 20 West to Stallion Hill Road. Consider removal of signage “clutter” near this intersection to emphasize the existing way-finding signage to Old Sturbridge Village.

### *2.7 Route 20 and Cedar Street*

There is a desire to provide a more attractive streetscape at this location to develop it as a gateway to the CTD. If feasible from a right-of-way and traffic flow standpoint, installation of a roundabout at this location would help to create a more scenic gateway to the CTD. This recommendation would require more engineering feasibility, concept design, and right-of-way impact review.

### *2.8 Route 20 and Arnold Road*

Local input indicated that the separate left- and right-turn lanes for the Arnold Road approach to this newly designed intersection are not efficient. Geometric improvements could be considered to improve sight distance for turning vehicles. As this intersection is located within the CTD, a flashing signal and/or bump outs could also be considered to calm through traffic on Route 20.

### *2.9 Route 131 and Hall Road*

Traffic flow at this location has been noted as problematic, likely due to the Route 131 through traffic speeds of 40 mph. The outcome of the ongoing work on Route 131 will need to be reviewed in the future so that potential further improvements can be evaluated. These improvements could include separate left- and right-turn lanes for Hall Road.

### *2.10 Route 131 and Shepard Road*

The existing grade of Shepard Road creates sight distance issues for turning vehicles. There is also high truck traffic volumes related to activities at the Southbridge Landfill. Improved warning signage at this location and potential geometric modifications could help to improve sight distance for vehicles entering/exiting Shepard Road.

## *3. Pedestrians*

**Issue:** Need to provide a more safe and walkable environment.

### **Recommendations:**

- ▶ Install or upgrade sidewalks on both sides of Route 20/Main Street in the CTD to be ADA compliant and include a landscaped buffer.
- ▶ Construct crosswalks that enhance the awareness of drivers to pedestrians; could include raised and or textured treatments.
- ▶ Install crosswalk signage to reinforce vehicle and pedestrian awareness.
- ▶ Install countdown pedestrian signal heads at signalized crossings.

- ▶ Improve pedestrian mobility on rural residential and suburban residential roads.
- ▶ Educate public to “Stop- Look-and Wave” in the town of Sturbridge at crosswalks.
- ▶ Support the Sturbridge Trails Committee as well as the development of the Trails Master Plan.
- ▶ Educate the public of existing walking trails.

#### 4. *Bicyclists*

**Issue:** Need to make Sturbridge more bikeable—commuter and recreational.

**Recommendations:**

- ▶ Develop and implement a town wide Bicycle Master Plan that addresses both commuter and recreational bicycling.
- ▶ Consider installation of bicycle racks at activity centers.
- ▶ Explore ways to incorporate on-road bicycle lanes from Spencer to Connecticut and Brimfield to Connecticut.
- ▶ Implement programs and events which will encourage people to consider bicycling and trail hiking.
- ▶ Consider installing bike lanes on Route 131 and possibly portions of Route 20 in the CTD;
- ▶ Educate the public of existing bicycling opportunities; and
- ▶ Improve bicycle mobility on rural residential and suburban residential roads.

#### 5. *Public Transportation*

**Issue:** The Town lacks public transportation options. Less than one percent of Sturbridge residents use public transit to commute to work.

**Recommendations:**

- ▶ Review CMRPC research for a fixed bus route to connect Sturbridge with Southbridge and Webster through WRTA.
- ▶ Research the possibility of creating a Sturbridge tie-in with tour buses that connect Boston with New York City and currently regularly make rest stops on Route 15 in Sturbridge; a Park-n-Ride lot is also possible.
- ▶ Explore feasibility of a seasonal shuttle trolley to points of interest in Sturbridge including, but not limited to, Old Sturbridge Village, the Publick House, the Sturbridge Host, shopping areas, and parking lots;

- ▶ Assure that Sturbridge has a representative on the WRTA Advisory Council.
- ▶ Launch an educational campaign to inform citizens of the public transportation currently available and of the possibility of additional services.
- ▶ Advertise the Park and Ride lot at the Bethlehem Lutheran Church with signage on I-84 and I-90.

#### 6. *Parking*

**Issue:** The CTD on Route 20 lacks adequate parking supply to accommodate the residents, services, and businesses in the town. Future demands related to increased population will require increased parking availability.

**Recommendation:**

- ▶ Create two consolidated public parking areas—one each on the western and eastern ends of Route 20. Possible locations are The Mill on the corner of Route 20 and Route 148 and at the intersection of Cedar Street and Route 20. An added benefit of these locations is the possible connection to the Town owned Riverlands Trail along the Quineboag River. The Town could also research the possibility of combining parking for recreation and public parking at Turner’s Field. This area also has potential to connectivity to the Riverlands Trail.

#### 7. *Signage*

**Issue:** Need to address over signage issues, particularly along Route 20:

**Recommendations:**

- ▶ Collaboratively (DPW and MassDOT) remove existing sign clutter along Route 20.
- ▶ Amend Chapter 22 of the Town’s Bylaws and Regulations to further regulate the number, size, style, and location of signage throughout the Town and include specific language that would address the sign clutter issue.
- ▶ Commission a “Way-finding Program” to assist visitors to navigate and experience Sturbridge without confusion by using effective signage branded to Sturbridge.
- ▶ Improve consistency of traffic signage throughout Town with Manual on Uniform Traffic Control Devices (MUTCD) guidelines.
- ▶ Enhance entry of visitors approaching from Connecticut at Route 15 through informational signage.

#### 8. *MassDOT*

**Issue:** Need regular communication with MassDOT.

**Recommendations:**

- ▶ Determine the MassDOT District 3 point of contact for the Town of Sturbridge Town Planner to collaborate with and establish regular ongoing communication regarding current and planned projects in the Town.
- ▶ Leverage CMRPC's relationship with MassDOT to ensure that the Town's interests are considered during the Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) development.





# 8. Public Services and Facilities

## Introduction

The public services and facilities element of a master plan should serve as a guide for decision-making about the public buildings, infrastructure, utilities and services provided by a local government. The adequacy of municipal and school facilities—which affects the ability of municipal employees to serve the community—is largely determined by three factors:

- ▶ The form, size and organization of the community’s local government;
- ▶ The community’s land use patterns, demographics and infrastructure; and
- ▶ The expectations of residents and businesses for types and levels of services, and the ability of the Town to meet those expectations.

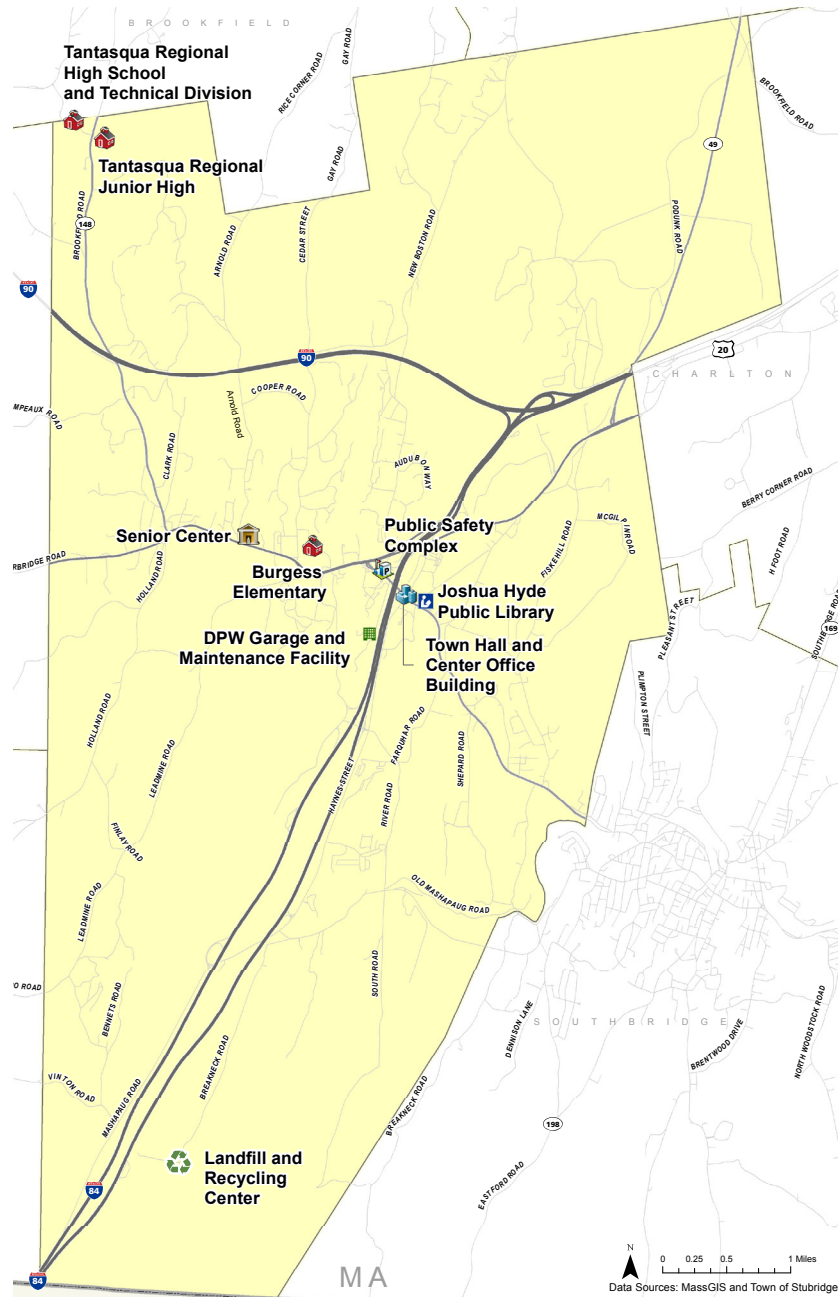
A Town’s ability to provide adequate services to the community requires both short- and long-term planning. Effective capital planning and asset management policies are often challenged by limited revenue for government operations, which can put long-term investment at risk. Prioritizing and setting goals for short- and long-term investment needs can help a Town ensure that it meets the community’s expectations for municipal services.

This chapter will include an analysis of the adequacy of the following public services and facilities in Sturbridge. The services and facilities listed below are among the key issues that were identified by Town officials and residents through interviews, a survey, a public meeting and input from the Public Services and Facilities Focus Group. (Figure 8.1 shows some of the major public facilities in town.)

- ▶ Government administration/Town Hall
- ▶ Public safety
- ▶ Public works
- ▶ Water, wastewater, and roads
- ▶ Solid waste and recycling
- ▶ Board of Health
- ▶ Education
- ▶ Library
- ▶ Senior services
- ▶ Parks and recreation

A municipal facility is any municipal property that has been improved for public purposes, such as a town hall, park, library, fire station or school. It also includes municipal utilities such as water or sewer service.

Figure 8.1 Major Municipal Facilities



This chapter incorporates information from past Town studies, including the American with Disabilities Act Self-Evaluation and Transition Plan (ADA study) that was done in 2008.<sup>1</sup> Completed by the Center for Working and Living in Worcester, the ADA study identified barriers to accessibility in all town buildings. It also included cost estimates for improvements or upgrades needed to make each building accessible.

In addition, the Town's FY 2010–2015 Capital Improvement Plan (CIP) has been reviewed for this chapter. Many of the capital needs cited by Sturbridge department heads—though not necessarily all of them—can be found in the CIP, which was recommended by the Capital Planning Committee (CPC).

The CPC uses a 10-factor rating system to rate capital requests. Each factor is rated on a 0–10 scale, meaning each request can receive a rating of up to 100. The factors include: public safety and health, infrastructure needs, quantity of use, efficiency of services, legal requirements, public support, personnel impact, service impacts, budgetary constraints and administrative needs. The requested items are divided into three categories in the CIP: those funded as part of the Town Meeting warrant, those funded as part of department budgets, and those funded by a debt issuance.<sup>2</sup>

## Public Services and Facilities Goals

- ▶ Establish efficiency and cost-effectiveness as a guiding principle for delivery of public services.
- ▶ Ensure that the Town can meet its infrastructure and service needs as growth and demand increases.
- ▶ Given the often conflicting demands, establish priorities for building and facility upgrades and replacement.
- ▶ Work to ensure that municipal staffing levels are adequate as the Town grows and service demands increase.
- ▶ Lead by example in municipal facilities and operations, fostering partnerships, communication, and sustainability principles through its investments and initiatives.

## Municipal Services

The Town of Sturbridge provides municipal services that are fairly typical of many cities and towns across the Commonwealth. Specifically, the Town provides many services that are not required by law, including recreation programs, a senior center, a public library and solid waste disposal services. Table 8.1 shows the municipal services in Sturbridge.

<sup>1</sup> 2008 Annual Town Report

<sup>2</sup> Capital Improvement Plan FY 10–15,  
[http://www.town.sturbridge.ma.us/Public\\_Documents/sturbridgema\\_reports/102341393.0/FY10%20Capital%20Plan%20Final.pdf](http://www.town.sturbridge.ma.us/Public_Documents/sturbridgema_reports/102341393.0/FY10%20Capital%20Plan%20Final.pdf)

**Table 8.1 Sturbridge's Municipal Services**

Administration and Finance	Public Safety	Public Works
Town Administrator	Police Department	Public Works
Board of Selectmen	Fire Department	• Wastewater
Finance	Inspectional Services	• Water
Town Assessor	Board of Health	• Highway
Town Clerk	<b>Human Services</b>	• Town Recycling Center & Landfill
Town Accountant	Council on Aging	Tree Warden
<b>Land Use</b>	Veterans Agent	<b>Culture and Recreation</b>
Planning	Health Agent	Recreation
Conservation	<b>Education</b>	Library
Zoning Board of Appeals	Regional School District	Trails Committee
Open Space Committee		
Community Preservation Committee		
Design Review Committee		
Historical Commission		
Economic Development Committee		
Housing Partnership		

Source: Town of Sturbridge website and 2009 Annual Town Report.

### Public Schools

Sturbridge is a part of the Tantasqua Regional/School Union 61 Districts, which also includes the nearby towns of Brimfield, Brookfield, Holland and Wales.<sup>3</sup> Each of the towns has an elementary school for pre-kindergarten through grade 6. Burgess Elementary School, the largest of the five elementary schools, is in Sturbridge. Starting in grade 7, the towns send their students to regional schools. Specifically, students attend Tantasqua Regional Junior High for grades 7 and 8 and Tantasqua Regional High School for grades 9 through 12. Both regional schools are located in Fiskdale, which is located in the northwestern corner of Sturbridge. The regional school district also offers a career and technical education through the high school technical division.

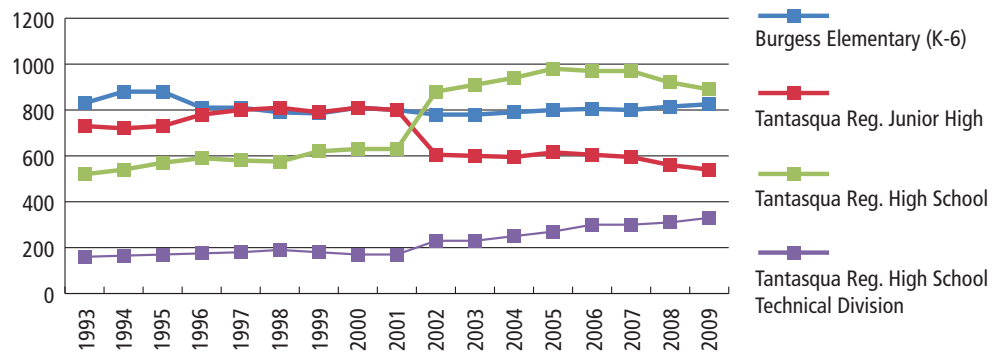
Sturbridge officials, residents and other stakeholders point to the public schools as a major strength of the community. The schools have been—and continue to be—a focus of capital investment in the area. For example, a new regional high school opened in 2002, and the Burgess Elementary School is undergoing a renovation project, which will be described in more detail below.

3 Tantasqua and Union 61 website, <http://www.tantasqua.org/>

### School Enrollment

At Burgess Elementary, K-6 enrollment declined in the mid- to late-1990s, hitting a low of 756 students in 1999 as shown in Figure 8.2. Since about 2000, the student population at Burgess has moderately climbed, reaching 833 students in the most recent 2009–2010 school year. (These enrollment numbers do not include part-time preschool students. There were 87 preschool students in 2009–2010.) Enrollment for grades K-6 is expected to stay stable in the near future.

**Figure 8.2 School Enrollment 1993–2009**



Source: Massachusetts Department of Elementary and Secondary Education, <http://profiles.doe.mass.edu/>

At the regional level, enrollment at Tantasqua Regional Junior High increased through the 1990s, which is in line with the growth in the 5 to 17-year-old population between 1990 and 2000. Enrollment then fell by 25 percent in 2002 when grade nine moved to the new regional high school. (This large drop in enrollment is shown in Figure 8.2.) Since then, the junior high school has continued to see its student population largely decline. That decline has been approximately 11 percent between 2002 and 2009. During the 2009–2010 school year, 538 students attended the junior high. That included approximately 240 students from Sturbridge, as shown in Table 8.2.

**Table 8.2 Student Enrollment**

School	2008	2009	2010**
Burgess Elementary (K-6)	824	833	827
Tantasqua Regional Junior High	554	538	NA
Sturbridge students*	268	240	NA
Tantasqua Regional High School	930	896	843
Sturbridge students	432	421	405***
Tantasqua Regional High School Technical Division	315	348	367
Sturbridge students	83	92	NA

Source: Town of Sturbridge 2008 and 2009 annual reports, principals of Burgess Elementary and the Regional High School  
 \*Sturbridge enrollments are as of October of 2008 and 2009.  
 \*\*Projected enrollments as of July 16, 2010.  
 \*\*\*Based on projection that approximately 48% will come from Sturbridge.

Like the junior high, Tantasqua Regional High School (excluding the Technical Division that will be discussed later) saw its enrollment steadily increase in the 1990s. In 2002, enrollment jumped 32 percent—661 students to 873 students—with the addition of grade 9. While enrollment continued to increase for a few more years thereafter, it has fallen in the last several years. There were 896 students in the 2009–2010 school year. That included approximately 421 students from Sturbridge. Over the next 10 years, student projections show a small but steady decline in enrollment at both the regional high school and junior high school.

In addition to Tantasqua Regional High School, Sturbridge's high school-age children have the opportunity to participate in the Technical Division program at the high school. The program, which is fully integrated with the academic program, offers vocational training in computer technology, carpentry, computer-aided design/drafting, culinary arts, manufacturing, electrical technology and applied health.<sup>4</sup> Students must apply to the program. Over the last 15 or more years, student enrollment at the Technical Division has gradually increased, growing from 153 students in 1993 to 348 in 2009 as shown in Figure 8.2. That is a 127 percent increase over 16 years. Projected enrollment for the 2010–2011 school year is 367 students.

### *School Staffing*

Table 8.3 shows the number of teachers as well as the teacher-student ratio at the public schools for the 2009–2010 school year. It indicates that all of the schools except the Technical Division at the Regional High School had lower teacher-student ratios than the statewide average. While the Technical Division's overall ratio appears high, the administrative assistant there has stated that the junior and senior level classes have ratios closer to 15 to 1. In addition, the Regional High School Principal does not expect to need any additional staff in the next decade.

The same is true for Burgess Elementary, according to the school's Principal. Currently, there are 85 professional staff and 40 support staff at the elementary school, and the average classroom size is 19 to 20 students.

**Table 8.3 School Staffing (2009–2010)**

	Number of Teachers	Student/Teacher Ratio
Burgess Elementary	69	13.3 to 1
Tantasqua Regional Junior High	50	10.7 to 1
Tantasqua Regional High School	80	11.3 to 1
Tantasqua Regional High School Technical Division	16	22.5 to 1
Regional District (excluding elementary schools)	145	12.3 to 1
State	69,909	13.7 to 1

Source: Massachusetts Department of Elementary and Secondary Education  
 \*Number of teachers has been rounded.

### School Facilities

Both the Tantasqua Junior and Senior High School facilities are in good condition.<sup>5</sup> The junior high school opened in 1975, and the new high school building was dedicated in 2002.<sup>6</sup> There is a detailed maintenance and capital plan for the schools that address their current and future needs. In addition, the Regional High School Principal does not anticipate having any additional space needs in the next 10 years.

The Town of Sturbridge is in the process of constructing a renovation and addition to the 1972 Burgess Elementary School building. The \$34 million project broke ground in September 2010 and will be completed in the spring of 2013.<sup>7</sup> The building improvements will allow the elementary school to move to full-day kindergarten. The project will also include sustainable building practices aimed at increasing its energy and water efficiency and improving its environmental performance under the Massachusetts Collaborative for High Performance Schools Criteria (MA – CHPS).<sup>8</sup> For example, rainwater will be collected for the flushing of toilets, reducing interior water use.

The Tantasqua Regional School District is planning to install photovoltaics on the rooftops of its two regional schools.<sup>9</sup> It is expected to be the largest photovoltaic array of any school district in the state. An independent company would buy and install the solar cells, with the produced electricity then being sold to the school district at a discounted rate. In general, the school district follows an energy management plan that is helping reduce energy costs.

### Public Safety

Public safety and security services are among the most fundamental services provided by a municipality. These include police, fire and ambulance services. Like many municipalities in the Commonwealth, the Town of Sturbridge maintains its own Police and Fire departments. The two departments share a complex at 346 Main Street on the east side of Interstate 84.

#### Police<sup>10</sup>

The Police Department provides police protection services, is responsible for emergency management functions, and maintains a 24-hour, 7-day-a-week emergency police and fire dispatch center. It also offers a number of other services, including home safety surveys, self defense personal empowerment courses and a student police academy.

The Police Department employs 18 full-time police officers. They include a Chief of Police, two Lieutenants, three Sergeants, and 12 patrolmen. The other permanent staff at the department includes

5 Daniel Durgin, Tantasqua Regional School District Superintendent

6 Tantasqua and Union 61 website, <http://www.tantasqua.org/>

7 Burgess Elementary School Principal Daniel Carlson, Town of Sturbridge, 2009 Annual Town Report

8 Charlie Blanchard, Burgess Elementary School Building Committee, Burgess Elementary School MA-CHPS scorecard

9 Chris Tanguay, "Tantasqua looks to Sun," Southbridge Evening News, June 13, 2010.

10 Town of Sturbridge 2008 and 2009 Annual Town Reports, Town of Sturbridge website, Police Chief Thomas Ford, Police administrative assistant Melissa Rozzen, Massachusetts Crime Reporting Unit [www.ucrstats.com](http://www.ucrstats.com), ADA study



four full-time and three part-time civilian dispatchers and one full-time administrative assistant. In addition, there is one part-time animal control officer.

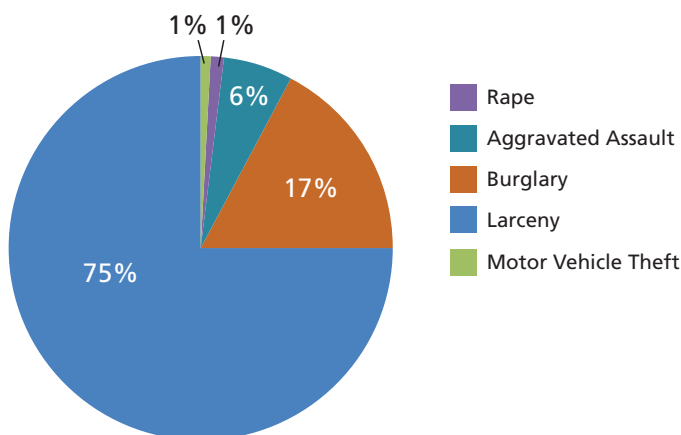
These staffing levels need to be bolstered by three to four new full-time positions now and six additional positions in the next decade, according to the Police Chief. (No additional Police positions have been included in the Fiscal 2011 budget.) The Police Department, working with the school administration, has applied for a federal grant to fund and fill the position of a full-time school resource officer in the schools. Currently, responding to incidents at the schools have been tying up officers on nearly a daily occurrence, taking them away from other duties.

In addition, adding a second dispatcher to two of the Dispatch Center shifts would also help address the issue of increasing call volumes. In 2009, the Police Department received 31,448 calls for service, which is a 2 percent increase over the previous year. Traffic complaints and accidents with property damage were among the major categories of calls received.

There were 139 Part 1 crimes (including violent and property crimes) reported to the Police Department in 2009, which is down from 141 in 2008 and 188 in 2007. Approximately 94 percent of the crimes were property crimes such as larceny and burglary. The remaining 6 percent were violent crimes such as rape and aggravated assault. As shown in Figure 8.3, larceny was the most common Part 1 crime reported in 2009.

In terms of vehicular equipment, the Police Department has nine marked cruisers, one sports utility vehicle, one motorcycle, one jet ski, one utility terrain vehicle, and one unmarked vehicle each for the Chief, Lieutenants and Detective. The oldest vehicle with the most miles is replaced every three years. The cruisers, which are being designed to be fuel efficient, are rotated on a 2-3-2 basis, meaning two in the first year, three in the second year, and two in the following year.

**Figure 8.3** 2009 Crimes in Sturbridge



Source: Sturbridge Police Department

### Fire<sup>11</sup>

The Fire Department provides the community with fire protection and emergency medical services, with full paramedic service having been added in 2007. Other services include fire prevention activities, inspections and investigation of fire causes. The department employs one Fire Chief/EMT, one full-time and one part time Captain/EMT, eight full-time firefighters/EMTs (four are paramedics), and 15 to 18 part-time on-call firefighters/EMTs. The Fire Chief has indicated a need for three additional full-time personnel in the next 10 years to allow there to be a minimum of three people staffing the station at all times. Currently, the station is staffed by four full-time personnel on weekdays, two full-time personnel on weeknights, and one full or part-time person over the weekend, according to a captain.

Given the staffing levels, the station sometimes goes unstaffed on nights and weekends due to a lack of people available to respond for coverage when the on-duty personnel go out on a call. With the addition of paramedic level services, there has also been an increase in calls for ambulances manned by three people, including a second EMT to assist the paramedic, according to the Fire Chief. In 2009, there were a total of 1,161 ambulance calls (a 10 percent increase over the previous year) and 372 fire or rescue-related calls (a 28 percent decrease).

The Fire Department operates four engines, one ladder truck, one tanker/pumper, one forest fire truck, two ambulances, one utility vehicle and one Fire Department Car, which is used by the Chief. The ambulances are rotated every five years, with the other vehicles being replaced as needed. In 2010, the Fire Department replaced a 1986 engine as well as a tanker/pumper. In the next 10 years, the Fire Chief anticipates needing to replace one engine from 1974, one ladder from 1976 and both ambulances.

### Public Safety Complex



Public Safety Complex Cell used for Records Storage

As mentioned above, the Police and Fire departments occupy the same Public Safety Complex. Constructed in 1987, the building has three levels. Dispatch and administrative offices are on the main or ground level, training rooms are on the middle level (below the main level), and the Fire Department is on the lower level (below the middle level). Due to the growth and changes in the Police and Fire departments as well as the community in the last two decades, it is anticipated that the Public Safety Complex will need significant upgrades. This is particularly true given that both the Police and Fire Chiefs project needing to add staff in the next 10 years.

11 Town of Sturbridge website, Town of Sturbridge 2008 and 2009 Annual Town Reports, Fire Chief Leonard Senecal, Captain/Fire Inspector John Marinelli, ADA study

Currently, the Public Safety Complex has a number of space, security and accessibility problems, which have been identified by the Police and Fire chiefs. For example, office space is tight, records storage is inadequate, and parking space is limited. Radio communications systems and area surveillance cameras need to be upgraded as does other technology throughout the complex. There lacks any public or “in custody” interview rooms in the facility, and there is no restroom near the dispatch area. In addition, the Fire Department needs a storage area for its Hazmat supplies and materials, and the Police garage needs to be expanded. Some space needs could be met if an elevator were added to make the attic more useful; it is currently used for storage. Throughout the complex, the HVAC system and outdated lighting also need to be upgraded.



Police Dispatch Center

Additionally, the Town’s ADA study identified a host of improvements that were needed to make the facility fully accessible. Totalling more than \$115,000 in estimated costs, those improvements included lowering the front desk counter, creating an accessible route of travel (such as an internal lift) between the main and mid-floor levels, and making the toilet/sink fixtures in the cells compliant.

### Public Works

The Department of Public Works (DPW) is responsible for the administration and operations of the Highway, Landfill, Water and Wastewater departments and the Tree Warden.<sup>12</sup> Other responsibilities include maintenance duties related to the Town cemeteries and the Recreation Department. The Department currently has 11 full-time employees.<sup>13</sup> There could be a need for more employees if new fields are built and additional roads are accepted by the Town. In recent years, requests have been made to provide for a third crew to assist in these efforts.

The DPW’s Garage and Maintenance Facility is located on New Boston Road Extension. Constructed in 1970, the facility houses the DPW’s equipment, supplies and vehicles. As the DPW has grown, however, its need for more space has become pressing. The DPW Director has indicated that the building needs to be expanded in the next five years.

Many needed upgrades to the facility have also been identified.<sup>14</sup> Office and meeting space is inadequate, the roof needs repair or replacement, and a backup generator and second sweeper are needed. In addition, equipment and other supplies need to be replaced such as the equipment lift, underground

<sup>12</sup> Town of Sturbridge 2009 Annual Town Report

<sup>13</sup> DPW Director Greg Morse

<sup>14</sup> Ibid., Zoning Board of Appeals member Maryann Thorpe and Detective Mark Saloio, ADA study

oil and gas storage tanks, and the lighting system. A new facility to store town buses and an overhead material handling system should also be considered. In terms of ADA compliance, the facility only requires minor improvements as most of the areas are not for public use.

### *Water*<sup>15</sup>

The Town of Sturbridge provides public water service to most of the suburban residential, commercial and industrial zones. Approximately 51 percent of the public water used is in residential areas. In total, the public water system serves 1,696 customers (water service connections) or roughly 4,616 people. The number of service connections has increased from 1,554 customers in 2008 to 1,654 customers in 2009. Figure 8.4 shows the location of public water mains, water tanks, wells and hydrants.

The Town contracts out its water operations to Veolia Water, which staffs the Sturbridge Water Treatment Plant and is responsible for maintenance of all Water Department facilities, equipment and distribution system. The treatment plant has an average daily flow capacity of 1.6 million gallons and a storage capacity of 2.3 million gallons.

In 2009, the plant treated and supplied an average of 683,000 gallons of water daily, which totaled more than 292 million gallons from three active wells. (There is an additional reserve well that is inactive.) That was less water than was supplied the previous year; in 2008, an average of 720,000 gallons of water was supplied daily. This decrease in 2009 was due in part to the large amount of rain that fell that year.

The Town is in the process of constructing a new well, Well #4 off of Shattuck Road. The project was awarded to Waterline Industries Corp. in December 2009. The new well is expected to come online in 2011.

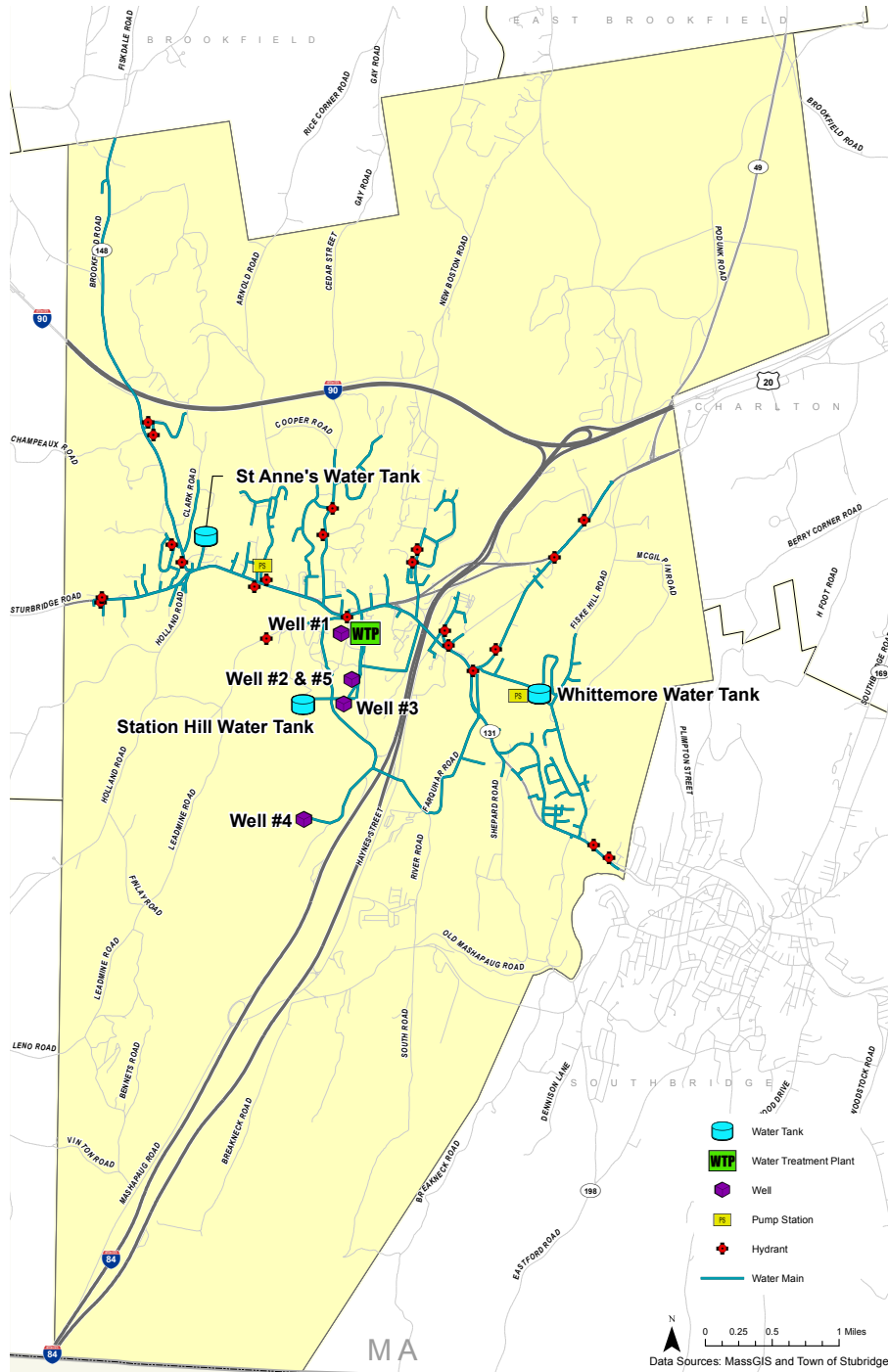
Of the other wells, Well #3 and #5 are in good shape, but Well #1 on WaterWorks Drive has been found to be under the influence of surface water due to its proximity to the stream from Cedar Pond. There has been a pilot study of that well, which is active but under consent order.

The DPW director has indicated that the water booster site on Whittemore Road needs to be overhauled in the next two years. The hydropneumatic tank and booster pump are outdated and need to be replaced. The three storage tanks in town, on the other hand, are in relatively good shape. Only one tank needs its interior repainted in the next five years.

Elsewhere in town, there has not been a lot of demand for the expansion of public water, largely due to areas being sparsely populated, according to the DPW director. At this time, there is no comprehensive study underway that addresses long-term water supply needs.

<sup>15</sup> Town of Sturbridge website, Town of Sturbridge 2008 and 2009 Annual Town Reports, Veolia Water Project Manager Shane Moody, DPW Director Greg Morse, Sturbridge Water Department's 2009 Public Water Supply Verification

Figure 8.4 Sturbridge Water System



### Wastewater<sup>16</sup>

Most commercial, industrial and suburban residential zones in Sturbridge and around Big Alum and Cedar lakes are on the Town's public sewer system. The system serves 2,022 customers (sewer connections), which is an increase of 155 customers since 2008. Roughly 45 percent of households in town are on public sewer. Figure 8.5 shows the location of public sewer mains in Sturbridge.

A private contractor, Veolia Water Northeast LLC, operates the Town's wastewater facilities, including staffing the Sturbridge Water Pollution Control Facility on New Boston Road Extension. That facility can handle an average daily flow of 750,000 gallons of wastewater. In 2009, the facility treated an average of 662,000 gallons a day, which was an 11 percent decrease from the previous year (743,000 gallons a day). The total amount of wastewater treated and discharged into the Quinebaug River was 242 million gallons in 2009 compared to 272 million gallons in 2008. (Periodically, when the Town's wastewater flow exceeds the facility's average daily design flow, a portion of the wastewater is diverted to the Southbridge sewer system along with the gravity sewage flow from the south side of Fiske Hill, and then treated at the Southbridge Wastewater Treatment Facility.<sup>17</sup> This occurs through an Intermunicipal Agreement between the towns of Sturbridge and Southbridge.)

The majority of the wastewater treated at Sturbridge's facility has been from residential or public sources, as shown in Figure 8.6. Wastewater from private septic systems and leachate from the landfill are also treated at the facility.

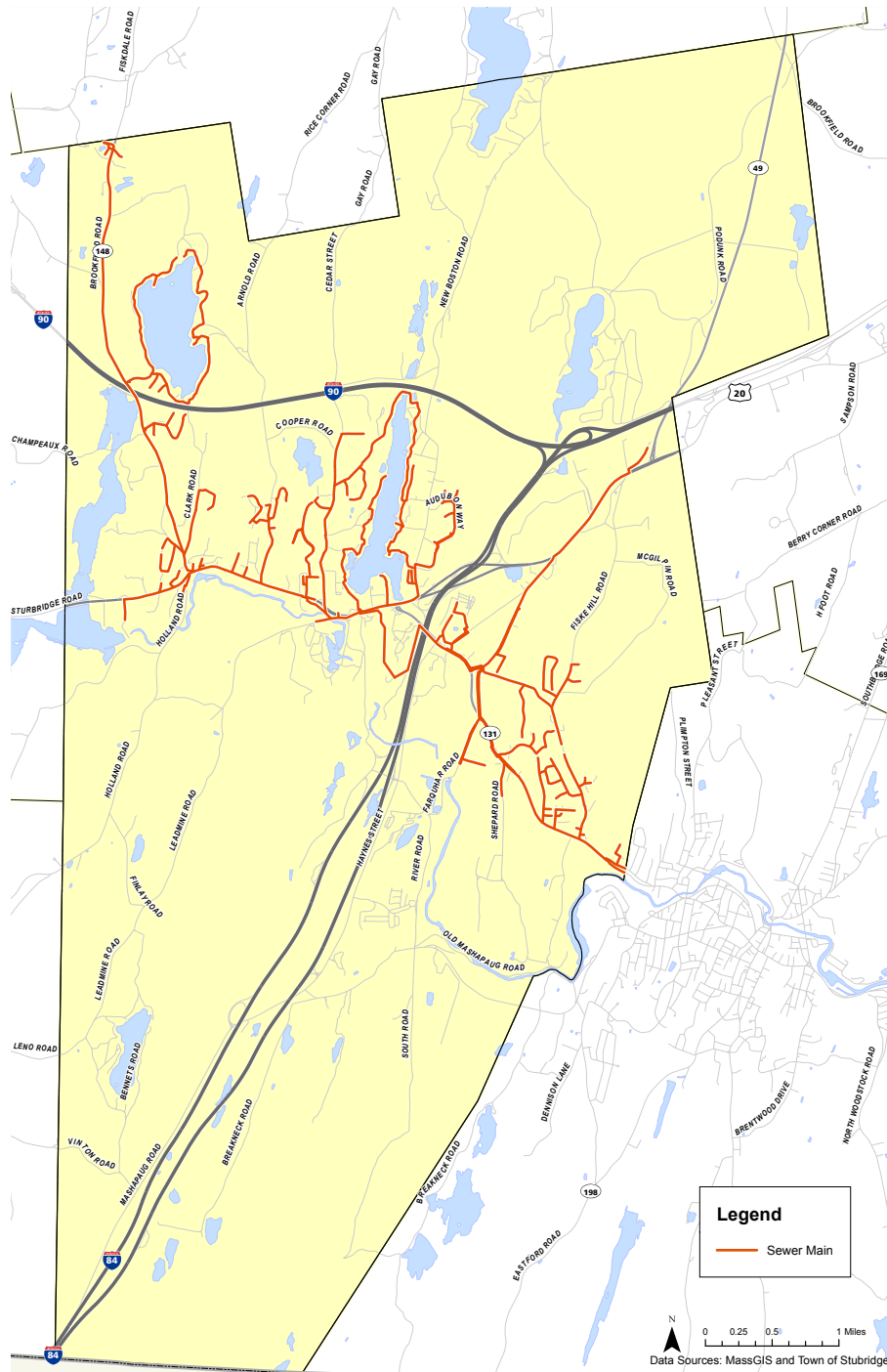
Sturbridge is upgrading and expanding the wastewater treatment plant following recommendations of a 2008 Comprehensive Wastewater Management Plan by Tighe and Bond Engineers. The Management Plan indicated that Sturbridge would need a treatment plant with a capacity of 1.4 million gallon per day in order to meet future flow demands. Town Meeting approved a \$20 million debt issuance for the project in 2008, and the project has since been awarded to R.H. White. The new treatment plant is expected to be completed in 2012. It will utilize new treatment technologies, including "Bio-Mag," which increases the amount of wastewater that can be treated in its tanks, and "Co Mag," which removes phosphorous from wastewater. If completed on time, the new treatment plant is expected to be the first of its kind in North America.

In terms of service, the Town has been debating the expansion of public sewer service along the Route 15 corridor—a two to four-mile stretch—in the next 10 years. There is a Special Use district in the area where Planned Unit Business Developments are allowed by special permit. See the Land Use and Community Character chapter for more discussion regarding Rt. 15.

<sup>16</sup> Town of Sturbridge website, Town of Sturbridge 2008 and 2009 Annual Town Reports, Veolia Water Project Manager Shane Moody, DPW Director Greg Morse

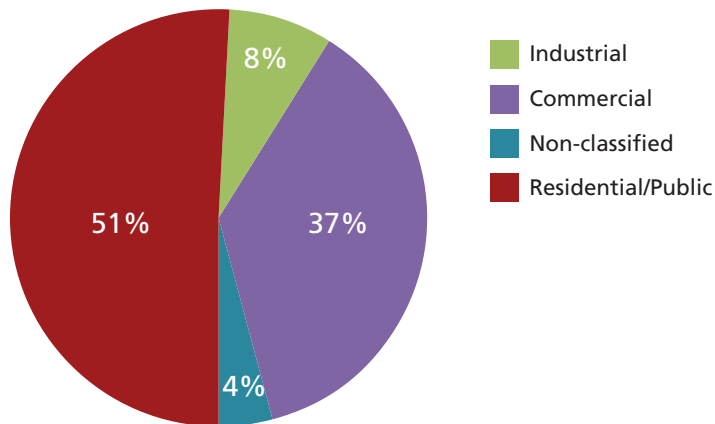
<sup>17</sup> Sturbridge Comprehensive Wastewater Management Plan, Tighe and Bond, April 2008

Figure 8.5 Sturbridge Sewer System





**Figure 8.6** 2009 Wastewater Flow Sources



Source: Town of Sturbridge 2009 Annual Report

#### *Roads<sup>18</sup>*

There are approximately 75 miles of public roads and 10 miles of private roads in Sturbridge. For several years, the Town has conducted an annual rating of the conditions of these roads in order to help determine which ones need to be repaired. In addition to road condition, secondary considerations include vehicle trips per day. The DPW repairs approximately four to five miles of roads each year. The condition of the roads overall has generally decreased due to a combination of roadwork and winter weather conditions. As a result, funding to maintain and repair roads will remain a challenge.

#### **Solid Waste and Recycling<sup>19</sup>**

The Town of Sturbridge owns and operates a Recycling Center and Landfill at the end of Breakneck Road. The operations are overseen by the Health Agent and Board of Health, which licenses the private waste haulers who provide curbside trash pickup to residents of Sturbridge for a fee. The Recycling Center is open from 7 AM to 2:45 PM Tuesday, Thursday and Saturday and is managed by a recycling manager with the help of three recycling assistants.

To use the Recycling Center, residents must have a resident permit sticker, which is free and must be renewed each year. (A second permit is \$20.) Residents can dispose of most household waste for free, but they must remove certain items from their trash, including cans, glass, paper, plastic, styrofoam, metals, clothing and yard waste. For an additional fee, other items such as tires, propane tanks, computer monitors, appliances and demolition debris can be dropped off. The Recycling Center also has a “Take It or Leave It” shed where residents can leave items that they think other people will want.

<sup>18</sup> DPW Director Greg Morse

<sup>19</sup> Town of Sturbridge website, Recycling Manager John Booth



Approximately 63 to 67 percent of everything that is brought to the Recycling Center and Landfill is recycled, according to the recycling manager. The remainder, about five tons of household waste a week, ends up buried and covered in the landfill. Half of the landfill reached capacity and was capped in 2009. The remaining landfill area is projected to have capacity for 10 to 20 more years. When it is eventually closed and capped, the recycling center is expected to continue operating, and there could be a need for a future transfer station.

In the last few years, there has been about a 10 percent increase in the number of people recycling at the Town facility, according to the recycling manager. That includes people who have private curbside trash pickup but use the facility solely for recycling. In 2009, the Board of Health issued 2,480 permits for the Recycling Center to 1,594 households.

There has been some discussion in the past about the need to ascertain the overall cost effectiveness of the Recycling Center and Landfill. The Town needs to improve its tracking of the amount of trash that is being handled at the Recycling Center and Landfill versus private collections, which in turn will allow the Town to gain a better understanding of its recycling rates. In order to do so, the Town should consider a number of alternatives to determine the best approach for managing its solid waste in the future. These would include:

- ▶ Town wide trash collection with mandatory recycling
- ▶ Single stream recycling
- ▶ Pay as you throw trash collection programs

If more people continue recycling or the Recycling Center is opened up to businesses—only Sturbridge households can use it now—additional staff would likely be needed. The Board of Health has indicated the need to upgrade and expand the facility over the next five years. In addition to personnel, this would include the purchase of new storage containers, a second bailing machine and a chipper. Electric power would also need to be upgraded.

#### **Town Hall and Center Office Building<sup>20</sup>**

Town Hall is located on Main Street in the Sturbridge Common Historic District. A two-story brick building, Town Hall has long served as Sturbridge's principal government office building, housing all of the Town's municipal offices.

The Town Hall building as well as the Center Office Building on Main Street have just been renovated to ease overcrowding, address structural and accessibility issues and provide additional community meeting space. The \$4.3 million project also improved the appearance of the two buildings, which are both listed in the National Register of Historic Places. Improvements to Town Hall included a new elevator compliant with state and federal accessibility requirements. The project did not incorporate many green building or sustainable practices, largely due to cost constraints, according to the project architect.

Municipal offices moved into the renovated buildings in August 2010. Town Hall now houses the offices of the Town Administrator, Board of Selectmen, Finance Department, Assessor and Town Clerk. Offices related to land use, including the Planning Department, Conservation Commission, Building Inspector, and the Recreation Department, as well as the Board of Health and Veteran's Agent moved across the street to the Center Office Building. Previously, the 1852 two-story Center Office Building had long been vacant, though it had been used as a school and police station in years past.

### Library<sup>21</sup>



Joshua Hyde Library

Joshua Hyde Library, a Town department, is located on Main Street near Town Hall. Built in 1897 and expanded in 1989, it was named in honor of a farmer and lifelong Sturbridge resident whose son George Hyde donated \$20,000 toward the library's construction. Today, the library is governed by an elected 9-member Board of Trustees, with responsibilities for library management and services delegated to a Library Director. Besides the director, there are 15 employees, four of which are full time. Volunteers also assist as needed.

The library, which is part of the Central Massachusetts Regional Library System, is open Monday through Saturday throughout the year (48 total hours), with additional Sunday hours from mid-October to mid-May (51.5 total hours). It has approximately 52,000 total volumes. Circulation of books, DVDs, CDs and magazines has steadily climbed in recent years, reaching 138,800 items in 2009. This represented a 5 percent increase over the previous year and was the highest circulation to date. Attendance, which has also increased, was 81,000 in 2009.

The library building has three levels, with the circulation area being on the main level. There is a meeting room on the basement level and a children's department on the middle level. In addition to books and other materials in circulation, the library offers story time, passes to several area museums, and a summer reading program. It also has seven computers for public use, including two laptops. An additional computer is expected to be added soon.

In 2007, the Library Trustees completed a Long Range Plan, which evaluated the library's level of service and identified issues that need to be addressed. The plan had been to apply for a grant from the Massachusetts Board of Library Commissioners in 2011 to study the possible expansion of the library, but the trustees decided to hold off due to the inability of the library to meet state requirements for dedicated parking, according to the Library Director. (To receive state funding, library projects must provide parking that "meets or exceeds the standard of one parking space for every 400 square feet of

21 Town of Sturbridge website, 2008 Long Range Plan for Joshua Hyde Library, Library Director Becky Plimpton, Town of Sturbridge 2008 and 2009 Annual Town Reports, ADA study

building;” applicants can alternatively show that the “appropriate local boards have approved an alternative parking plan.”<sup>22</sup> Currently, there is no dedicated parking for the Joshua Hyde Library.) The trustees might apply for a state planning grant in the future.

For now, the Library Director has identified a number of space and staffing needs:

- ▶ Additional staff is needed to adequately cover the three floors in the building. Currently, there are times when only two employees are working in the library—two people must be at checkout upstairs—leaving no one to cover the children’s department downstairs.
- ▶ More space is needed for the Children’s Department and for meetings. Currently, children’s programs are held in the meeting room, which means such programs cannot be held at the same time as meetings.
- ▶ Parking is an issue as there is no dedicated parking for the library. Patrons either use on-street parking, which is shared with the church next door, or they park in the Town Hall lot across the street.
- ▶ A larger space is needed for the library’s public use computers. There is not enough room to put all of the computers in one area, so only four are located together. The others are spread out. (Two of those are laptops, which are only given out for public use when they are requested.)
- ▶ Shelf space is virtually full, so more shelving could be needed in the future. At the very least, existing shelves must be reorganized.
- ▶ The library has limited seating, with there being only three tables for patrons to use. There is also no private study area.

In terms of accessibility, the library largely complies with ADA standards. The Town’s ADA study only identified a few modifications needed to make the building fully accessible. For example, the main entrance vestibule does not provide enough clearance between doors, and the circulation desk counter does not comply with maximum height clearance requirements. The cost of improvements is estimated at approximately \$9,225.

22 Board of Library Commissioners Regulations, <http://mbic.state.ma.us/grants/construction/program/605cmr6.pdf>

### Parks and Recreation Facilities<sup>23</sup>

Sturbridge has a Recreation Department that operates the Town Recreation Area at Cedar Lake and coordinates all activities on the Town Common. Staffed by a part-time Recreation Coordinator, the Department offers a variety of programs to residents of all ages. Programs include girls softball, a youth summer recreation program, and adult summer tennis and basketball leagues. During the summer, the Department also presents a concert series on the Town Common.

The many activities occur on recreational fields or facilities throughout Sturbridge. These include a baseball field at Turners Club, two Town Barn fields, basketball and tennis courts at Cedar Lake Recreation Area, and multiple fields at the public schools. The Turners Club and Town Barn baseball fields are under the jurisdiction of the Recreation Committee. The other ball fields are on School Committee property and are maintained by the schools. The Recreation Department is responsible for maintaining the Town's fields and facilities, though the Department of Public Works provides the physical labor. (This split in field jurisdiction between the School Committee and Recreation Department has led to difficulties in coordinating field usage and planning for future field needs.)

Several of the fields and recreational facilities in town require improvements. At the Cedar Lake Recreation Area, the tennis and basketball courts need to be reconstructed, and more parking is needed. There is also a growing need for additional field space in Sturbridge as more children continue to participate in sports. Adding fields has become a priority among residents.

In 2007, Sturbridge created a Field Study Subcommittee to examine the field situation in town and propose changes to address identified needs. Recommendations included creating a playground area near the Town Barn fields, changing Turner's Field from a baseball to a softball field, and turning two baseball fields at Burgess Elementary School into one regulation baseball field and a small T-ball field. According to the Subcommittee's 2007 report, if all of the proposed changes were made, the Town would still need to add six new fields.

Recently, the Recreation Committee selected a designer to develop plans for the construction of new fields on the Shepard property on Route 15 and behind the DPW garage facility. If these new fields are built, the Recreation Coordinator anticipates there being a need for additional maintenance staff. Changing the Coordinator position into one that is full-time or adding paid staff would also increase the Recreation Department's ability to handle day-to-day responsibilities as well as any new responsibilities resulting from the creation of new fields.

<sup>23</sup> Town of Sturbridge website, Recreation Coordinator Lynne Girouard, Recreation Committee, 2007 Sturbridge Field Study Committee report

### Senior Center/Council on Aging<sup>24</sup>

The Senior Center and Council on Aging office is located at 480 Main Street in Fiskdale and open 8 a.m. to 4 p.m. Monday through Friday. Staff includes a full-time Director, a part-time secretary, a part-time Community Resources Coordinator, two part-time custodians and a fitness instructor, who is partially grant-funded. Other instructors work on a contractual basis.

A wide range of services and programs are offered at the Senior Center or by the Council on Aging, including recreation programs, health services, nutrition and fitness programs, meals, referral counseling, medical transportation and support groups. Residents who drop in at the Senior Center can also use computers, play pool or cards, watch television or socialize.



Senior Center

The Senior Center itself, which was constructed in the 1800s and renovated in the late 1990s, has three floors, all of which are served by an elevator. On the main level, there are three offices, a dining area, bathrooms and gallery-style kitchen, which is primarily used to store items and warm and distribute food that is prepared off site.

The building is in fairly good condition, though some modifications are required to bring the building into ADA compliance. According to the ADA study, approximately \$56,000 in improvements are needed, including modifications to parking spaces, the ramp into the building, the interior public stairwell and the basement area. Beyond ADA issues, other minor repairs are needed such as painting of the window frames.

Given the current and expected growth in the senior population, the Council on Aging Director has indicated a need for a new, larger senior center. (Any expansion would displace parking spaces, which are already at a premium.) A few years ago, there had been discussion about the possibility of conducting a feasibility study, but one was never completed, and efforts to explore the idea of a new senior center stopped. This was largely due to the fact that the Town had decided to move forward with the Town Hall/Center Office Building and Burgess Elementary School projects. The need for more space at the senior center remains, particularly if any regular programs are to be added in the future. Currently, there is no room to add another regular program, such as an exercise class, without precluding special events like health clinics.

<sup>24</sup> Town of Sturbridge website, Town of Sturbridge 2008 and 2009 Annual Town Reports, Senior Center Director Barbara Search, ADA study

An additional part-time staff member would also allow for the addition of regular evening classes, as a staff member must be on site during any programs or classes. Currently, only special events such as speakers are scheduled in the evening during the summer.

### Overall Staffing Needs

Additional departments have staffing needs and recommendations have been made in other plan chapters regarding new staff (i.e. Economic Development Director—see Chapter 4 on Economic Conditions). For example, issues have been raised about Veteran's Services where the Director of Veteran's Services and Agent is essentially "on call" and the office is open only a couple of evenings a week. The Building Inspector position has been reduced to half time. The Board of Health, Assessor's Office and the Planning Department are other examples where staffing is deemed to be inadequate and a number of departments, boards, and commissions have limited administrative assistance. Other department staffing needs, notably Police and Fire, are often determined by national standards.

An overall examination of staffing needs should be undertaken across town government. A municipal management consultant should be engaged to study long-term needs. As the Town continues to grow, demand for services is likely to increase which puts more stress on existing staffing and resources.

### Form of Government

Sturbridge has a fairly centralized government that includes a Town Administrator, Board of Selectmen and Open Town Meeting. Under the Open Town Meeting form of government, all of the Town's registered voters can set the Town's budget, appropriate money for capital projects and adopt local bylaws. This body of voters, who attend and make decisions at Town Meetings, is Sturbridge's legislative branch. The Town's elected five-member Board of Selectmen is the executive branch. This Board of Selectmen appoints the Town Administrator, who is the chief administrative officer of the Town.

In addition, Sturbridge has a mix of paid professional staff as well as volunteer committees. Table 8.4 provides information about the various boards, committees and commissions in Sturbridge.

**Table 8.4**      **Boards, Committees and Commissions**

	# Members	Elected/Appointed	Term
Agricultural Commission	5	Appointed	3
Board of Assessors	3	Elected	3
Board of Health	3	Elected	3
Board of Selectmen	5	Elected	3
Burgess Elementary School Building Committee	14	Appointed	Indefinite
Community Preservation Committee	9	Appointed	3
Conservation Commission	5	Appointed	3
Council on Aging	9	Appointed	3
Cultural Council	5	Appointed	3
Design Review Committee	5	Appointed	5
Economic Development Committee	5	Appointed	Indefinite
Energy Advisory Committee	7	Appointed	Indefinite
Finance Committee	9	Appointed	3
Historical Commission	5	Appointed	3
Housing Partnership	5	Appointed	3
Lakes Advisory Committee	15	Appointed	Indefinite
Library Trustees	9	Elected	3
Local Emergency Planning Committee	15	Appointed	Indefinite
Open Space Committee	5	Appointed	Indefinite
Personnel Committee	5	Appointed	3
Planning Board	7	Appointed	5
Recreation Committee	5	Elected	3
Recreational Trail Master Plan Committee	9	Appointed	Indefinite
School Committee (Sturbridge)	5	Elected	3
School Committee (Regional)	Variable	Elected	3
Street Light Committee	3	Appointed	3
Tourist Association	7	Appointed	3
Town Hall/Center Office Building Committee	14	Appointed	Indefinite
Traffic Safety Committee	5	Appointed	3
Trails Committee	5	Appointed	Indefinite
Tree Warden Advisory Committee	5	Appointed	3
Zoning Board of Appeals	7	5 elected, 2 appointed	3

Source: Sturbridge Town Charter, Town of Sturbridge website, Board of Selectmen Secretary Judy Knowles



As the Town has seen its population grow, particularly in the last decade, there has been some discussion about whether a different form of government—particularly a Representative Town Meeting—could better serve the needs of the community. Potential changes in the form of government and government operations were also identified as opportunities during the public meeting on the Master Plan and in related surveys.

The Town Charter requires the Board of Selectmen to form a committee every five years to study the “working of town government.” The committee can recommend procedures for revising the charter. Only a charter commission elected under Massachusetts General Laws, however, can propose changes to the form of government, according to Sturbridge’s charter. Such a commission could analyze the potential advantages and disadvantages of changing to a Representative Town Meeting form of government. State law also allows communities to adopt, revise or amend their charters by a special act of the State Legislature with approval by the Governor.

## Recommendations

- ▶ Establish a Building Committee to comprehensively review short- and long-term needs of other Town buildings. As the Town continues to grow, the demand for services and facilities will continue to grow from residents, businesses, and visitors. Overall, it appears that many municipal facilities are facing problems associated with the combination of being extended beyond their capacity coupled with a degradation of the physical condition of the buildings. Several department heads indicated that they anticipate the need to improve or expand existing facilities in order to meet staffing or service needs over the next five to ten years. The total fiscal impact of these improvements have not been fully analyzed and understood, and it is unlikely that they can all occur concurrently. A comprehensive building survey could more directly assess what improvements are needed, when they are needed and how much they are estimated to cost. This will help the Town prioritize the improvements, budget for the work, and seek supplemental sources of funding such as grant money. The recommendations and priorities identified in the ADA study can be folded into this effort.
- ▶ Similarly, the anticipated growth of the Town is likely to create a need for additional staff to provide necessary services for residents, businesses, and visitors. It would be useful to predict with more certainty the level of staffing that may be required for the various town departments over the next five to ten years so that those fiscal needs can be identified. A number of departments are short-staffed and there is a need to create new positions, most notably an Economic Development Director. The Town should engage a municipal management consultant to assess long-term staffing needs for the Town.
- ▶ Some facility needs are more apparent and immediate. Upgrade and expand the Public Safety Building and the DPW Garage and Maintenance Facility so that both buildings can meet current and future needs of the Town. As a first step, it is recommended that the Town hire an architect to study the facilities and evaluate how they can be best upgraded. The recommendations in the ADA study should be incorporated into any facility improvements.



- ▶ The Library Trustees prepared a Long Range Plan in 2007. It assesses the current state of facilities and services, and it outlines the steps that need to be taken to achieve community goals into the future. The plan serves as a good model for other departments.
- ▶ Establish a Sustainability Task Force that is charged with developing sustainability principles or guidelines that can be incorporated into Town operations, policies and regulations and applied to Town projects (including new or renovated municipal facilities). These principles should include energy and water conservation, green building materials, use of alternative energy sources and minimizing waste. See also the Energy and Sustainability chapter.
- ▶ Conduct a study that looks at alternative strategies for solid waste management in Sturbridge. Such a study should assess the overall cost effectiveness of each option.
- ▶ Promote recycling, expand recycling services to include businesses and begin to develop plans to expand the recycling center. Alternative waste disposal options should also be studied in light of the eventual capping of the landfill.
- ▶ Conduct a parking study at the library in order to determine how the required dedicated parking standards can be met before submitting an application for grant money for library expansion and improvements.
- ▶ The Town is currently updating its Open Space and Recreation Plan (OSRP). A 2007 Field Study Subcommittee report made recommendations as to specific field needs. The Recreation Committee also is looking at plans for new fields. The new OSRP should consolidate all these plans and prioritize recommendations for field improvements, new facilities, and coordination of maintenance efforts.
- ▶ Explore options for consolidating/streamlining local boards/committees to clarify the responsibilities of each and identify potential overlaps in responsibility, particularly with respect to open space, trails, and recreation.
- ▶ Develop long-term strategic visions for each department, board, and commission, possibly through external staff or consulting support. Continually seek ways to collaborate with non-government agencies and other towns to provide government, utility, cultural, and human services.
- ▶ Explore options for digitizing records/files as storage is an issue facing several departments, especially given some of the new public records and open meeting requirements.
- ▶ Encourage Department heads to utilize the capabilities of the Town's Virtual Town Hall website and to keep their pages up to date so as to provide residents with current information about town services.

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## 9. Energy and Sustainability

### Introduction

**Energy use and sustainability have widely been recognized as playing an important role in shaping a community's future. Decisions about energy use made by public and private sectors can help determine, for example, whether a community is able to meet its current and future energy needs. Just as importantly, a community's financial stability largely depends on its ability to meet rising energy costs, and the health of its environment depends on its ability to reduce environmental pollution.**

This chapter will focus on energy use and sustainability in Sturbridge and highlight measures the Town has taken to reduce current levels of energy consumption. It will also outline challenges the Town faces in its effort to become more energy efficient and sustainable. By providing recommendations for reducing energy use and improving sustainability, this chapter will help the Town of Sturbridge meet future energy needs, reduce greenhouse gas emissions and cut energy costs.

### Energy and Sustainability Goals

- ▶ Work toward becoming a Green Community by meeting state criteria for the designation
- ▶ Promote sustainability in municipal and public operations, starting with a Sustainability Task Force that can advise and support sustainability efforts by Town departments
- ▶ Encourage energy efficiency, conservation, and sustainability in Sturbridge to reduce energy consumption and cost
- ▶ Establish best management practices and economically-viable technologies in future construction, renovation and maintenance of public buildings and facilities
- ▶ Reach out to the community as a whole to inform and educate residents and businesses regarding energy conservation, recycling and sustainability principles

### State Context

The Commonwealth of Massachusetts has recognized the importance of a sustainable energy policy for the continued prosperity of its 351 cities and towns. One of the most relevant policy initiatives is the Green Communities Act of 2008. The resulting Green Communities Division of the Office of Energy and Environmental Affairs is charged with providing resources to the cities and towns of Massachusetts enabling them to pursue a path towards energy efficiency, and the adoption of renewable energy sources. Some of the resources that the Green Communities Division provides are:

- ▶ Education about the benefits of energy efficiency and renewable energy
- ▶ Guidance and technical assistance through the energy management process

- ▶ Facilitation of informed decisions and actions
- ▶ Collaboration through shared best practices among cities and towns
- ▶ Local support from regional Green Communities coordinators
- ▶ Opportunities to fund energy improvements<sup>1</sup>

The adoption and utilization of statewide initiatives such as Green Communities will be a crucial part of Sturbridge's effort to increase energy efficiency and reduce dependence on non-renewable sources of energy. These initiatives not only provide opportunities for collaboration with the Commonwealth, but also provide necessary building codes and zoning bylaws which may be adopted by the town and are discussed in more detail later in this chapter.

### Energy Efficiency, Conservation and Sustainability

The Town of Sturbridge and Tantasqua Regional/School Union 61 Districts have taken several steps to promote energy efficiency and conservation. Energy efficiency refers to efforts to reduce or limit the amount of energy used to accomplish a goal, such as heating a building. Energy conservation, on the other hand, refers to the wise use or management of energy. Sustainability centers on the idea of meeting the needs of the present without compromising the ability to meet the needs of future generations.

#### Building Projects

Many of the strategies pursued in Sturbridge to reduce energy consumption have been through building projects. As mentioned in the Public Services and Facilities chapter, the Town is in the process of renovating and building an addition on Burgess Elementary School. The project, expected to be complete in 2013, will employ green building techniques and energy efficiency initiatives as the school building has been designed to meet Massachusetts Collaborative for High Performance Schools Criteria (MA – CHPS).<sup>2</sup> Initiatives will include rainwater collection, energy efficient electrical fixtures, automatic light shutoffs, and the use of recycled steel in construction.<sup>3</sup> In addition, photovoltaic panels will be installed on a small portion of the roof that faces south.

The Tantasqua Regional School District is also installing photovoltaic panels on the rooftops of its two regional schools.<sup>4</sup> This installation is expected to be the largest of any school district in the state. (Other renewable energy sources or projects have not been pursued in Sturbridge.)

1 Executive Office of Energy and Environmental Affairs, 2010

2 Charlie Blanchard, Burgess Elementary School Building Committee

3 Energy and Sustainability Focus Group Issues Paper, based on interviews with Principal Daniel Carlson

4 Chris Tanguay, "Tantasqua looks to Sun," Southbridge Evening News, June 13, 2010

The Town Hall project, completed in 2010, includes fewer energy efficiency or sustainable practices than the Burgess Elementary School project due largely to cost constraints. However, one example of an efficiency measure that was implemented was the use of motion-activated lighting, to reduce unnecessary electricity consumption.

### Green Communities

The Town has applied for, and been selected to receive, Green Communities Planning Assistance from the Massachusetts Department of Energy Resources (DOER).<sup>5</sup> The assistance, which is expected to begin late in 2010, will help the Town meet the criteria for becoming a Green Community. The five criteria are as follows:<sup>6</sup>

- ▶ Provide as-of-right siting in designated locations for renewable/alternative energy generation, research and development, or manufacturing facilities
- ▶ Adopt an expedited application and permit process (1 year) for as-of-right energy facilities
- ▶ Establish benchmarks for energy use and develop a plan to reduce baseline by 20 percent within five years
- ▶ Purchase only fuel-efficient vehicles
- ▶ Require all new residential construction over 3,000 square feet and all new commercial and industrial real estate construction to minimize life-cycle costs

Sturbridge has made progress on some of these criteria. Specifically, Town Meeting adopted expedited permitting in accordance with Massachusetts General Laws Chapter 43D in April 2010.<sup>7</sup> One way to meet the last criteria listed above is the adoption of the Stretch Code. The Stretch Code is an appendix to the state building code which applies additional energy efficiency performance standards to residential buildings greater than 3,000 square feet and commercial buildings greater than 5,000 square feet. The Green Communities Planning Assistance will help the Town develop an action plan to meet the remaining criteria. Should the Town meet these criteria and be designated a Green Community, it will become eligible to receive grants for municipal renewable energy and energy efficiency projects.

### Energy Advisory Committee

The Town of Sturbridge formed an Energy Advisory Committee in 2010 to advise the Board of Selectmen on energy-related matters. The seven member committee, which first met in January, aims to identify strategies, funding sources and renewable energy opportunities to lower municipal, school and

<sup>5</sup> Energy and Sustainability Focus Group Issues Paper

<sup>6</sup> Green Communities Planning Assistance Program, [http://www.mass.gov/Eoeea/docs/doer/green\\_communities/grant\\_program/GC%20Planning%20Round%202%20Application.pdf](http://www.mass.gov/Eoeea/docs/doer/green_communities/grant_program/GC%20Planning%20Round%202%20Application.pdf)

<sup>7</sup> Sturbridge Zoning Bylaws, [http://www.town.sturbridge.ma.us/Public\\_Documents/SturbridgeMA\\_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5](http://www.town.sturbridge.ma.us/Public_Documents/SturbridgeMA_PlanningDocuments/Zoning%20Bylaw%202010?FCItemID=S02B54AC5)

community energy expenditures and reduce greenhouse emissions.<sup>8</sup> So far, the committee has largely focused on working toward the designation of Sturbridge as a Green Community. That has included the application for the Green Community Planning Assistance mentioned earlier. Going forward, the committee anticipates helping the Town meet the outstanding Green Communities criteria.<sup>9</sup> This could include assisting with an energy audit of municipal buildings, vehicles and street lighting.

### Recycling

The Town owns and operates a Recycling Center where residents can dispose of most household waste for free. They must remove certain items from their trash, however, including cans, glass, paper, plastic and metals. There is also a shed where residents can leave items for reuse by other people. As mentioned in Chapter 8, approximately 63 to 67 percent of everything that is brought to the Recycling Center and Landfill is recycled. (Additional information about the Recycling Center is provided in the Public Services and Facilities chapter.) There has been an increase in the number of people recycling at the Center in the last few years, and this trend could continue, particularly if the Town promotes the recycling program through education.

### Water Resources

As discussed in the Natural, Historic and Cultural Resources chapter, Sturbridge has many water bodies that are cherished by the community. Specifically, there are several large ponds and lakes that not only enhance the town's natural beauty but also provide residents and visitors with passive and active recreational opportunities. There have been efforts to monitor the water quality of these water resources, and those efforts should continue. The lakes and ponds should also continue to be protected from pollution and other potential negative impacts from development. (See the Natural, Historic and Cultural Resources chapter for more information and recommendations.)

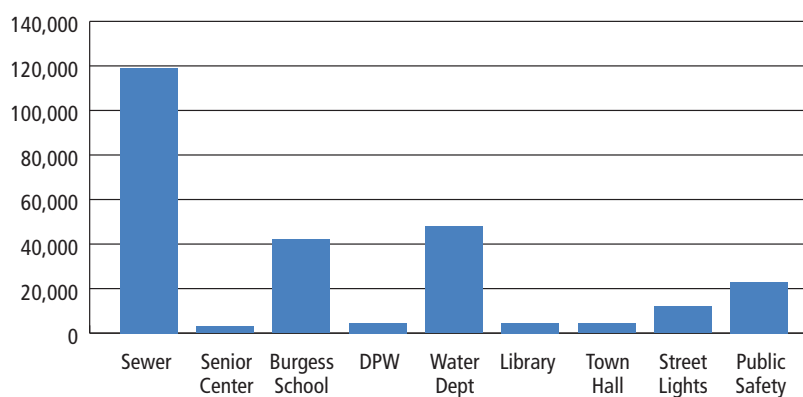
### Challenges

There are several challenges to increasing energy efficiency and reducing emissions in Sturbridge, and they should be addressed if the Town hopes to make gains going forward. First, the Town does not have an energy use baseline against which it can establish goals for reducing energy consumption and promoting sustainability. In 2009, the Hampshire Council of Governments analyzed municipal energy usage in Sturbridge in order to determine how much money the Town could save if it purchased electricity from its Hampshire Power program. (The Town subsequently switched its electricity supplier to Hampshire Power.<sup>10</sup>) That data has been summarized in Figure 9.1. The chart shows that among municipal properties, the Town's sewer facilities used the most energy on average per month. While noteworthy, this information would be more useful if annual trends could be determined and tracked.

<sup>8</sup> Kenneth Elkinson, Energy Advisory Committee member

<sup>9</sup> John Schneider, Energy Advisory Committee chair

<sup>10</sup> Geoff Rogers, Hampshire Power

**Figure 9.1** Average Monthly Energy Usage by Municipal Property\*

\*Includes months between November 2008 and October 2009. Does not include municipal properties that average less than 600 kWh/month.  
Source: Hampshire Power and Sturbridge Town Accountant

In addition to lacking a baseline, the Town does not have any established goals for energy usage, waste reduction or recycling.<sup>11</sup> Similarly, the Town does not have a process for undergoing annual energy audits. Such audits would help determine how effective and efficient the Town's energy usage is and if progress is being made toward energy goals. Burgess Elementary School, for example, has conducted energy audits in the past, the most recent one occurring several years ago.<sup>12</sup> As a result of the last audit, the school replaced its fluorescent lighting with more energy efficient lighting. The school also made other improvements, which have lowered its energy bills.

Currently, the Town uses its budgeting process as its primary way to review and potentially reduce energy use and costs. Recognizing that other, more effective means exist, the Town has signed up to use MassEnergyInsight, a free, web-based tool that provides cities and town with energy use information for municipally owned and operated buildings, streetlights, and vehicles.<sup>13</sup> The information can be used to develop an energy use baseline, monitor ongoing usage and show results of energy efficiency investments.

Overall, there is wide support among Sturbridge officials, including the Board of Selectmen, to assess energy usage and enhance energy policies.<sup>14</sup> However, there are limited resources—both in terms of money and manpower—available to pursue these goals. As noted by the Energy and Sustainability focus group, the Town does not have a designated employee responsible for overseeing and monitoring energy usage in Sturbridge. The recent formation of the Energy Advisory Committee, though, is a laudable first step. This Committee will likely be involved in the future implementation of strategies to increase energy efficiency and promote sustainability in Sturbridge.

11 Energy and Sustainability Focus Group Issues Paper

12 Ibid (Principal Daniel Carlson)

13 Energy and Sustainability Focus Group Issues Paper

14 Ibid.



## Resources

The Massachusetts Executive Office of Energy and Environmental Affairs provides numerous resources to help cities, towns, businesses and residents to become more energy efficient.<sup>15</sup> For example, the state's website offers information about the Green Communities Grant Program for municipalities, tax incentives for homeowners to invest in energy efficiency upgrades, and Energy Feasibility Audits for businesses and institutions. Mass Save, an initiative sponsored by gas and electric companies in Massachusetts, also provides information about numerous services, incentives and trainings available in the state.<sup>16</sup> Its website is [www.masssave.com](http://www.masssave.com).

National Grid offers a variety of programs that can help residents and businesses learn more about energy efficiency and minimize their energy consumption. The company provides everything from energy saving tips to a heating system comparison calculator. These resources can be found on National Grid's websites, [www.myenergytips.com](http://www.myenergytips.com) and [www.nationalgridus.com/masselectric/home/energyeff/energyeff.asp](http://www.nationalgridus.com/masselectric/home/energyeff/energyeff.asp). The company is also asking customers to reduce their energy by 3 percent a year for the next 10 years as part of its "3% Less Initiative."

## Land Use

The issue of sustainability has been a growing concern in land use planning in recent years. As municipalities experience increased growth, especially on more marginal land, there has been an increasing awareness of the long-term ramifications of our growth patterns on the environment. In other words, as stated in the American Planning Association (APA) Policy Guide on Planning for Sustainability, planners should worry about "whether the Earth's resources will be able to meet the demands of a growing human population that has rising aspirations for consumption and quality of life, while maintaining the rich diversity of the natural environment or biosphere." The patterns of human development, whether they are physical, social, and economic, affect sustainability at the local and the global level. The very nature of planning is "integrally related to defining how, where, and when human development occurs, which affects resource use."<sup>17</sup>

Using the principles listed in Appendix 5 as a guide, this Plan and other actions taken by the Town can help to move Sturbridge towards a policy of promoting sustainability.

## Recommendations

To make gains in energy efficiency and sustainability, the Town must pursue strategies on multiple fronts. For example, the Town should look into new renewable energy sources while striving to reduce energy consumption in existing buildings. Recommendations related to water resources have been included in the Natural, Historic and Cultural Resources chapter.

<sup>15</sup> Massachusetts Executive Office of Energy and Environmental Affairs, <http://www.mas.gov/?pageID=eoasubtopic&L=3&LO=Home&L1=Energy,+Utilities+27+Clean+Technologies&L2=Energy+Efficiency&sid=Eeea>

<sup>16</sup> Mass Save, <http://www.masssave.com/>

<sup>17</sup> American Planning Association, Policy Guide on Planning for Sustainability, April 2000 (<http://www.planning.org/policy/guides/adopted/sustainability.htm>)

## Municipal Operations

- ▶ The Energy Advisory Committee should establish a long-range plan for energy efficiency in Sturbridge and work to prioritize projects necessary to achieve that goal.
- ▶ Conduct a detailed energy audit of all properties in Sturbridge owned by the Town and Regional School District. This includes examining the Town's vehicle fleet to determine where more fuel efficient vehicles can be bought and looking at street lights to identify where more efficient lighting can be used. (Examining energy use by department would allow the Town to better understand and compare consumption across departments.)
- ▶ Develop a schedule and process for conducting these audits on an annual basis.
- ▶ Identify Town employees who will be responsible for this task. The Energy Advisory Committee could provide support.
- ▶ Use the energy audit to establish a baseline for municipal energy use.
- ▶ Establish goals for reducing municipal energy use, and develop a long-range energy reduction plan to meet these goals. This plan should include a list of prioritized projects for municipal buildings and the Town's vehicle fleet. (The Green Communities criteria call for developing a plan to reduce the baseline by 20 percent within five years.)
- ▶ Pursue funding sources to make energy efficiency improvements.
- ▶ Lead by example in government operations:
  - Employ energy conservation and efficiency policies and standards when practicable such as LEED building standards and Energy Star equipment and system purchases.
  - Employ renewable energy sources where and when practicable.
- ▶ Among the other tools that can be used by municipalities to track energy consumption is the Energy Star Portfolio Manager, which is a free energy and water consumption tracking software program available on the Energy Star website.<sup>18</sup> Consumption can be tracked in individual buildings as well as a combination of numerous buildings. Another is available at no charge to members of the International Council for Local Environmental Initiatives (ICLEI)—the Clean Air and Climate Protection (CACP) Software. This tool can calculate and track emissions of criteria air pollutants and reductions in greenhouse gases. It can assess buildings, vehicle fleets, waste, wastewater treatment, and street and traffic signals.<sup>19</sup>
- ▶ In order to implement these recommendations, the Town should consider establishing a dedicated staff position for addressing energy efficiency and sustainability.

<sup>18</sup> See [http://www.energystar.gov/index.cfm?c=evaluate\\_performance.bus\\_portfoliomanager](http://www.energystar.gov/index.cfm?c=evaluate_performance.bus_portfoliomanager)

<sup>19</sup> See <http://www.icleiusa.org/action-center/tools/cacp-software>

### Sustainability Task Force

- ▶ The Town should establish a Sustainability Task Force by developing a mission statement and bylaws that will enable the Task Force to carry out the specific recommendations set out in this Plan.
- ▶ Working with the Energy Advisory Committee, develop a Sustainability Strategic Plan for Sturbridge. Include staff and officials from all departments in development of the plan and subsequent training on its recommendations.
- ▶ Within the Sustainability Strategic Plan, develop a set of sustainability principles, including but not limited to energy and water conservation, green building materials, use of alternative energy sources, and minimizing waste, which can be incorporated into Town operations such as requests for proposals, area plans, and maintenance contracts.
- ▶ Working with the Planning Board and Town departments, review and evaluate the Town's current bylaws and policies for sustainability issues such as water, energy, materials, and waste, and identify steps to improve or amend these over time.
- ▶ Seek grant funds to complete other innovative projects that increase public awareness and support municipal leadership on sustainability issues.

### Green Communities

- ▶ Continue working to meet the criteria to be designated a Green Community. Planning Assistance from the DOER should facilitate this process.
- ▶ Pursue the adoption of the Stretch Code and other measures which encourage the construction of zero net energy buildings.

### Renewable Energy Sources

- ▶ Pursue the use of photovoltaic panels and thermal systems in Town buildings where it is technically and economically feasible. Explore other locations which could be suitable for solar energy installations such as the capped landfill.
- ▶ Study the feasibility of developing wind energy and recommend sites that may be feasible for wind energy generation.
- ▶ Promote the use of solar power (thermal and photovoltaic) in new developments as well as in existing homes and educate residents of the resultant fiscal benefits. For new projects, this could be done through bylaws and incentives such as density bonuses or fee waivers as well as utilization of the Commonwealth's Chapter 40 A Section 9B.

### Recycling

- ▶ Establish goals for increasing recycling at the Town's Recycling Center. This could include a zero-waste goal, which would be measured by the amount of trash that went into the landfill each year.
- ▶ Promote recycling, composting and water collection by distributing educational material to households and businesses, placing recycling cans at strategic locations in commercial areas, putting composting bins and rain barrels at the Recycling Center, and expanding the "Take It or Leave It" shed at the Recycling Center.
- ▶ Consider purchasing composting bins and rain barrels in bulk and providing them to residents at discounted rates.

### Energy Efficiency and Conservation

- ▶ Develop and implement a municipal buying strategy whereby the Town commits to purchasing Energy Star equipment and eco-friendly office products as financially feasible.
- ▶ Establish outreach programs to encourage businesses and residents to follow suit in their purchase and use of energy-saving appliances and eco-friendly products.
- ▶ Provide software tools, instructional information and guidance to residential and non-residential energy users concerning energy conservation, efficiency and sustainability. Conduct education and outreach programs for the general public.
- ▶ Provide residents and businesses with information about tax incentives, grants, energy-saving programs and other services that promote energy efficiency and sustainability.

### Building Codes

- ▶ Require building owners to complete, and make available to tenants, annual "energy certificates" which track a building's annual energy consumption.
- ▶ Adopt the Commonwealth's Stretch Code.
- ▶ The Energy Advisory Committee should evaluate the costs and benefits associated with requiring new commercial construction to be solar ready and make recommendations as to the appropriateness of the Town of Sturbridge making such a standard mandatory.

### Zoning and Land Use

- ▶ Review the Zoning Bylaws and consider amendments that would encourage mixed-use and compact development which can reduce dependence upon the automobile.
- ▶ Adopt measures which invoke or utilize Chapter 40A Section 9B to protect "solar access" by regulating the orientation of new streets, building lots, as well as building height, and setback.

- ▶ Adopt zoning bylaws which address and reduce regulatory barriers to low energy homes, energy efficiency retrofits and renewable energy installations.
- ▶ Encourage the use of Energy Star, LEED and other green building standards in new residential and commercial projects as well as renovations. Incentives can be provided for encouraging the building of new developments that meet such standards.
- ▶ Provide incentives for new development to occur in areas where municipal services, roads and utilities are already available. Minimize development patterns that extend into undeveloped areas by maintaining a protected edge around neighborhoods and natural resources.

As illustrated by APA, planning for sustainability includes the following processes, practices and outcomes.

Planning processes include:

- ▶ Making planning decisions in a holistic and fully-informed manner that involves all segments of the community and the public and private sectors.
- ▶ Educating all age groups to raise public understanding of and regard for the future consequences of current planning decisions and ultimately change human behavior.

Planning practices include:

- ▶ Developing a future-oriented vision, which look beyond current needs and recognizes environmental limits to human development.
- ▶ Fostering projects/activities that promote economic development by: efficiently and equitably distributing resources and goods; minimizing, reusing and recycling waste; and protecting natural ecosystems.
- ▶ Upholding a widely held ethic of stewardship that strongly encourages individuals and organizations to take full responsibility for the economic, environmental, and social consequences of their actions, balancing individual needs and wants with nature and the public good.
- ▶ Taking leadership in the drafting and implementation of local, regional and state policies that support sustainability.

Planning outcomes include:

- ▶ Local and regional development patterns that expand choice and opportunity for all persons, recognizing a special responsibility to address the needs of those that are disadvantaged.
- ▶ Resilient, diverse, and self-sufficient local economies that meet the needs of residents and build on the unique characteristics of the community to the greatest extent possible.
- ▶ Communities with a healthy economy, environment and social climate that function in harmony with natural ecosystems and other species and allow people to lead healthy, productive and enjoyable lives.

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# 10. Implementation

## Introduction

**This chapter is arguably the most important in the entire Master Plan. The implementation chapter is based on the goals and objectives of this Master Plan and the data that was collected and analyzed. To ensure the implementation of these actions on a year-to-year basis, the Town of Sturbridge should clearly identify some entity comprised of representatives from Town staff and existing boards and commissions and other key stakeholders that will be charged with ensuring that this plan is used and followed. This entity will be responsible not only for coordinating overall implementation of the plan, but would also work to ensure that public outreach and education is achieved. Specifically, the best options are to either create a Town Administrator-appointed Master Plan Implementation Committee that would operate under the auspices of the Planning Board, which is already charged with official adoption of the Plan pursuant to M.G.L. c. 41 §81D, or to have the board itself play that role.**

The implementation chapter is often the most difficult component of a Master Plan. Unlike the lofty goals and objectives of the previous sections, here is where the rubber meets the road, where the planning ideals are translated into concrete actions. The following recommendations can sometimes be difficult to commit to and problematic to review over time. Items that have been accomplished fade from view, while the more intractable problems linger for years. Financial and political trends may change, advancing some items while leaving others untouched. For these reasons alone, many communities are hesitant to put in writing the full scope of their intentions.

The following implementation plan intends to deliver on the promise of the goals and objectives expressed throughout this process, with a program of tangible steps for the Town to take over the next ten years and beyond. There is a high level of activity on these issues, based upon the input received during the planning process. These actions are targeted to address the physical as well as the organizational issues confronting the Town, as described and analyzed throughout this plan. The recommendations described below work to correct these “process” problems, while still maintaining a focus on the substantive issues of land use and community design; housing; economic development; open space and recreation; natural, cultural and historic resources; transportation; public services and facilities; and energy and sustainability.



It is important to recognize that the master plan recommendations are the first steps of the implementation program. Further study will be necessary before actions are taken on the specific recommendations, especially zoning, where consideration of environmental conditions, traffic and safety, and community character must be reviewed. In many cases, there will be additional opportunities for a public dialog and process.

In order to ensure follow-through on the recommendations of this plan and provide some “accountability” for plan implementation, the Town should consider some mechanism for reporting on progress on a regular basis. Regular communication is critical. This reporting should include updates on progress and achievements as well as information on barriers to implementation that have been identified. Some communities provide this information by reporting to the Planning Board and/or Town Meeting, as well as in the annual Town Report. Another community has developed a follow-up evaluation form that specifically lists each action item and asks for responses. It is important to note that planning is a dynamic process and priorities can shift over time. A consistent review process allows for these issues to be acknowledged while keeping each specific recommendation on the table unless a situation dictates that it be reconsidered. A regular evaluation or follow-up procedure will at least indicate how a particular action item was ultimately addressed or call out items that still need attention.

The table below summarizes the specific recommendations found at the end of each of the plan’s elements. However, they are organized by function (i.e. land use and zoning, data collection, transportation, etc.). Thus, recommendations from several plan elements may actually be listed under land use and zoning. The department, board or commission responsible for implementing each recommendation is identified. Multiple entities are listed by action items that require coordination or collaboration among different departments or boards. Levels of priority are also assigned to assist in determining the timeframe in which each item is to be considered. Note that short term is 1–3 years; medium term is 4–7 years; and long term is 8 years or more. If funding is required to achieve success, potential sources for the funds are listed.

## Implementation Plan

### Responsible Parties

- ▶ Assessor – Town Assessor
- ▶ BOS – Board of Selectmen
- ▶ Capital – Capital Planning Committee
- ▶ CPC – Community Preservation Committee
- ▶ Con. Comm. – Conservation Commission
- ▶ CC – Cultural Council
- ▶ DPW – Department of Public Works
- ▶ EAC – Energy Advisory Committee
- ▶ Finance – Finance Department
- ▶ His. Comm. – Historical Commission
- ▶ HP – Housing Partnership
- ▶ Library – Library Trustees
- ▶ OSC – Open Space Committee
- ▶ PB – Planning Board
- ▶ PLAC – Public Lands Advisory Committee
- ▶ Planning – Planning Department
- ▶ Rec. Comm. – Recreation Committee
- ▶ Recreation – Recreation Department
- ▶ SLAC – Sturbridge Lake Advisory Committee
- ▶ TC – Trails Committee
- ▶ TA – Town Administrator

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source *
Data Collection			
Update demographic and housing data once the U.S. Census data for 2010 is released	Planning	Short term	
Inventory town-owned land and tax title property to identify potential parcels for use as affordable housing sites	Planning, Assessor	Short term	
Continue to inventory the built environment, identify properties eligible for listing in the National Register of Historic Places, and pursue such listings	His. Comm.	Ongoing	
Consider the preparation of a community-wide archaeological inventory	His. Comm.	Medium term	
Land Use and Zoning			
Adopt an Inclusionary Zoning bylaw and consider including a provision whereby developers can give a cash payment in-lieu of affordable units	PB, HP	Medium term	
Allow (or allow by special permit) mixed-use developments in more zoning districts like the Commercial district	Planning, PB	Short term	
Consider amending the Multiple Dwelling Project chapter of the Zoning Bylaws	Planning, PB	Short term	
Provide incentives for new development to occur in areas where municipal services, roads and utilities are already available and maintain a protected edge around neighborhoods and natural resources	Planning, PB, EAC	Short term	
Ensure that there is an adequate supply of suitably zoned industrial land available to support future development	Planning, PB	Medium term	
Prepare a Corridor Improvement Plan for the Commercial-Tourist (CT) District <ul style="list-style-type: none"> <li>• Develop a scaled-base map showing parcel boundaries and other features</li> <li>• Develop a Capital Improvement Plan for all recommended infrastructure upgrades</li> <li>• Identify potential redevelopment sites</li> <li>• Revise zoning bylaws to allow more flexibility in types and scale of uses permitted in the CT District</li> <li>• Identify potential locations for centralized, shared parking facilities</li> <li>• Create conceptual plans for redevelopment on selected sites</li> <li>• Establish a façade improvement fund to assist property owners</li> <li>• Explore financing options for renovating or redeveloping the mill site at Holland Road and Route 20</li> </ul>	Planning, PB	Long term (short term planning)	
Consider establishing a new zoning district around the former motel known as The Lodges to serve as a gateway to the CT District	Planning, PB	Short term	
Consider expansion of Business/Industrial zoning on the east end of Route 20 from Route 84 interchange to the Charlton town line	Planning, PB	Short term	
Create a new mixed-use medical zone on Route 131	Planning, PB	Short term	
Revise the purpose and development requirements of the Special Use District to provide alternative development options	Planning, PB	Short term	
Consider revising the historic commercial zone along Route 15 to reflect existing hospitality related uses	Planning, PB	Short term	

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source *
Overhaul nonresidential zoning regulations by updating and expanding permitted uses and revising boundaries of the General Industrial district	Planning, PB	Short term	
Land Use and Zoning			
Consider adopting a Low Impact Development (LID) bylaw to minimize post-development stormwater runoff and further protect the town's water resources	Planning, PB, Con. Comm.	Short term	
Consider enacting a lakes overlay district for areas surrounding the lakes of specific concern	Planning, PB, SLAC	Short term	
Adopt zoning bylaws which address and reduce regulatory barriers to low energy homes, energy efficiency retrofits and renewable energy installations	Planning, PB, EAC	Short term	
Ensure that any zoning revisions consider and incorporate best practices for such environmental protections as stream buffers or shoreline setbacks	Planning, PB, Con. Comm.	Ongoing	
Initiate and support local bylaws that will encourage preservation of /historic assets	PB, Hist. Comm.	Medium term	
Consider modifying the demolition delay bylaw to include buildings more than 50 years of age and extend the delay period to one year	PB, Hist. Comm.	Medium term	
Develop access management and traffic impact study guidelines and incorporate them into the Zoning Bylaws and subdivision regulations	Planning, PB, DPW	Medium term	
Consider zoning amendments that would encourage mixed-use and compact/ clustered development in areas served by transportation infrastructure	Planning, PB	Medium term	
Encourage the use of green building standards	Planning, PB, EAC	Medium Term	
Amend the Zoning Bylaws to further regulate the number, size, style and location of signage throughout town	Planning, PB	Short term	
Inventory town-owned land and tax title property to identify potential parcels for use as affordable housing sites	Planning, Assessor	Short term	
Create a table of uses in the Zoning Bylaws to replace the existing narrative listing of uses in each zoning district	Planning, PB	Short term	
Consolidate all of the definitions in the Zoning Bylaws into one section	Planning, PB	Short term	
Create a separate section for parking in the Zoning Bylaws, and consider updating the parking regulations and putting them into a table	Planning, PB	Short term	
Consider encouraging future development along Routes 20 and 131 into nodes at key locations, preserving natural areas between the nodes using tools such as transfer of development rights	Planning, PB	Medium term	
Establish a form-based code to encourage better building layout and design	Planning, PB	Medium term	
Consider the costs and benefits of establishing zoning incentives to encourage reinvestment and redevelopment of existing properties	Planning, PB	Medium term	
Use appropriately-scaled gateway landscape treatments and pedestrian-scaled "places" within the CT District	Planning, PB	Short term	
Encourage streetscape improvements that create gateways to Sturbridge along Route 131 near the Town Common	Planning, PB, DPW	Ongoing	

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source*
<b>Housing</b>			
Consider a buydown program whereby the Town buys down market-rate homes, deed restricts them as affordable and sells them to income-qualified, first-time homebuyers	HP, CPC	Medium term	CPA
Create a policy whereby projects with a certain amount of on-site affordable housing receive priority within the sewer allocation process.	HP, Planning, CPC	Medium term	
Create a home improvement program whereby the Town provides zero- or low-interest loans to qualified residents	HP, Planning, CPC	Short term	CPA, Community Development Block Grant (if for low/mod income)
Create a downpayment/closing cost assistance program whereby the Town provides grants or loans to income-eligible, first-time homebuyers	HP, CPC	Short term	CPA
Provide incentives to rehabilitate older housing or subdivide residential properties to create opportunities to allow senior citizens to stay in their homes	Planning, PB	Short term	CPA
<b>Economic Development</b>			
Create a more integrated approach to economic development within the town <ul style="list-style-type: none"> <li>• Provide incentives/directives to bring economic development and tourism-related oversight groups together</li> <li>• Create a database of town businesses and available development sites</li> <li>• Encourage closer cooperation of marketing and events with Old Sturbridge Village</li> </ul>	TA, Planning	Medium term	
Consider creating a business incubator to support the establishment and growth of small businesses both within Sturbridge and on a cooperative basis with neighboring towns	TA, BOS	Long term	Massachusetts Economic Development Fund
Maintain a "pro-business" environment within Town government <ul style="list-style-type: none"> <li>• Identify key position on town staff (or create a new position) responsible for economic/business coordination, monitoring and outreach</li> <li>• Establish a program that provides recognition of excellence for existing businesses</li> </ul>	TA, BOS, Planning	Medium term	
Consider making additional tax or financing incentives available to existing businesses or as tools for attracting future development	Finance	Long term	
Examine Town-owned vacant or underutilized land for possible "highest and best use" as future economic development sites	PLAC, Planning	Medium term	
Identify priority development sites for inclusion in the Central Massachusetts Regional Planning Commission's Comprehensive Economic Development Strategy	PB, Planning	Medium term	
Encourage growth in the town's hospitality, entertainment and recreation businesses by supporting regional efforts to promote tourism	BOS	Ongoing	
Continue to participate in the Southern Worcester County Community Development Corporation's efforts to foster regional cooperation	TA	Short term	
<b>Open Space and Recreation</b>			
Incorporate existing reports and plans on fields into the new Open Space and Recreation Plan and prioritize recommendations	OSC	Short term	
Continue to identify, prioritize and preserve open space and recreation resources based upon pre-determined criteria for prioritizing acquisitions	OSC, Rec. Comm., CPC	Ongoing	CPA, Massachusetts Land and Conservation Fund, Massachusetts Local Acquisitions for Natural Diversity Program

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source *
Research and monitor funding opportunities for the creation or preservation of open spaces	OSC	Short term (ongoing monitoring)	
Expand public access to open spaces, particularly around the lakes and along the Quinebaug River	Con. Comm., OSC, TC	Medium term	
Maintain and enhance existing open spaces and recreational facilities <ul style="list-style-type: none"> <li>• Develop a maintenance plan for Town-owned properties and incorporate any major improvements into the Town's larger Capital Improvement Plan</li> <li>• Examine whether additional staff or staff hours are needed to oversee open spaces, parks and recreational facilities</li> </ul>	Recreation, DPW, Capital, TA	Medium term (ongoing maintenance)	CPA
Provide recreational opportunities for all ages, and consider developing a community center, football field and multi-use sports field	Rec. Comm., Recreation	Ongoing (long term development)	CPA, Massachusetts Parkland Acquisitions and Renovations for Communities Program
Continue developing trails	TC, Con. Comm.	Ongoing	CPA, Massachusetts Local Acquisitions for Natural Diversity Program
Capitalize on small vacant properties to create pocket parks and other open spaces	OSC, Con. Comm., CPC	Long term	CPA, Massachusetts Land and Conservation Fund
Increase public awareness of open space and recreational facilities	Recreation, Rec. Comm., OSC	Ongoing	
Support the Sturbridge Trails Committee and the development of the Trails Master Plan	TC	Ongoing	
Educate the public about existing walking trails	TC	Ongoing	
Natural Resources			
Continue monitoring the water quality of the lakes to determine which are in need of cleanup or protection	SLAC	Ongoing	
Ensure that any new access points to the Quinebaug River protect water quality and shoreline vegetation	Con. Comm., SLAC	Ongoing	
Identify critical resource areas encompassing streams, ponds and other water bodies for conservation and preservation	Con. Comm., OSC	Short term	
Evaluate opportunities and locations that could be used to facilitate wildlife crossings and connect habitat areas within the town	Con. Comm., OSC	Medium term	
Seek funding to fully evaluate and document the wildlife habitat values and natural communities in town	Con. Comm., OSC, CPC	Medium term	
Educate agricultural landowners about the state's voluntary Agriculture Preservation Restriction Program	Ag. Comm.	Ongoing	
Continue working to meet the criteria to be designated a Green Community	Planning, EAC	Short term	
Natural Resources			
Evaluate the costs and benefits associated with wind and solar energy for municipal use and private development	EAC	Long term	
Promote recycling, composting and water collection by distributing educational material to households and businesses	DPW	Short term	
Establish goals for increasing recycling at the Town's Recycling Center	DPW	Short term	

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source*
Cultural and Historical Resources			
Educate residents of the importance of maintaining the historic character of Sturbridge	His. Comm.	Ongoing	
Continue developing more in-depth regional partnerships and programs with organizations with similar preservation and educational goals	His. Comm.	Ongoing	
Continue the preservation and improved access to important Town documents by seeking additional funds	His. Comm.	Ongoing	CPA
Continue to support the Town's implementation of the CPA for historical preservation	His. Comm., CPC	Ongoing	
Use arts to create a local identity for residents and capitalize on tourist attractions to make the town a destination for annual cultural events	CC	Short term	
Transportation			
Develop distinct gateways, particularly at each end of the Main Street section of Route 20	Planning, DPW	Medium term	
Develop scenic streetscapes by landscaping, medians, undergrounding utilities, using period lighting in the CTD and replacing faded crosswalks	Planning, DPW	Medium term	
Consider traffic calming measures such as curb extensions, narrowed travel lanes, rumble strips, raised crosswalks and roundabouts	Planning, DPW	Short term	Chap. 90
Prioritize bridge repairs along Holland, Champeaux and Farquahar roads	DPW, TA	Long term	
Consider making improvements to intersections along Route 20 and Route 131	DPW, TA	Long term	Chap. 90, TIP funds
Provide a more safe and walkable environment through new/upgraded sidewalks, crosswalks, countdown pedestrian signal heads and other measures	BOS, Planning, DPW	Medium term	Chap. 90
Make Sturbridge more bikeable through the development of a Bicycle Master Plan, installation of bicycle racks and bicycle lanes, and other measures	PB, Planning	Medium term	
Transportation			
Increase public transportation options: <ul style="list-style-type: none"> <li>• Review CMRPC research for fixed bus route to connect Sturbridge with Southbridge and Webster through WRTA</li> <li>• Expand paratransit service</li> <li>• Research the possibility of creating a Sturbridge tie-in with tour buses between Boston and New York City</li> <li>• Explore feasibility of a seasonal shuttle trolley to points of interest</li> <li>• Assure that Sturbridge has a representative on the WRTA Advisory Council</li> <li>• Launch an educational campaign to inform residents of public transportation options</li> <li>• Advertise the Park and Ride lot at the Bethlehem Lutheran Church with signage on I-84 and I-90</li> </ul>	BOS, Planning	Long term (short term research and education)	

## Implementation Chart

Recommendation	Responsibility	Priority/Timing	Potential Funding Source*
Create two consolidated public parking areas, one on each end of Route 20	BOS, Planning	Long term	
Work collaboratively with MassDOT to remove existing sign clutter along Route 20	DPW	Ongoing	
Commission a "Way-finding Program" to assist visitors	PB	Medium term	
Improve consistency of traffic signage throughout Town with Manual on Uniform Traffic Control Devices guidelines	Planning	Short term	
Enhance entry of visitors approaching from Connecticut at Route 15 through informational signage	DPW	Short term	
Public Services and Facilities			
Revise wastewater management plan to reflect capacity required for future economic development initiatives	DPW	Short term	
Upgrade and expand the Public Safety Building and the DPW Garage and Maintenance Facility	BOS, Capital	Long term (short term planning)	
Consider projecting the level of staffing required for Town departments over the next five to ten years	TA	Short term	
Encourage Town departments to develop long range plans modeled after the one prepared by the Library Trustees	TA	Medium term	
Establish a Sustainability Task Force that is charged with developing sustainability principles or guidelines for the Town and future projects	TA, BOS	Short term	
Conduct a parking study at the library	Library	Medium term	
Explore options for consolidating/streamlining local boards and committees	TA, BOS	Short term	
Explore options for digitizing records/files to address storage issues	TA	Medium term	
Encourage Department heads to utilize and keep current the Town's Virtual Town Hall website	TA	Ongoing	
Develop a long-range plan for energy efficiency	EAC	Short term	
Conduct an energy audit for Town and Regional School District properties	EAC	Short term	Utility programs
Establish goals to reduce municipal energy use to meet Green Communities criteria	EAC	Medium term	Utility programs
Establish a dedicated staff position for energy efficiency and sustainability	TA	Short term	
Conduct a study to look into solid waste management alternatives	DPW, TA	Short term	





# Appendix 1

## Survey and Public Participation

In April 2010, the University of New Hampshire Survey Center conducted a survey for the Sturbridge Master Plan effort. Residents were asked about their attitudes and opinions of the community, town services, open spaces, development, and transportation issues. Three thousand and forty-nine (3149) randomly selected household members were sent a survey and nine-hundred and thirty (930) Sturbridge residents responded. The resultant response rate of 30 percent is very respectable for a survey of this type. The following is a summary of the key findings from the survey.

- ▶ Half of Sturbridge residents (51%) said they moved to Sturbridge because of the quality of life, followed by rural town character (45%), location (42%), schools (39%), historic town character (31%), job/employment (23%), born/raised in Sturbridge (19%), shops/stores/restaurants (15%), public amenities (9%), recreation (6%), the tax structure (1%), and 10 percent stated some other reason.
- ▶ Half of Sturbridge residents (49%) rate the town’s ambulance/paramedic services as excellent, followed by fire protection/rescue services (48%), police services (43%), the library (43%), senior citizen services (31%), recycling center (31%), public works (10%), and parks and recreation facilities (9%).
- ▶ When asked to indicate the three most important reasons for the town to manage, acquire and/or preserve open space, more than half of Sturbridge residents (56%) said “to protect water quality and resources,” followed by “preserve forests and woodlands” (46%), “passive recreation” (44%), “wildlife preservation” (34%), “scenic vistas” and “rural character” (31%), “preservation of historic assets” (24%), “sports fields” (22%), “long-term economic benefits” (19%), “agriculture” (5%), “hunting” (5%), “snowmobiling/4-wheeling” (4%), and some other reason (4%).
- ▶ Eight in ten Sturbridge residents (80%) favor (37% “strongly favor” and 43% “favor”) the Town providing more dedicated bike routes, followed by walking trails (78%), picnic areas (70%), canoe/kayak public access (68%), playgrounds (62%), indoor sports recreation (57%), team playing fields (57%), ice skating (54%), outdoor swimming (47%), tennis courts (35%), horse-back riding trails (23%), 4-wheeling/ATV/snowmobiling trails (16%), and hunting areas (16%).
- ▶ In Sturbridge overall, a vast majority of Sturbridge residents favor a movie theatre (85%), followed by more health care services (72%), more art galleries, boutiques, and small retail (71%), historic/cultural museums (64%), assisted living facility (57%), light industrial (54%), health spa resort (52%), service industry (52%), office development (46%), shopping mall/big box/outlets (45%), mixed use (44%), and amusement/theme parks (29%).
- ▶ Along Route 15, four in five (81%) Sturbridge residents favor a movie theatre, followed by recreational facilities (73%), small scale retail (64%), restaurants (60%), light industrial (59%), office buildings (59%), assisted living facility (55%), hospital/medical treatment facility (53%), a shopping mall (50%), health spa resort (45%), lodging (45%), bank (44%), campground (36%), amusement park (33%), single family homes (32%), and multifamily dwellings (16%).

- ▶ Town residents believe the town should investigate and or encourage participation in alternative types of transportation: sidewalks (85%), dedicated bike routes (82%), seasonal in-town trolley (58%), regional bus services (54%), carpool/rideshare programs (46%).
- ▶ Sturbridge residents describe the following streets/intersections as unsafe: Route 20 and New Boston (57%), Route 131 and Fiske Hill Road (53%), Route 20 and Fiske Hill Road (52%), Route 131 and Hall Road (43%), Route 20 and Hall Road (42%), Route 20 and Arnold Road (42%), Route 131 and Shepard Road (30%), Route 49 and Putnam Road (11%), entire length – Whittemore Road (11%), Route 15 and River Road (10%), Mashapaug Road and Breakneck Road (8%), Route 49 and Walker Pond Road (8%), entire length – Brookfield Road (7%).
- ▶ Sturbridge residents describe the following streets/intersections as congested: Route 131 and Fiske Hill Road (84%), Route 131 and Hall Road (79%), Route 20 and New Boston (76%), Route 20 and Hall Road (76%), Route 20 and Fiske Hill Road (72%), Route 20 and Arnold Road (71%), Entire length – Brookfield Road (49%), Route 131 and Shepard Road (48%), Route 49 and Walker Pond Road (28%), Route 49 and Putnam Road (25%), Route 15 and River Road (20%), Entire length – Whittemore Road (19%), Mashapaug Road and Breakneck Road (17%).

The survey was only one part of the overall public participation effort. Additionally, there were two town-wide public forums – one at the early stages of the planning process and one towards the end.

On Saturday, November 21, 2009, the Town of Sturbridge convened a public forum to discuss the 2010 Master Plan Update project. Approximately 80 people attended the forum, which was held at Old Sturbridge Village from 8:30 AM until 12 noon. The forum was attended by Jean Bubon, AICP, Town Planner; Sandra Gibson-Quigley, Chair of the Master Plan Steering Committee; members of the Master Plan Steering Committee; and representatives from the VHB and RKG consulting team (Ralph Willmer, FAICP; Juli Beth Hinds, AICP; Joe Wanat, P.E., PTOE; and Mike Casino).

After a presentation on Sturbridge land use and demographic data, a Strengths, Challenges, Opportunities and Threats (SCOT) analysis was conducted. Participants were asked to describe aspects of living, working, shopping and playing in Sturbridge that was both positive and negative. After the lists were generated, they were given four “voting dots” which were to be placed next to those items that the audience thought were the most important issues to address in the master planning process. The results of this analysis can be found in the Appendix to this Plan.

The second forum was held on Thursday, November 18, 2010 from 6:30 pm–9:00 PM at Paige Hall at the Publick House. This forum was attended by approximately 75 people. The presentation focused on the key findings from the research and data gathering phase of the project for each plan element. The major recommendations were summarized, followed by discussion and comments from the audience.

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## Appendix 2



### **Public Forum Report – November 21, 2009**

On Saturday, November 21, 2009, the Town of Sturbridge convened a public forum to discuss the 2010 Master Plan Update project. Approximately 80 people attended the forum, which was held at Old Sturbridge Village from 8:30 AM until 12 noon. The forum was attended by Jean Bubon, AICP, Town Planner; Sandra Gibson-Quigley, Chair of the Master Plan Steering Committee; members of the Master Plan Steering Committee; and representatives from the consulting team (Ralph Willmer, AICP; Juli Beth Hinds, AICP; Joe Wanat, P.E., PTOE; and Mike Casino).

After a presentation on Sturbridge land use and demographic data, a Strengths, Challenges, Opportunities and Threats (SCOT) analysis was conducted. Participants were asked to describe aspects of living, working, shopping and playing in Sturbridge that was both positive and negative. After the lists were generated, they were given four “voting dots” which were to be placed next to those items that the audience thought was most important issues to address in the master planning process.

The results are listed below.

### **SCOT ANALYSIS**

#### **STRENGTHS**

- Schools ●●●●●
- Highway access & location
- Open space & common areas ●●●●●
- Historic quality & continuity
- Old Sturbridge Village ●●●●●●●●●●
- Sturbridge “Brand” & identity
- Natural resources – lakes, ponds, river ●
- Tax base ●
- Community Preservation Act
- Library
- Town support for and quality of public services & senior center

- Conference center
- 43D zoning (streamlined permitting process for commercial development on parcels of land designated as priority development sites)
- Recycling center
- Number of hotel rooms
- Balance – economic growth & preservation
- Low crime rate
- Conference space
- Bike trails
- Historic character & continuity ●●●●●
- Community involvement generally
- Location within New England
- Water: lakes, ponds, river ●●
- Beauty of landscape-trees, hills, lakes
- Low crime rate – sense of safety
- Passive recreation & trails ●
- Restaurants & variety of unique shops ●
- Park land (state and local)
- Part of “Last Green Valley”
- The balance that the town strives to maintain ●

## CHALLENGES

- Job opportunities lacking – high commuting time ●
- Continuity & integration of assets
- Traffic congestion
- Lack of public transportation (especially for seniors)
- Walkability & transit ●●●●●●●●●●
- More, better shopping, nearby ●
- Development of economic base ●●●●●
- Lack of recreational ball fields (soccer, baseball, golf, swimming)  
●●●●●●●●●●●●●●●●●●●●
- Divisive town politics
- Keep identity but be progressive (with respect to development)
- Commercial sprawl that imperils mom & pop retail – need to protect “charm” retail
- Public beach
- Coherent open space preservation ●●●
- Water resource preservation awareness (sustainability) ●●●●●
- Revenue vs. open space ●
- Storm water & roadway infrastructure
- Town water & town sewer ●
- Main St. identity – Rt. 20 vs. Rt. 131 ●

- ●

## OPPORTUNITIES

- ●**



- “You are what you see from the roads” ●
- Conference meeting space/hotel capacity & accessibility
- Symbiosis between OSV & other village/retail/services ●
- Coming together around “Americana” theme
- Encouraging visitors to add a day for tourism-recreation, national areas - build brand identity & market ●
- Outdoor activities, especially winter–skating, XC ski, festival–in addition to horses, biking, hiking ●●●●●
- Re-evaluate town committee structure & purpose
- Find ways to engage others (Fish & Wildlife, non-profits) in stewardship & management of land & resources
- Bring D.O.D. & other visitors from Southbridge conf into Sturbridge
- Professional forums on economic development
- Marketing plan & PR
- Highway image – place to stop
- More tourist/family destinations – year round – open space package to market ●
- Zero waste policy ●●
- Re-evaluate town committee structure & purpose
- Combine open space & share responsibility ●

### THREATS

- Charlton
- Global warming ●●●
- Sidewalk quality or lack of (ADA mobility lacking) ●●●
- Declining trends
- Ability of government to deal with threat ●
- Growth in surrounding communities & neg. impacts
- Perception of being not business friendly ●●●●●●
- Rural identity threatened by retail expansion ●●●●
- Economy going up or down
- Lack of engagement in community activism
- Perception is major threat ●●
- Zoning stymies business opportunities ●●●●●●
- Traffic – I-90, I-84, Route 20 ●●●
- Traffic off I-90 onto Route 20 ●●
- Town meeting time and format not conducive to parents of children, consider daycare
- Regional bus (Peter Pan) used to come – no public transportation options
- Residents vs. tourists
- Communication on desired outcomes
- Not enough reasons for tourists to extend a stay ●
- Going too far to support tourism

- Casinos, other large uses that like the highway access
- Disconnect between zoning & desired outcomes ●●
- OSV's long-term outlook
- Political polarization need to find ways to be positive & common ground ●●●●●
- Loss of regional bus transit
- Ability of form of government to deal with threats ●
- Providing times & access for people beyond current form & schedule
- Misinformation – letters in paper become “facts”
- Need reality check on facts – growth rates, etc. ●
- Large uses in border towns do affect town
- Rural identity – if retail expands & further suburbanized ●●●●
- Lack of community diversity – feels “stagnant” ●
- Rezoning without a plan for “fast money” ●●●
- A lack of local news coverage & common outlet that is trustworthy

### **MASTER PLAN SURVEY QUESTIONS**

A sample of survey questions were asked that gave participants an opportunity to quickly give their opinion on six different issues facing the Town. A more detailed survey will be mailed to each household in early 2010. The results were as follows.

**Question 1. Do you favor or oppose mixed-use development with both residential and commercial uses in the same building?**

1. Strongly favor – 25%
2. Somewhat favor – 37%
3. No opinion – 10%
4. Somewhat oppose – 10%
5. Strongly oppose – 17%

**Question 2. Do you favor or oppose purchasing farmlands, forests, and open space for conservation?**

1. Oppose, not needed – 15%
2. Favor, but not with higher taxes – 34%
3. Favor, even with higher taxes – 52%

**Question 3. Are you satisfied or dissatisfied with the amount of recreational facilities such as parks, playgrounds, and ballfields?**

1. Very satisfied – 5%
2. Somewhat satisfied – 23%
3. Not very satisfied – 31%

4. Very dissatisfied – 41%

**Question 4. What would you like to see happen to the Rt. 15 corridor?**

1. Leave it as is – 22%
2. Allow limited development in designated areas – 21%
3. Allow small scale commercial development – 32%
4. Allow large-scale commercial development – 25%

**Question 5. What would you like to see happen to the Commercial-Tourist District on Rt. 20?**

1. No changes are needed at this time – 2%
2. Pedestrian-friendly with commercial uses that serve local needs, but not tourism-based businesses – 13%
3. Pedestrian-friendly setting with tourism-based businesses – 78%
4. Encourage commercial development without hampering automobile travel – 8%

**Question 6. What is the most pressing transportation need?**

1. Improve condition of roadways – 6%
2. Build and/or repair sidewalks – 44%
3. Congestion – 25%
4. Lack of mass transit options – 17%
5. Bicycle access and safety – 6%

**BREAK OUT GROUPS**

The next part of the forum involved eight breakout groups that were asked to answer a series of questions. Each attendee at the forum had an opportunity to participate in two different groups. The breakout groups discussed the following topics:

- First session
  - Land Use
  - Housing
  - Economic development
  - Transportation
- Second session
  - Natural, cultural and historic resources
  - Public facilities
  - Energy and sustainability
  - Open space

Each group was asked to answer several questions. The following is a synopsis of the questions and group responses from each breakout session.

## HOUSING

1. Identify the most successful housing developments in Town? What makes them successful?
  - Preserve open space
  - Older development in general – large acreage, variety in architecture
    - Tall Pines has sidewalks and lanterns
    - Historic District – mixed use
    - Walker Pond has open spaces, ball field in neighborhood, beach, feeling of community, variety of housing, association
    - Crescent gate – variety of condos, quality of life, common rooms, proximity to Town
    - Sturbridge Hills – walkable and good location
2. Identify the 3 biggest housing-related challenges in Sturbridge?
  - Affordable housing in general
  - Retirement lower income housing
  - Building senior housing around amenities with transportation and walkable
3. How has Sturbridge approached these in the past? Discuss remedies to help overcome these challenges.
  - Town has not approached this subject in the past
    - Review zoning laws
    - Continue work on the guideline form to create a clear direction for projects to flow through the process

## LAND USE

1. What are your top three land use objectives for Sturbridge? (These could include topics such as village centers; mix of uses; density; natural resources; accessibility/connections)
  - Natural resources – maximize value and identify ways to create tourism activities; expand awareness of and activities on the lakes
  - Protection of resources
  - Public uses – residential
  - Tourism use/commercial
  - Green corridors
  - Find a way to use resources and land to develop economic opportunities for residents
  - History of decentralized village – 1800 maps show Fiskdale/Common area as population centers
  - Mill-based history and charm – don't lose identity
  - Safety and accessibility in conjunction with youth-based outlets
  - Cluster housing – implement recent bylaw (open space helps transportation)
  - Mixed use – variety
  - Expand commercial base vs. light industry (quality vs. quantity in commercial)
  - Diversity is needed, including telecommuting
2. What are the biggest obstacles to achieving these objectives?
  - State controls Rt. 20
  - River cross over on Main St.
  - Lack of sidewalks

- Outsourcing
  - Lack of parking
  - Lack of bike racks
  - Obstacles to light industry
    - Resources and cheap labor
    - Example – Evergreen outsourcing
  - Infrastructure – lack of water and sewer
  - Cost reduction in revenue – tax incentive financing
  - Current economic conditions
  - Differentiating our community
  - Develop zoning for biomed research
  - Technology backbone – lack of high speed internet
  - Developing common vision
3. How can the Town be better prepared to manage growth and development?
- Define communities
  - More aggressive on positives and outreach to obtain them
  - Focus needs to be on coordinating efforts that work for Sturbridge
  - Push the positive attributes, increase awareness of resources (natural and highway infrastructure)

#### ECONOMIC DEVELOPMENT

1. In terms of economic development (jobs, retail, office, industry), what do we want/need in Sturbridge?
- Maintain existing business
  - Complimentary businesses (retail-small)
  - Light industry/high quality jobs
  - Non-retail, non-service jobs
  - Municipal parking infrastructure, sidewalks
  - Outreach to businesses – wants/needs
  - Need Economic Development Coordinator position in Town government
  - Recognition of business/welcome wagon
    - Need info on how to navigate the Sturbridge government
  - Merchants Association/Regional Chamber/Sturbridge Tourism Association (don't all get along)
  - Improved information to businesses/residents
    - Website/overall navigation
  - Encourage diverse economic base
    - Ball fields/tournaments/recreation
    - Publicize trail system
    - Indoor winter recreation
    - Leverage infrastructure
    - Co-op marketing
    - Eco-tourism

- Family recreation/entertainment
  - Hospital/clinic
2. What should the Town be doing to achieve those goals?
    - Shop
    - Movies/entertainment
    - Ball fields/tournaments – can host large regional tournament in Sturbridge and cross-market with OSV
    - Need to find cross-marketing investments
  3. How critical is the tourism focus and how important should it be in the future (include any thoughts on the Commercial-Tourist zoning district)?
    - Clarify identity – Sturbridge not really a tourist town – it is a town with tourist attractions in it
    - Update and enhance tourism experience – leverage it, but it is not core of local economy
    - People do not associate OSV with an actual community that has other things that people want to do
    - Create better tourism experience – leave OSV and feel like you are still in New England

## TRANSPORTATION

1. What part of the transportation system works well in Sturbridge? What part does not work well?
  - Crosswalks & sidewalks (lacking, Route 131, ADA, maintenance)
  - Rt. 20 congestion
  - Mass DOT roads – more cars
  - Divided highway is barrier – pedestrians, bikes, business access
  - Senior Center/Pizza Shop – Arnold Rd.
  - Crosswalk enforcement – state law
  - Municipal parking area on Rte. 20. (Commercial district) & shuttle
  - More pedestrian friendly – Mass DOT challenge
  - No public transportation
  - No marked bike lanes or signs
  - Bike bridge across river – across to wetlands for pedestrians/bikes
  - Nothing works well – lots of problems
  - Elder bus runs well. Paratransit works - needs to improve turn-around service
2. What are your concerns regarding mobility in Sturbridge, including the Commercial-Tourist zoning district (vehicles, pedestrians, bicyclists, bus, etc)?
  - Paramedic transportation has improved
  - Casella Rt. 131 access is detriment (weight of the traffic)
    - Rt. 20 rutting, example
  - Rt. 20 to 131 right-turn lane
  - Weigh trucks more
  - Pilot station out of way
  - Rt. 20/Hobbs Corner getting worse – trucks/eyesore

- Car carriers, heavy & fast moving
  - Way finding issues – bury utility lines or move them to back side of buildings
  - Cedar/Rt. 20 traffic light – good spot, flashing lights
  - Slow traffic down – calming devices such as plastic reflectors
  - 35 MPH on Rt. 20, should be closer to 25
  - X-way to 148 - beautification – streetscaping & traffic calming
  - Gateway creation
  - Signage clutter is a detriment
  - I-90 toll elimination – diversion
  - Not very stroller-friendly area – more sidewalks
3. Please tell us of something that has been completed in the last 5-10 years that has improved transportation in Sturbridge, if applicable. Tell us of something that has made transportation conditions worse.  
(No time to discuss)
  4. If you could fix 3 transportation problems in Sturbridge, what would they be? Suggest 2 or 3 remedies (for each) that may help overcome these issues (Assuming no constraints)
    - Covered to some extent above.

#### OPEN SPACE & RECREATION

1. Identify Sturbridge's most significant open space assets? How has the Town performed in preserving/developing/utilizing them?
  - Wells State Park and OSV land that was purchased by town (which includes the River Lands and 838 additional acres)
  - Open Space isn't promoted to out-of-towners
  - Signage is going up on much of the land soon, and brochures will be provided to identify the trails and the allowed uses.
  - Trails are currently being developed on the properties and then the trails will be promoted.
  - Property on Finlay Road is part of a certified forestry cutting program, and the proceeds for the wood that is sold will be used to pay for trail development on other properties
2. Identify any additional resources that may be considered critical in Sturbridge's open space network.
  - None identified
3. What are the most significant recreational needs? If new facilities are needed, identify potential locations.
  - Need additional active recreation facilities in town. Adult ball fields could be used to host regional sports tournaments. This would bring in more customers for the town's restaurants. Identify the appropriate open space in town for active recreation use and use CPA funds to make this happen.
  - There was consensus to open up the area along the Quinebaug River in the Commercial/Tourist district and build a river walk to make the river more visible and accessible.
  - There was consensus for the Town to purchase the Holland Mill property (at the corner of Holland Rd. and Route 20), which is riverfront property. It could be used for open space and housing.
  - Recreational opportunities

- Running track such as Webster Lake has (Lake Chargoggagoggmanchauggagoggchaubunagungamaugg). The whole community uses this (all ages). Healthy, safe, scenic.
- Public running/bicycling infrastructure
- Safety
- Walking and hotels
- Parks & places for dog walking & play areas – people meet there too

## NATURAL, CULTURAL & HISTORIC RESOURCES

1. What do you consider to Sturbridge's greatest natural, cultural and historical assets? Briefly evaluate their condition.
  - Use OSV more as a resource
  - Town Common – in good condition; encourage continued preservation of area
  - Natural beauty, open space and water – better utilize these resources
  - Hall estate
  - Hobbs Brook
2. Are there opportunities to improve these resources? Think about existing assets as well as the potential to identify new ones.
  - Old buildings and cemeteries
    - Town Hall
    - Blackington Building
  - Geographic location
  - Open space conditions vary
  - Need to make a connection between OSV and Town
  - Understand value of local history
  - Historical Society and materials
    - Needs a place
  - Encourage people to learn and understand their history – what is historical significance?
  - Make connections between planned trails and existing resources
  - Bring in families for sports tournaments
3. Can natural resources be better utilized in Sturbridge? How?
  - Opportunities for recreation
  - Plans need to be more public and tie in together
    - Media communications/public relations
    - Town website improvements

## PUBLIC SERVICES & FACILITIES

1. What types of new or expanded public facilities are needed in the future? (consider location of new facilities, if needed).
  - Internet - telecommunications - public zones & speed (FIOS)
  - Public parking – Main Street
  - Sports recreation – skating rink (indoor & out) indoor family recreation center (Rt. 15)
  - Sidewalks – Main Street
  - Water access, public swimming areas



- Teenager hang out areas – central & observable
  - Walking/biking bridge across river
  - Crosswalks/Rt. 20 beginning section
  - DPW is stretched thin
  - Need to make sure we can maintain
2. Which municipal services serve the community best? What enables these services to perform well?
    - Police, DPW, Senior Center
    - Town Planner very active
    - Recycling center – expand
    - School system
    - School survey (How many children do you hope to have, when will you have them)
    - Recycling – open up for business community, zero waste policy – more support for DPW, public health, pay as you throw
  3. Which town services or facilities are not meeting the needs of the community? What is needed to improve the performance of these services?
    - Funding for road maintenance & repair, catch basin maintenance, brush cutting
    - Enhanced internet infrastructure
    - DPW lacks funding to tackle issues – sidewalks
    - Better interaction/integration between departments
    - Expansion of school services
    - Town's water supply - sodium levels
    - Increased waste treatment
    - Surveys – include teenagers (important demographic)
      - Need activities for teens to keep them
      - “Know Your Community” for teens
    - Economic development services
    - Board of Health – full time support
    - Need more resources to expand services
    - Water supply/sodium
      - possibly caused by road salting (Mass DOT)
      - town does not use salt
    - Better way to solicit adult volunteers

#### ENERGY & SUSTAINABILITY

1. What should the Town do to reduce its “carbon footprint”?
  - Waste management
  - Alternative energy sources-house-solar, etc.
  - Pedestrian/bicycle friendly
  - Internet/telecommuting (FIOS)
  - Energy audits – incentives to qualify for funding waste water, etc.
  - Co-op/farmers markets encourage use of local agriculture
  - Carpooling/connecting park & ride
  - Recycling
2. Where should new development occur in order to enhance energy efficiency and sustainability?
  - Attract “lite” industry – green industries
  - Explore wind/solar energy sources

- Development to utilize existing resources
- 3. What other things could be done to incorporate energy and sustainability principles into daily life in Sturbridge?
  - Recycle, composting at transfer station, buy local
  - Encourage/educate residents on recycle, composting at transfer station, buy local
  - Town purchase renewable energy
  - Bio-fuels/recycle
  - Committee to focus on this issue



# Appendix 3

## Massachusetts Cultural Resources Information System MACRIS Search Results

Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.A	Sturbridge Common Historic District		Sturbridge	
STU.B	Sturbridge Fair Grounds Area		Sturbridge	
STU.C	Snellville		Sturbridge	
STU.D	Old Sturbridge Village		Sturbridge	
STU.E	Fiskdale		Sturbridge	
STU.F	Fiske Hill		Sturbridge	
STU.G	Bob's Trailer Park		Sturbridge	
STU.909	Tantiusques Reservation Site		Sturbridge	
STU.113	Snellville District #2 Schoolhouse	Arnold Rd	Sturbridge	1874
STU.147	Fiskdale Mills Worker Housing	Bates Ct	Sturbridge	1873
STU.148	Fiskdale Mills Worker Housing	Bates Ct	Sturbridge	1873
STU.85	Sturbridge Coach Motor Lodge	Cedar St	Sturbridge	1972
STU.86		Cedar St	Sturbridge	1984
STU.87	Sturbridge Veterinary Hospital	Cedar St	Sturbridge	1966
STU.88	Shumway, Livingston House	Cedar St	Sturbridge	1840
STU.12		Chamberlain St	Sturbridge	1800
STU.13		Chamberlain St	Sturbridge	1800
STU.14	Corey - Merrick Block	Chamberlain St	Sturbridge	1800
STU.15	Franklin, Benjamin House	Charlton St	Sturbridge	1790
STU.16	Ladd, George S. House	Charlton St	Sturbridge	1800
STU.17	Drew, Clarence House	Charlton St	Sturbridge	1929
STU.18	Warner, Roswell House	Charlton St	Sturbridge	1810
STU.20	Pelton, L. House	Charlton St	Sturbridge	1835
STU.21		Charlton St	Sturbridge	1820
STU.22	Plimpton, Arthur House	Charlton St	Sturbridge	1935
STU.23		Charlton St	Sturbridge	1830
STU.24	Gifford, H. F. House	Charlton St	Sturbridge	1790
STU.46	Fuller, C. Cordwainer Shop	Charlton St	Sturbridge	1840
STU.25	Bachelor, James House	1 Charlton St	Sturbridge	1836
STU.166	Fiskdale Mills Worker Housing	Church St	Sturbridge	1873
STU.167	Fiskdale Mills Worker Housing	Church St	Sturbridge	1873
STU.168	Fiskdale Mills Worker Housing	Church St	Sturbridge	1873
STU.173	Saint Anne Roman Catholic Church and Shrine	Church St	Sturbridge	1883

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Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.174	Saint Anne's Roman Catholic Church Rectory	Church St	Sturbridge	1887
STU.175	Saint Patrick's Roman Catholic Church	Church St	Sturbridge	1883
STU.904	Saint Anne's Roman Catholic Shrine Pavilion	Church St	Sturbridge	
STU.905	Saint Anne's Roman Catholic Outdoor Shrine	Church St	Sturbridge	
STU.49	Fiske, Dea. Henry II House	Fiske Hill Rd	Sturbridge	1815
STU.50	Shephard, Philemon House	Fiske Hill Rd	Sturbridge	1846
STU.52	Fiske, Henry House	Fiske Hill Rd	Sturbridge	1850
STU.53	Fiske, David House	Fiske Hill Rd	Sturbridge	1786
STU.54	Fiske, Daniel III House	Fiske Hill Rd	Sturbridge	1832
STU.55	Fiske, Daniel II House	Fiske Hill Rd	Sturbridge	1811
STU.56	Fiske, Levins House	Fiske Hill Rd	Sturbridge	1820
STU.57	Fiske, Capt. Simeon - Marsh, Simeon F. House	Fiske Hill Rd	Sturbridge	1800
STU.58	Cutting, Ebenezer House	Fiske Hill Rd	Sturbridge	1812
STU.902	Fiske Hill Well	Fiske Hill Rd	Sturbridge	1731
STU.903	Fiske Hill District #9 Schoolhouse Memorial	Fiske Hill Rd	Sturbridge	1949
STU.48	Hobbs, Samuel House	Hall Rd	Sturbridge	1780
STU.41	Haynes House	Haynes St	Sturbridge	1850
STU.42	Dunton, Dea. Zenas House	Haynes St	Sturbridge	1780
STU.169	Fiskdale Mills Worker Housing	Hillside St	Sturbridge	1873
STU.170	Fiskdale Mills Worker Housing	Hillside St	Sturbridge	1873
STU.171	Fiskdale Mills Worker Housing	Hillside St	Sturbridge	1873
STU.172	Fiskdale Mills Foreman's House	Hillside St	Sturbridge	1873
STU.132	Webster - Ward House	Hinman St	Sturbridge	1812
STU.133	Bates, Arthur L. House	Hinman St	Sturbridge	1885
STU.1	Sturbridge Candy and Gift Shoppe	Main St	Sturbridge	1955
STU.2	U. S. Post Office - Sturbridge Main Branch	Main St	Sturbridge	1959
STU.3	Wight, Oliver B. House	Main St	Sturbridge	1835
STU.4	Sturbridge Town Hall	Main St	Sturbridge	1838
STU.10	Federated Church of Sturbridge and Fiskdale	Main St	Sturbridge	1922
STU.11	Hyde, Joshua Public Library	Main St	Sturbridge	1896
STU.26	Coburn, John House	Main St	Sturbridge	1790
STU.28	Gerold House	Main St	Sturbridge	1820
STU.29	Davis, Dea. George House	Main St	Sturbridge	1814

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Inv. No.	Property Name	Street	Town	Year
STU.30	Corey, Dr. Jacob Jr. House	Main St	Sturbridge	1775
STU.31	East Schoolhouse	Main St	Sturbridge	1822
STU.32		Main St	Sturbridge	1825
STU.33	Wheelock and Corey Country Store	Main St	Sturbridge	1790
STU.34		Main St	Sturbridge	1918
STU.35		Main St	Sturbridge	1918
STU.36	Babbit, Erasmus Inn	Main St	Sturbridge	1772
STU.37	Chamberlain, A. B. Grain and Feed Barn	Main St	Sturbridge	1920
STU.38	Griswold - Chamberlain, Clifford House	Main St	Sturbridge	1820
STU.40	Plimpton, Dea. Daniel Store - Corner House	Main St	Sturbridge	1800
STU.43	Haynes Carriage and Paint Shop	Main St	Sturbridge	1835
STU.44	Haynes Blacksmith and Harness Repair Shop	Main St	Sturbridge	1850
STU.45	West Schoolhouse	Main St	Sturbridge	1822
STU.64	Howard, Dr. A. House	Main St	Sturbridge	1825
STU.66	Cranston Blacksmith Shop	Main St	Sturbridge	1906
STU.67	Stone, Maude House	Main St	Sturbridge	1825
STU.68	Hebard, John Double House	Main St	Sturbridge	1910
STU.71	Haynes, Conrad House	Main St	Sturbridge	1940
STU.72	Main Street Trolley Substation	Main St	Sturbridge	1906
STU.73	Mobil Gas Station	Main St	Sturbridge	1971
STU.74	Wight, Oliver House	Main St	Sturbridge	1789
STU.75	Village Victualler	Main St	Sturbridge	
STU.76	Sturbridge Visitor Information Center	Main St	Sturbridge	1965
STU.77	South Worcester Agricultural Society Hall	Main St	Sturbridge	1868
STU.78	Yankee Spirits	Main St	Sturbridge	1960
STU.79	Sturbridge Pumping Station	Main St	Sturbridge	1971
STU.80		Main St	Sturbridge	1965
STU.81		Main St	Sturbridge	1955
STU.82	Tatman, Charles House	Main St	Sturbridge	1941
STU.83		Main St	Sturbridge	1961
STU.84		Main St	Sturbridge	1896
STU.89	Wight, Alpheus House	Main St	Sturbridge	1787
STU.90	Wight Mills Worker Housing	Main St	Sturbridge	1850

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Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.91	Wight House		Main St	Sturbridge
STU.92	Wight, W. Store		Main St	Sturbridge
STU.93	Sturbridge Yankee Workshop	Main St	Sturbridge	
STU.102	Sturbridge Trading Post	Main St	Sturbridge	1957
STU.103	Mandeville Restaurant	Main St	Sturbridge	1945
STU.104	Cheese House, The	Main St	Sturbridge	1971
STU.105	Snell Double House	Main St	Sturbridge	1857
STU.106	Shumway, Livingston House	Main St	Sturbridge	1850
STU.107	Snell Manufacturing Company Double Worker Housing	Main St	Sturbridge	1870
STU.108	Snell Manufacturing Company Double Worker Housing	Main St	Sturbridge	1870
STU.109		Main St	Sturbridge	1936
STU.110	Phillips, Marvin House	Main St	Sturbridge	1895
STU.111	Wight, Frank House	Main St	Sturbridge	1865
STU.112	Gray, Floyd House	Main St	Sturbridge	1949
STU.114	Snell, Lucius House	Main St	Sturbridge	1865
STU.115	Hooker, Marvin House	Main St	Sturbridge	1860
STU.116	Village Farms Roadstand	Main St	Sturbridge	1955
STU.117	Snell Manufacturing Company	Main St	Sturbridge	1912
STU.118	Snell Manufacturing Company Business Office	Main St	Sturbridge	1912
STU.119	Snell Manufacturing Company Auger Shop	Main St	Sturbridge	1855
STU.120	Wight Mills Worker Housing	Main St	Sturbridge	1830
STU.121	Wight Mills Worker Housing	Main St	Sturbridge	1830
STU.122	Wight, Alpheus Barn	Main St	Sturbridge	1787
STU.123	Wight, Alpheus Vinegar House	Main St	Sturbridge	1862
STU.124	Richards, George House	Main St	Sturbridge	1892
STU.125	Guaranty Bank and Trust Company	Main St	Sturbridge	1958
STU.126	Horn of Plenty Gift Shop	Main St	Sturbridge	1957
STU.127	Lincoln, Gov. Levi House	Main St	Sturbridge	1836
STU.128		Main St	Sturbridge	1790
STU.129	Sturbridge Auto Museum	Main St	Sturbridge	1960
STU.130	Bates, Emory L. House	Main St	Sturbridge	1865
STU.131	Adams, Fred House	Main St	Sturbridge	1840

## Massachusetts Cultural Resources Information System

### MACRIS Search Results

Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.134	Parker's Garage	Main St	Sturbridge	1930
STU.135	Webber, N. House	Main St	Sturbridge	1840
STU.136	Charles, T. House	Main St	Sturbridge	1840
STU.137	Fiskdale Baptist Church Vestry	Main St	Sturbridge	1849
STU.138	Taylor, A. P. House	Main St	Sturbridge	1850
STU.139	Fiskdale Mills Agent's House - Drake, Simeon House	Main St	Sturbridge	1850
STU.140	Fiske, Josiah House	Main St	Sturbridge	1845
STU.141	Quinebaug Manufacturing Company Hotel and Store	Main St	Sturbridge	1826
STU.142	Mallahy Building	Main St	Sturbridge	1860
STU.143	Maloney, Timothy Double House	Main St	Sturbridge	1885
STU.144	Chauvin, John Day House	Main St	Sturbridge	1875
STU.145	Kirby Drug Store	Main St	Sturbridge	1870
STU.146	Fiskdale Mills Worker Housing	Main St	Sturbridge	1870
STU.149	U. S. Post Office - Fiskdale Branch	Main St	Sturbridge	1969
STU.150	Sturbridge Pharmacy	Main St	Sturbridge	1967
STU.151	Otis Block	Main St	Sturbridge	1874
STU.152	Fiskdale Mills Fire House	Main St	Sturbridge	1850
STU.153	Fiskdale Mills Double Worker Housing	Main St	Sturbridge	1870
STU.154	Fiskdale Mills Double Worker Housing	Main St	Sturbridge	1870
STU.155	Fiskdale Mills Double Worker Housing	Main St	Sturbridge	1875
STU.156	Fiskdale Mills Foreman's House	Main St	Sturbridge	1875
STU.157	Fiskdale Mills Foreman's House	Main St	Sturbridge	1870
STU.158	Quinebaug Manufacturing Company Worker Housing	Main St	Sturbridge	1830
STU.159	Cartier - Gleason Double House	Main St	Sturbridge	1865
STU.160	Veterans of Foreign Wars - V. F. W. Building	Main St	Sturbridge	1900
STU.161	Sturbridge Fire Station	Main St	Sturbridge	1922
STU.162	Allen, Jacob House	Main St	Sturbridge	1790
STU.176	Heritage Store	Main St	Sturbridge	1965
STU.177	1738 Apartment House	Main St	Sturbridge	1973
STU.178		Main St	Sturbridge	1820
STU.179		Main St	Sturbridge	1935
STU.180	Sturbridge Christian Advent Church	Main St	Sturbridge	1895



## Massachusetts Cultural Resources Information System

### MACRIS Search Results

Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.181	Bacon - Monroe House	Main St	Sturbridge	1850
STU.182	Bacon - Monroe Barn	Main St	Sturbridge	1850
STU.183		Main St	Sturbridge	1823
STU.184	Lombard, David House	Main St	Sturbridge	1835
STU.185	Upham, Horace House and Bakery	Main St	Sturbridge	1860
STU.186		Main St	Sturbridge	1932
STU.187	Brimfield Congregational Church Conference Hall	Main St	Sturbridge	1820
STU.188		Main St	Sturbridge	1920
STU.189	Fiskdale Mills Double Worker Housing	Main St	Sturbridge	1835
STU.190	Fiskdale Mills Worker Housing	Main St	Sturbridge	1826
STU.191	Fiske House	Main St	Sturbridge	1830
STU.192		Main St	Sturbridge	1830
STU.193	Fiskdale Mills - Lower Mill	Main St	Sturbridge	1829
STU.194	Fiskdale Mills - Upper Mills	Main St	Sturbridge	1869
STU.801	Old Sturbridge Burial Ground	Main St	Sturbridge	1750
STU.906	Massachusetts Electric Company Substation	Main St	Sturbridge	1955
STU.907	Fiskdale Ball Field	Main St	Sturbridge	1935
STU.910	Sturbridge Soldiers Monument	Main St	Sturbridge	1871
STU.47	Sturbridge Professional Center	258 Main St	Sturbridge	1970
STU.39	Sturbridge Center School	301 Main St	Sturbridge	1855
STU.27	Hyde, Benjamin D. House	313 Main St	Sturbridge	1833
STU.5	Purdey, J. E. House	Maple St	Sturbridge	1840
STU.6	Wells, B. House	Maple St	Sturbridge	1835
STU.7	Wight, D. P. House	Maple St	Sturbridge	1868
STU.8	Federated Church of Sturbridge - Fiskdale Parsonag	Maple St	Sturbridge	1869
STU.800	North Cemetery	Maple St	Sturbridge	1790
STU.59	Smith, John House	McGilpin Rd	Sturbridge	1820
STU.60	Robbins, Ezekiel House	McGilpin Rd	Sturbridge	1826
STU.61	Fiske, Nathan House	McGilpin Rd	Sturbridge	1802
STU.51		McGregory	Sturbridge	1755
STU.9	Chase House	Morse St	Sturbridge	1870
STU.65	Harrington, C. C. House	New Boston Rd	Sturbridge	1870

## Massachusetts Cultural Resources Information System

### MACRIS Search Results

Search Criteria:	Town(s): Sturbridge; Resource Type(s): Area, Building, Burial Ground, Object, Structure;			
Inv. No.	Property Name	Street	Town	Year
STU.901	Vermont Bridge - Taft Bridge	Quinebaug River	Sturbridge	1874
STU.900	Sturbridge Fairgrounds	Rt 20	Sturbridge	1868
STU.908	Route 20 Bridge over Cedar Pond Outlet	Rt 20	Sturbridge	1956
STU.163	Leodore, Julian Mobile Home	School St	Sturbridge	
STU.164		School St	Sturbridge	
STU.165	Fiskdale Schoolhouse	School St	Sturbridge	1896
STU.94	Snell Manufacturing Company Worker Housing	Snell St	Sturbridge	1870
STU.95	Wight, William House	Snell St	Sturbridge	1850
STU.96	Snell Manufacturing Company Double Worker Housing	Snell St	Sturbridge	1870
STU.97	Snell Manufacturing Company Worker Housing	Snell St	Sturbridge	1870
STU.98	Snell Manufacturing Company Double Worker Housing	Snell St	Sturbridge	1870
STU.99	Snell Manufacturing Company Worker Housing	Sykes Rd	Sturbridge	1850
STU.100	Snell Manufacturing Company Worker Housing	Sykes Rd	Sturbridge	1850
STU.101	Snell Manufacturing Company Double Worker Housing	Sykes Rd	Sturbridge	1850
STU.19	Childs, Isaac Jr. House	Taft St	Sturbridge	1792
STU.69	Massachusetts Department of Public Works	West Main St	Sturbridge	1955
STU.70	New England Telephone Company Building	West Main St	Sturbridge	1950
STU.62	Potter, D. K. House	Whittemore Rd	Sturbridge	1830
STU.63	Rice - Simpson Barn	Whittemore Rd	Sturbridge	1792



# Appendix 4

## Preservation-related Tools and Programs

Many programs exist at the local, state, and federal levels that are available to assist in the preservation of Sturbridge’s important historic resources. Three broad categories of preservation-related programs are described in this section including Local Planning / Protection of cultural resources; Federal and State Regulatory review, and Financial Programs and Incentives.

### Local Planning / Protection

#### *National Register of Historic Places*

The National Register of Historic Places (NRHP) is the nation’s official list of significant historic properties. Properties listed in the NRHP include sites, buildings, structures, districts, and objects that are significant in American history, architecture, archaeology, engineering, and culture. Contrary to popular perception, listing in the NRHP does not limit a property owner’s right to alter, manage, or sell the property when using private funds. Instead, the designation acts as a key to access preservation programs and incentives at the federal, state and local level.

Some of the key benefits to NRHP listing include eligibility for federal and state rehabilitation tax credits, access to income tax deductions for the donation of historic preservation restrictions, and matching grant funds for preservation related projects. NRHP listing also requires consideration in federal, state, and some local planning projects.

NRHP properties must be at least fifty years old (unless they demonstrate exceptional significance) and must possess physical integrity by retaining enough of its original materials to exhibit its historic appearance during the time period of its historic significance. The NRHP recognizes properties associated with famous figures and events, but also acknowledges places that are associated with the history of important themes and trends in American history and pre-history. NRHP listing is accomplished through a nomination process initiated by an individual, or a private or public entity. Property owners may object to the listing through a certified letter to the Sturbridge Historical Commission. If 51% of the property owners within a district object to the listing through the certified letter objection process, the district will not be officially listed in the National Register. The number of properties owned by a single owner is immaterial; each property owner has one “vote”. The nomination addresses the significance and integrity of the resource through a thorough report documenting its appearance and history. The report is reviewed by the MHC staff, the Massachusetts Historical Commission’s state review board, and the National Park Service before final designation.

#### *Demolition Delay Bylaw*

The objective of a demolition delay bylaw, which has been instituted in many Massachusetts communities, is to encourage owners of historic buildings to seek and consider alternatives to demolition and encourage preservation or relocation of significant buildings. Communities vary

on the age and type of properties to be included in their Demolition Delay Bylaws, but communities typically require buildings that are at least 50 years old, and determined to exhibit architectural or historical significance to be reviewed before demolition is allowed. The Town adopted a Demolition Delay Bylaw in 2008, which is focused on buildings over 100 years old which meet one of more of several significance criteria and those listed in the State and National Register of Historic Places. Buildings found to be preferably preserved by the Sturbridge Historical Commission are subject to a six-month demolition delay period.

#### *Local Historic Districts*

Local Historic Districts (LHD) can protect the appearance of historic properties and encourage new construction to be designed to complement the historic setting. The designation of a LHD imposes a review and approval process by a commission of appointed members for proposed exterior changes to properties. The primary strength of a LHD is that it can be tailored to specific community needs while providing greater protection for local resources. Design guidelines are developed to address the significant defining characteristics of a particular area. Designation as a LHD is one of the most effective ways to protect the historic character of buildings, streetscapes, neighborhoods, and special landmarks from inappropriate alterations, new construction, and demolition. In addition to protecting historic resources, locally designated districts across the country consistently produce stable property values, increase commercial activity, and attract tourism dollars.

#### *Scenic Road Bylaw*

Similar to Local Historic Districts, Sturbridge's Scenic Road Bylaw has the ability to protect the appearance of historic properties through the local review of repair, maintenance, reconstruction, or paving projects conducted to designated scenic roads. The Scenic Road Bylaw involves Planning Board review and approval for the removal of trees and stone walls that are within the right-of-way.

#### *Certified Local Government Program*

The federal Certified Local Government (CLG) program is designed to help recognize communities that value historic preservation as a community asset. The program is administered by the Massachusetts Historical Commission and establishes a set of basic requirements for local historic preservation programs, including the operation of a preservation commission or board and the maintenance of a survey of historic resources. In return, CLG status gives participating cities and towns exclusive access to at least 10% of Massachusetts' annual Historic Preservation Fund.

The funds are awarded to CLGs through a competitive survey and planning grant program on a percentage matching fund basis and can be used for preservation plans, comprehensive surveys, and National Register nominations. In addition to grant funds, the Massachusetts Historical Commission offers technical assistance to participating municipalities.

### *Community Preservation Act*

The Community Preservation Act (CPA) is a program instituted in 143 communities across Massachusetts since its inception in 2001. Used for projects that help develop or acquire open space, increase the number of affordable housing units, and support historic preservation efforts, the CPA is funded through a property tax surcharge of no more than 3%. If adopted, 10% of the funds must go toward open space, 10% toward affordable housing, and 10% toward historic preservation. The remaining 70% can be divided as the city or town determines among these three categories. The CPA ensures that funds will always be available for preservation activities. Sturbridge adopted the CPA in 2001.

Properties receiving CPA funding for historic preservation projects must be listed in or eligible for the State Register of Historic Places, or deemed historic by the local historical commission. Funded projects can be owned publicly, privately, or by a non-profit organization, as long as they provide a significant public benefit.

Funds can be used for a variety of project types. The Town has already used CPA funds for a significant effort in digitizing town meeting records from 1738 through 1945, which are accessible to the public at the Joshua Hyde Public Library's collection.

The CPA has also provided funding for historic property signage. Signage now marks the boundaries of the Sturbridge Common Historic District Main and Haynes Streets, while informational markers have been erected at the Common, the Center School/Old Burying Ground, the North Cemetery, and the Snellville School which is the current Senior Center. CPA funds were also used to repair some tombstones in the Old Burying Ground and North Cemeteries.

### *Preservation Restrictions*

A preservation restriction is a legal contract by which the property owner agrees the property will not be changed in a way that would compromise its historic and architectural integrity. The Sturbridge Center School at 301 Main Street is the only property in Sturbridge which is protected by a preservation restriction. Any proposed changes to the property are reviewed by the organization to which the preservation restriction is donated or sold. The preservation restriction runs in perpetuity with the land and is binding on both the owner who grants it as well as on all subsequent owners. A preservation restriction allows the owner of a historic property to retain title and use of a property and, at the same time, ensure its long-term preservation. The owner retains the major interest in the property and can sell or will it to whomever he or she wishes.

Preservation restrictions are specifically tailored to the individual building and the elements being sought to be preserved. Some agreements only protect a building's façade, while some include stipulations to protect elements of the interior, significant architectural details, or significant landscapes. The terms of the agreement are negotiated between the qualified organization and the property owner. The owner of the property subject to a preservation restriction must secure approval before

undertaking significant changes to the property, such as altering the building's historic elements or constructing an addition. The owner also agrees to repair and maintain the property to an agreed-upon level of maintenance.

Significant federal income tax benefits can result from the donation of a preservation restriction. If the property is listed in the National Register of Historic Places, the value of the development restrictions imposed by the preservation restriction is normally considered a charitable donation. Often a preservation restriction-holding organization will require a fee or endowment to provide adequate resources to monitor the preservation restriction in the future. According to Massachusetts General Law Chapter 184, Section 31-33, all historic preservation restrictions must be reviewed and approved by the Massachusetts Historical Commission. If the preservation restriction-holding organization is a private non-profit, the preservation restriction must also be reviewed and approved by the local municipality.

#### *Agricultural Preservation Restrictions*

Similar to Preservation Restrictions, Agricultural Preservation Restrictions (APR) are a specific type of conservation restriction designed to help farmers realize equity without being forced to sell their land for development purposes. The equity is often reinvested back into the protected farm by way of the purchase of more land, equipment, or buildings, and through the retirement of farm debt. Overall, the program is designed to protect productive agricultural lands by establishing permanent deed restrictions that would protect them from any use that might diminish the area's agricultural potential.

#### *Architectural Preservation/Neighborhood Conservation Districts*

An Architectural Preservation District is a district in which only additions, major alterations, demolition, and new construction are reviewed and require approval before work can progress. Generally, the districts, which are also known as neighborhood conservation districts, have both binding and non-binding regulatory review for exterior changes only.

### **Regulatory – Federal and State**

#### *Section 106 of the National Historic Preservation Act*

Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), was originally enacted to address the widespread loss of historic properties during federally-sponsored urban renewal initiatives and highway construction projects during the 1960s. The law requires that any project that receives federal funds or is required to obtain permits or licenses from a federal agency is required to be reviewed for its effects on historic properties. Section 106 review is required for properties that are both listed or determined eligible for the National Register. This determination is part of the review process if the property has not been previously assessed for its eligibility.

Typical examples of federal undertakings that do and can take place in the Town of Sturbridge are the requirements of U.S. Army Corps of Engineers (ACOE) permits for development projects and Federal Highway Administration (FHWA) supported road improvement projects. If a property is determined eligible for the National Register or is already listed in the National Register, then the impact of the proposed project on the resource must be determined by the federal agency or its assignee and concurred upon by the Massachusetts Historical Commission. If the project is determined to have an adverse effect on the resource, the federal agency must consult with the Massachusetts Historical Commission (MHC) in order to determine mitigation options.

#### *M.G.L. Chapter 254*

Chapter 254 of the Massachusetts General Laws (M.G.L., Chapter 9, Sec. 26-27C, as amended by Chapter 254 of the Acts of 1988), like Section 106 at the federal level, requires that any undertaking involving state involvement (funds, permits, approvals, or licenses) be reviewed to determine whether the proposed project will have an adverse effect on a property listed in the State Register of Historic Places. If it is determined that the project will have an adverse effect on a listed property, the state agency and/or the project proponent must consult with MHC to determine mitigation measures. Unlike Section 106, which considers NRHP listed and properties that have been determined eligible, Chapter 254 only considers properties or districts listed in the State Register of Historic Places. Chapter 254 could be relevant in the Town of Sturbridge if any area or individual property is listed in the State Register of Historic Places (this designation is automatic if the area were listed in the NRHP) and any state funds, permits, approvals, or licenses are used for projects such as road improvement, community development or residential and/or commercial development.

#### *Massachusetts Environmental Policy Act (MEPA)*

The Massachusetts Environmental Policy Act (MEPA) is a comprehensive review process that requires state agencies to account for the potential environmental impacts of projects involving state licenses, permits or financial support. This public process requires a thorough study of potential environmental impacts and the development of feasible mitigation options designed to avoid or minimize those impacts. Historic resources, both above and below ground, are included in the list of environmental factors that must be considered in the MEPA process.

If the project has a connection to state funds permits, or licenses, certain thresholds must be met in order to initiate MEPA review. For historic resources, the threshold is met if the project involves the demolition of any part of a structure listed in the State Register of Historic Places, or (as of 1998) the property is listed in the Inventory of Historic and Archaeological Assets of the Commonwealth. A detailed project information statement, known as an Environmental Notification Form, must then be prepared to assess the impact of the project on the resource.



## Financial Programs and Incentives

### *Federal Historic Preservation Tax Credit*

The Federal Historic Preservation Tax Credit program encourages preservation of historic structures by allowing favorable tax treatments for rehabilitation through a 20% tax credit for the rehabilitation of an income-producing NRHP-listed building. Since 1976, this investment incentive has proven to be one of the nation's most successful and cost-effective community development programs.

In order to be eligible for the credit, a building must be listed in the NRHP either individually or as a contributing structure in an historic district, or within a certified local historic district. The proposed project must also be a substantial rehabilitation costing more than \$5,000 or the adjusted basis of the property, whichever is greater. The building must be rehabilitated in a manner that meets the Secretary of the Interior's Standards for Rehabilitation and is reviewed through a series of applications by the State Historic Preservation Office (MHC) and the National Park Service.

For the purposes of the tax credits, income-producing buildings include commercial, agricultural, retail, and rental properties, but do not include owner-occupied residences or most condominiums.

Federal tax credits have helped encourage economic development in areas similar to Sturbridge Common's Historic District, which is listed in the National Register of Historic Places. In addition to the historic rehabilitation tax credits, a 10% Federal tax credit is also available to non-historic structures (buildings not listed in the NRHP) built before 1936. The requirements for the type of rehabilitation for these properties are not as stringent as those mandated for the historic tax credit.

### *Massachusetts Historic Rehabilitation Tax Credit*

The Massachusetts Historic Rehabilitation Tax Credit allows up to 20% of the cost of the qualified rehabilitation of an income-producing historic structure to be credited on state income taxes. Many owners / developers use the state credit in conjunction with the federal tax credit to reach up to a return of 40% of approved costs in tax credits. Unlike the Federal incentive, the Massachusetts Historic Tax Credit program has an allocation cap of \$50 million per year, and credits are awarded via a competitive process. General requirements for eligibility to gain the credits are the same as for the Federal historic tax credits.

### *Survey and Planning Grants and Massachusetts Preservation Projects Fund (MPPF)*

The Massachusetts Preservation Projects Fund (MPPF) and Survey and Planning Grants, administered by the Massachusetts Historical Commission, provide 50% reimbursable matching grants for preservation of properties, landscapes, and sites listed in the State Register of Historic Places. Grants can be used for feasibility studies, design assistance and plans, acquisition and construction activities including stabilization, protection, rehabilitation and restoration. Non-profit organizations and governmental agencies can apply for the grants, which typically range from \$5,000 to \$30,000 for

pre-development projects, and \$7,500 to \$100,000 for development or acquisitions. Acceptance of the grant requires that the recipients place and abide by a preservation restriction on the property that will protect its significant features in perpetuity. The Massachusetts Historical Commission should be approached regarding funding status for these programs.

#### *Historic Landscape Preservation Grant Program (HLGP)*

The Massachusetts Department of Conservation and Recreation (DCR) sponsors the Heritage Landscape Inventory Program, which documents and analyzes unprotected historic landscapes throughout the state. Properties must be listed in the National Register of Historic Places, with preference given to properties associated with friends' groups or citizen advisory councils. The Program supports inventory and planning projects, construction projects, preservation maintenance projects, and public education and stewardship activities. The Historic Landscape Preservation Grant Program provided matching grants in the past to municipalities for preservation of public parklands, although the grants program is currently not funded. A study was conducted by DCR of the town's heritage landscapes in 2007 as part of a larger study of many of the communities within both the John H. Chafee Blackstone River Valley National Heritage Corridor and the Quinebaug and Shetucket Rivers Valley National Heritage Corridor.

#### *Quinebaug and Shetucket Rivers Valley National Heritage Corridor*

Sturbridge is within the Quinebaug and Shetucket Rivers Valley National Heritage Corridor, composed of 35 towns in both Massachusetts and Connecticut. This national designation recognizes the significant natural and historic characteristics of the area and provides technical and financial support for initiatives to further economic and conservation efforts. The Corridor is managed by a non-profit, private organization which provides some funding for projects within the heritage area. Sturbridge's Trails Committee was a recipient of a grant in 2010 to help create a new trail segment of the Trolley Line Trail. Grants for historic preservation activities are certainly a possibility as well.



# Appendix 5

As illustrated by APA, planning for sustainability includes the following processes, practices and outcomes.

Planning processes include:

- ▶ Making planning decisions in a holistic and fully-informed manner that involves all segments of the community and the public and private sectors.
- ▶ Educating all age groups to raise public understanding of and regard for the future consequences of current planning decisions and ultimately change human behavior.

Planning practices include:

- ▶ Developing a future-oriented vision, which looks beyond current needs and recognizes environmental limits to human development.
- ▶ Fostering projects/activities that promote economic development by: efficiently and equitably distributing resources and goods; minimizing, reusing and recycling waste; and protecting natural ecosystems.
- ▶ Upholding a widely held ethic of stewardship that strongly encourages individuals and organizations to take full responsibility for the economic, environmental, and social consequences of their actions, balancing individual needs and wants with nature and the public good.
- ▶ Taking leadership in the drafting and implementation of local, regional and state policies that support sustainability.

Planning outcomes include:

- ▶ Local and regional development patterns that expand choice and opportunity for all persons, recognizing a special responsibility to address the needs of those that are disadvantaged.
- ▶ Resilient, diverse, and self-sufficient local economies that meet the needs of residents and build on the unique characteristics of the community to the greatest extent possible.
- ▶ Communities with a healthy economy, environment and social climate that function in harmony with natural ecosystems and other species and allow people to lead healthy, productive and enjoyable lives.