TOWN AND VILLAGE OF WATERBURY, VERMONT

MUNICIPAL PLAN

2013-2018

DRAFT #2: September 12, 2013

The Selectboard for the Town of Waterbury and the Trustees for the Village of Waterbury will convene public hearings on Monday, October 21, 2013, at 6:30 p.m. and on Monday, November 4, 2013, at 6:30 p.m. at the Waterbury Municipal Offices located on the second floor of the Fire Station at 43 South Main Street in the Village of Waterbury, to consider and receive public commend on this draft of the proposed 2013 Municipal Plan for the Town and Village of Waterbury. In order to submit comments, please contact Stephen Lotspeich, the Community Planner, at (802) 244-1012, or by email at slotspeich@waterburyvt.com. Comments can also be mailed to the attention of the Waterbury Selectboard and Trustees, Waterbury Municipal Offices, 51 South Main Street, Waterbury, Vermont 05676.

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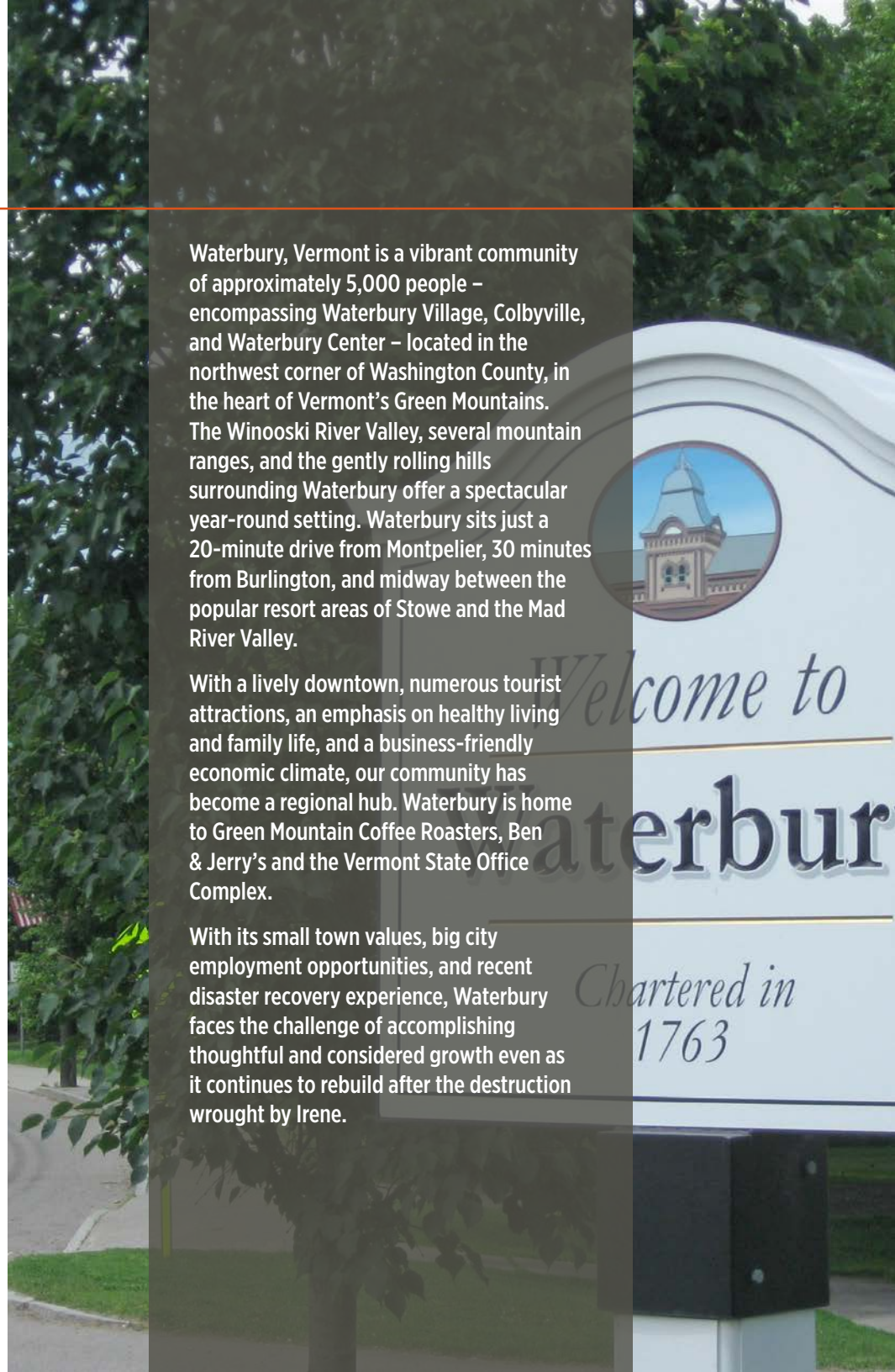
1. INTRODUCTION

1-1. About This Document

The Waterbury Planning Commission, appointed by the Town and Village of Waterbury, is responsible for preparing this joint plan for the two municipalities. The 2013 Waterbury Municipal Plan represents the community's vision for Waterbury. The goals, objectives, actions, and other implementation strategies expressed in this plan are based first and foremost on the desires of Waterbury residents, local officials, community partners, and other stakeholders, to move forward with community development while maintaining an environment that respects our historic strengths, unique attributes, and finite natural resources. The plan is intended to be a vision and road map for the future. It may be helpful, as you read the plan, to keep the following in mind:

- Goals describe in general terms the desired condition or outcome Waterbury wants to achieve in the future. They set direction.
- Objectives are intended to provide steps, or benchmarks, toward achieving a particular goal. They are intended to help track or measure relative success.
- Actions are a combination of specific recommendations and strategies to guide Waterbury residents, local officials, developers, and others toward achieving the goals, values, and vision that are set forth in this plan.

Each chapter begins with an introductory summary shown with the photo that in many cases identifies the overarching priority for the goals, objectives, and actions identified in the chapter. The local and regional partners that will help implement the actions for each chapter are identified and discussed in the text for that chapter. In many cases these partners are also identified in the specific actions. In general the goals, objectives and



Waterbury, Vermont is a vibrant community of approximately 5,000 people – encompassing Waterbury Village, Colbyville, and Waterbury Center – located in the northwest corner of Washington County, in the heart of Vermont's Green Mountains. The Winooski River Valley, several mountain ranges, and the gently rolling hills surrounding Waterbury offer a spectacular year-round setting. Waterbury sits just a 20-minute drive from Montpelier, 30 minutes from Burlington, and midway between the popular resort areas of Stowe and the Mad River Valley.

With a lively downtown, numerous tourist attractions, an emphasis on healthy living and family life, and a business-friendly economic climate, our community has become a regional hub. Waterbury is home to Green Mountain Coffee Roasters, Ben & Jerry's and the Vermont State Office Complex.

With its small town values, big city employment opportunities, and recent disaster recovery experience, Waterbury faces the challenge of accomplishing thoughtful and considered growth even as it continues to rebuild after the destruction wrought by Irene.

Although the town and village are separate municipalities, they are socially, economically, and politically intertwined. The Village of Waterbury lies within the Town of Waterbury and provides the additional services of public water, wastewater, and police. Village residents are also town residents. Throughout this document, references made to "Waterbury" include both the town and village, while references to the "village" refer to only the incorporated area of Waterbury Village.

actions are listed in priority order for each chapter. However, it is understood that priorities will shift during the five-year period of this plan and beyond, as actions are accomplished and new opportunities for implementing the specific actions arise.

In formulating this plan, the Planning Commission has also relied heavily upon an inventory and analysis of available information from the U.S. Census Bureau, the 2013 Waterbury Community Survey, and other sources. Technical assistance was provided to the Planning Commission by Steve Lotspeich, Community Planner, Claire Rock, Zoning Administrator, and Brandy Saxton, AICP, of the planning consultant firm, PlaceSense.

1-2. Why Plan?

Planning allows a community to look at where it is, where it came from, where it would like to be headed, and how it can get there. Planning, and the documentation thereof, helps lay ground rules for a community's future growth and development. A good municipal plan aspires to respect the needs of every citizen of a community, and attempts to reduce conflict and division among neighbors. Planning:

- Can save money by recommending more efficient use of land, infrastructure, and community facilities and services.
- Helps attract jobs and new businesses by anticipating infrastructure and services needed to support economic growth. Innovative programs or incentives can be developed through planning to attract new industries.
- Helps protect property values, avoid conflict between incompatible land uses, and enhance the quality of life in our community. The environment can be protected and important natural resources can be maintained, while at the same time allowing for growth.

The Vermont Planning and Development Act (24, V.S.A., Chapter 117) authorizes municipalities to plan, and provides numerous methods for plan implementation. Vermont law requires that municipal plans be reviewed, updated, and readopted every five years. This allows the community to reevaluate its goals in light of new information, constant changes, and new needs.

A municipal plan is not a regulatory document. Rather, it establishes policies and recommendations upon which bylaws, such as zoning or subdivision regulations, are to be based. These policies will also be considered in regional and state planning efforts, and for the issuance of permits from Vermont's land use and development control law (Act 250) and certificates of public good from the Public Service Board. It also provides critical information needed for grant and funding initiatives. With a plan, Waterbury can influence the physical, social, and economic development of the community.

1-3. How the Plan was Developed

This plan is intended to reflect the common goals of Waterbury's individual, business, and government residents. For this reason, the Planning Commission has solicited and relied on input garnered through informal work sessions and conversations,

a community survey, public forums, and more formal public hearings that preceded adoption of this plan. The Waterbury Planning Commission strives to provide ongoing opportunities for Waterbury residents to actively shape our community's future through this continually evolving plan.

2013 Community Survey and Community Profile. The Planning Commission mailed out a three-page questionnaire in early 2013 to a random sample of approximately 20% of Waterbury's registered voters. The questionnaire was also available at town meeting on March 5, 2013 and on-line through the municipal website. There were 78 responses to the random sample (a 12% response rate) and 68 additional surveys were submitted online or at town meeting for a total of 146 responses.

The purpose of this survey was to assist the Planning Commission by providing an assessment of public opinion on a variety of issues, including but not limited to economic development, land use, natural and cultural resources, and municipal services. Survey results have helped guide the Planning Commission in defining related goals and objectives that are supported by the community. The 2013 Survey incorporated questions from the community surveys conducted in 2001 and previously in conjunction with prior plan updates, as well as new questions provided by the Planning Commission.

Relevant survey results are highlighted in the text of the individual chapters in this plan. The complete Waterbury Survey Report, which is a compilation of all the numerical responses and narrative answers to the questions, can be found in Appendix A.

1-4. Broad Plan Goals

This iteration of Waterbury's Municipal Plan introduces a new element. In preparing the plan, the Planning Commission identified seven broad goals which it deemed of critical importance to the Waterbury community as it continues to evolve following the lessons learned after Tropical Storm Irene.

These broad goals, listed below in order of the plan's chapters, are given form more particularly throughout the Plan and are re-stated in the relevant chapters. The Planning Commission hopes that they will begin to be realized long before the next scheduled Plan update in 2018.

1. Cultivate a vibrant economic climate that achieves sustainable economic growth throughout Waterbury; encourage a diversified local economy that welcomes a plurality of business types and sizes; and supply a diversity of jobs at livable wages.
2. Achieve continued availability of housing for existing and new residents in a manner respectful of natural resources; in this effort, encourage and prioritize the rehabilitation of existing buildings, especially historic structures, as well as new construction.
3. Explore the concept of community siting standards for small- and large-scale renewable energy projects.
4. Pursue regulatory measures and projects that will ensure better interconnectedness of Waterbury's transportation system, while respecting the equal needs of the various modes including vehicular, transit, pedestrian, and bicycle.
5. Encourage and support efforts to develop a master plan for downtown and other growth centers identifying specific areas for more growth, additional parking, better vehicular and pedestrian traffic and better and more cohesive wayfinding signage.
6. Continue to pursue efficiencies of purpose and economies of scale throughout town and village government operations to ensure that they are consistent with community needs; evolving standards; and ongoing management of Waterbury's special flood hazard areas.

7. Improve identification and management of growth centers; thoroughly examine development and zoning regulations to ensure that they are consistent with community needs and updated standards.

1-5. Final Notes

Growth in Waterbury's business, industry, governmental, and residential communities should occur with prudence and at a rate that is reasonably accommodated by existing and planned services and facilities. Growth should not occur at the expense of the natural environment or Waterbury's historic and cultural resources. Waterbury should continue to promote and support growth in appropriate locations that respects the community's historic and scenic character, the unique charm, and the natural resources.

The mere presentation of a thoughtful, well-reasoned Municipal Plan is no guarantee of its success. The plan must include some truly visionary objectives in order for the community to be energized and come together in thoughtful discussion about achieving a bright future. If there is one word that describes this plan, it is 'balance.' By working together, we can achieve that balance, even as we achieve significant growth for our community and create a framework for Waterbury upon which future generations can rely on and upon which they can be proud.

2. HISTORIC RESOURCES

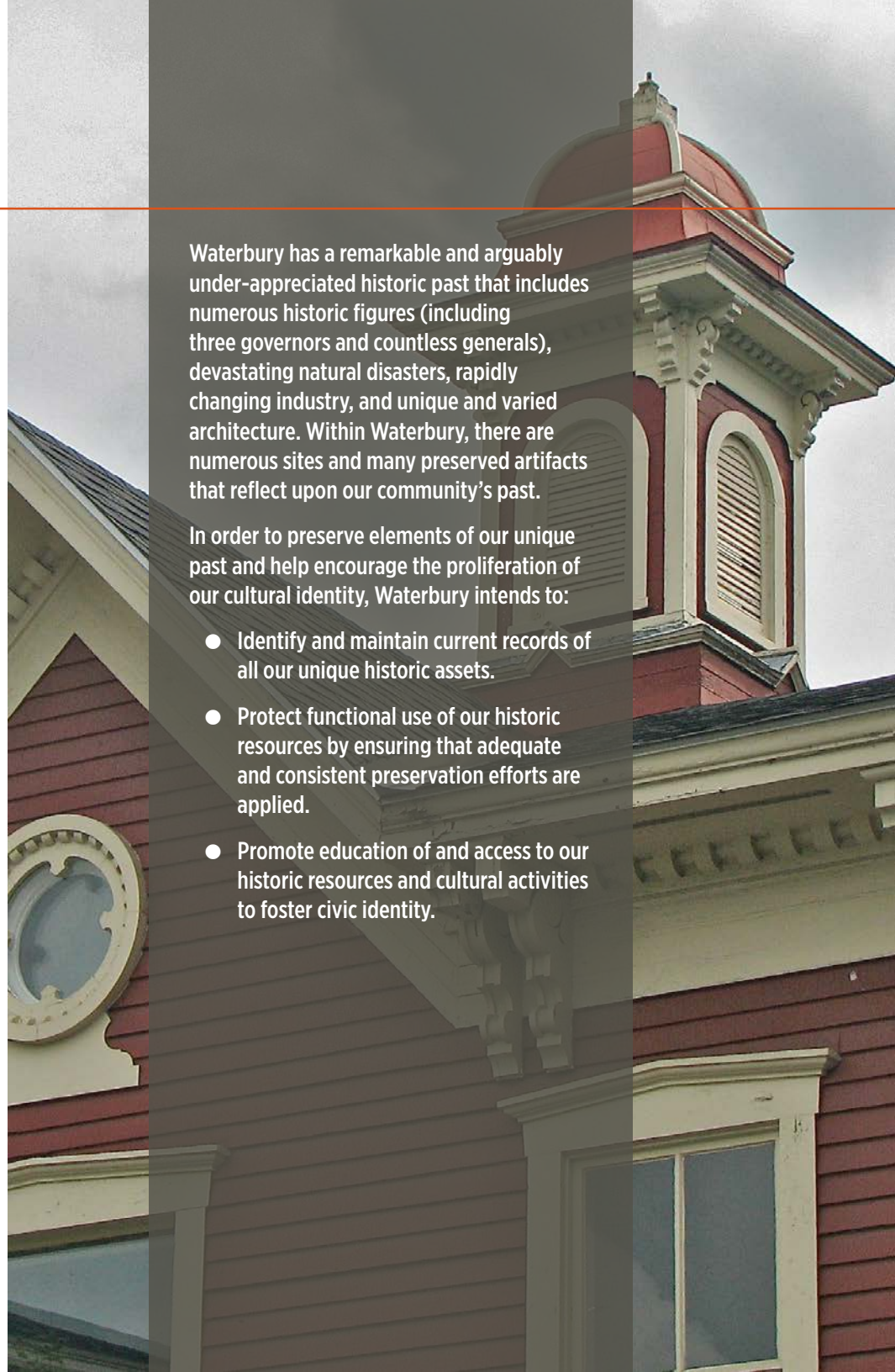
2-1. Waterbury's Historic Development

Early Settlement. Before the arrival of the first European settlers, Native Americans passed through the Winooski River valley and settled in parts of what is now Waterbury. The area's abundant supply of water, timber and soil provided ample food and shelter, which eventually attracted other settlers as well.

In February 1704, a band of about 300 French and Indian soldiers and warriors under the leadership of Hertel de Rouville followed a route from Canada along Lake Champlain, to the frozen Winooski River, to the White River, and then down the Connecticut River to Deerfield, Massachusetts in the early morning hours. Following the raid, which left 44 Deerfield residents dead and 109 men, women and children taken captive, the French and Indian raiding party returned back to Canada by the same route. Records indicate that the raiding party and their captives camped in the vicinity of Bolton Falls on March 17, 1704 as they traveled the frozen Winooski River on their return trip to Canada.

In 1763, King George III of England granted a charter through Governor Benning Wentworth of New Hampshire for land in the Winooski River valley. The initial proprietors, mostly from Waterbury, Connecticut, named the new township after their hometown. According to the town charter, Waterbury contained 23,040 acres. Tracts of land from Middlesex and Bolton were added in 1850 and 1851 that increased the acreage to 32,768. Lots were initially laid out in 1773, and the land was surveyed nine years later by Partridge Thatcher.

James Marsh, Waterbury's first permanent settler, arrived in 1783 and claimed land north of the Winooski River in the vicinity of what is now Winooski Street. Ezra Butler, who later became a Vermont governor, built the first frame house in the northern



Waterbury has a remarkable and arguably under-appreciated historic past that includes numerous historic figures (including three governors and countless generals), devastating natural disasters, rapidly changing industry, and unique and varied architecture. Within Waterbury, there are numerous sites and many preserved artifacts that reflect upon our community's past.

In order to preserve elements of our unique past and help encourage the proliferation of our cultural identity, Waterbury intends to:

- Identify and maintain current records of all our unique historic assets.
- Protect functional use of our historic resources by ensuring that adequate and consistent preservation efforts are applied.
- Promote education of and access to our historic resources and cultural activities to foster civic identity.

In addition to Ezra Butler, two other Waterbury residents have been elected governor – Paul Dillingham and his son, William P. Dillingham, who also served as a U.S. Senator. Waterbury is the only town in Vermont to have sent three governors to serve in the state house.

extremity of town and in March of 1790, he called a meeting to incorporate the township. By 1791, Waterbury's population had reached 93 people, as counted in the first U.S. Census.

Also in 1790, residents built the first school. Strong believers in a good education, the townspeople voted in 1803 to build a school where the railroad now crosses Stowe Street. The tax would be two cents on a dollar and payable in wheat, rye, or corn.

Most early inhabitants lived near the Winooski River, bordering the town on the northwest, for it was here that adequate water was available and fishing and trapping could be more easily achieved. Within the decade, a growing population of settlers was attracted to newly opened Main Street as the site of residences, businesses and institutions. Farms were also established in the area that is now Park Row and Randall Street.

Waterbury's first grist mill was erected in 1793. The town's early industries, located primarily along the Little River, Thatcher Brook, and Alder Brook, included wood and leather products, baskets, children's carriages, starch, alcohol, and scythe handles. The first successful merchant in town was Amasa Pride.

Agriculture was also a major industry. In the 1800s, self-sufficient farms yielded gradually to commercial agriculture, which was characterized by the rise and fall of "sheep mania" during the period from 1830 to 1870, and the flowering of the dairy industry thereafter. Many of the town's stone walls, marking old sheep pasture boundaries, date from this period.

The Railroad Era. The Central Vermont Railroad came to Waterbury in 1849. With it came economic growth and tourism. The railroad also contributed to the relocation of the center of local activity from Waterbury Center to Waterbury Village, which soon saw a surge in industries, businesses and population growth.

After 1850, a string of small concerns sprung up in the area immediately surrounding the railroad's original depot including the Cooley Wright Foundry established in 1882. The town's budding tourism industry also was served by the construction of the Waterbury Inn in 1885, and the establishment of the Mount Mansfield Electric Railroad to Stowe in 1896.

As well as inviting a greater transient population, rail transportation brought with it new permanent settlement. By the mid-1870s the number of homes on Union Street (then Maple Street), Winooski Street, and South Main Street had doubled since 1850. By 1880, Waterbury's population was more than 2,200 – large enough to support a public high school, a local newspaper, a library association, and a number of retail establishments.

Waterbury Village, which grew as a regional transportation and commercial center, was incorporated in 1882 to provide services such as fire and police protection, and sidewalks. The village's public water system was constructed in 1898 and the sewer system was built in 1906. The first modern sewage treatment plant was constructed near the Twin Bridges in 1964 providing primary treatment and disinfection before discharge.

The economic growth of Waterbury during the late-19th and early-20th centuries is reflected in the many historic commercial and residential structures erected during this period. There are over 200 structures of varying functional types, many of which are fine examples of major 19th century architectural styles ranging from Federal to Queen Anne. Economic prosperity also brought an increase in middle-class housing as evidenced

by the building of several stately homes on South Main Street. Additionally, Randall Street, which was developed with uniformity akin to urban speculation, was nearly built up in its entirety during the 1880s and 1890s.

State Facilities. In 1889, the state acquired Mr. C.C. Warren's farm and in 1891, the state constructed the Vermont State Hospital on the land. The state hospital treated individuals with mental illnesses and disabilities. Over the years, the hospital's capacity grew to approximately 1,400. Following the de-institutionalization of a large percentage of the hospital's patients in the 1970s, most of the original hospital buildings were converted to state office buildings, and the grounds are now referred to as the Waterbury State Office Complex.

Early-20th Century. The early-20th century saw further expansion of the village. The first canning factory was built off South Main Street in 1910 by the Demeritt Company. They later made clothes pins and ran a lumber mill. Also on South Main Street was the scythe handle factory of Edwards and Edwards. Later, as Derby, Ball & Edwards, they made baseball bats, which were sold nationwide as well as skis and chairs. At one time there were three granite sheds in town- Rock of Ages, Union Company and O'Clair Granite Works - that ultimately merged with larger firms out of town or simply closed down later in the century.

Civic interests also expanded in the first decades of the 1900s, with the founding of a number of service organizations, including the American Legion (1919), the Knights of Columbus (1920), and the Rotary Club (1936). In 1903, a poor farm was established on the west side of Blush Hill to support the area's indigent population. In 1905, the Waterbury Town Library in Waterbury Center was established. The Waterbury Public Library, located in the village, was founded in 1916 when Dr. Henry F. Janes, a local doctor and son of Waterbury's first postmaster, left his house to the Waterbury Library Association.

In the early 1900s, exposure to the outside world also brought epidemics, including small pox and chicken pox outbreaks in 1915, and the influenza epidemic of 1917. Perhaps the most devastating event in Waterbury's history was the 1927 flood. Like many Vermont municipalities, Waterbury was hit hard – several residents were killed, many buildings were damaged or destroyed, and major rail lines, roads, and bridges were washed out.

The Little River Dam was built between 1935 and 1938 as a flood control project by the Civilian Conservation Corps (CCC), under the direction of the Army Corps of Engineers, creating the Waterbury Reservoir. Residents of the Little River watershed were relocated in advance of dam construction. Upland remnants of their settlement still exist in Little River State Park. The reservoir has since become an important public recreational resource.

Flood recovery in the 1930s involved the construction of improved roads and bridges, which literally paved the way for wider use of the automobile. From 1928 to 1932 the state constructed "cement" roads along Routes 2 and 100, connecting Waterbury with Montpelier and Stowe. Motor vehicles created competition for local rail lines, and soon surpassed them in importance for the transport of freight and passengers. The Mount Mansfield Electric Railroad ceased operations in 1932. The Central Vermont Railroad remained in operation, but never fully recovered financially.

Mid-20th Century. Despite the flood, stock market crash and ensuing economic depression, and two world wars, Waterbury continued to improve as a community. From the 1930s through the 1960s, the community invested in its schools, public parks, police and fire services. A new public swimming pool was dedicated in 1941. The village fire station was erected in 1956, and the first police car was purchased in 1958. In the 1960s,

Waterbury High School was closed, with the opening of Harwood Union High School, and Waterbury hired its first town manager.

Communications also improved. WDEV, Waterbury's AM radio station, was founded in 1931. Its tower, erected in 1936, was then the highest structure in New England. Television was introduced in the 1940s, followed by the dial telephone in the 1950s.

The Waterbury portion of Interstate 89 (Exit 10) was opened in 1960, relieving traffic on Route 2 through Waterbury Village. I-89 significantly increased accessibility to and from Waterbury, and opened up additional areas of town – including Waterbury Center along Route 100 – for development.

Late-20th Century. As the regional economy improved so too did local tourism and economic development. Cold Hollow Cider Mill, a major tourist attraction, relocated to Waterbury in the 1970s. This was followed in the 1980s by the entry of a number of the area's major employers – including Karl Suss America, Green Mountain Coffee Roasters, Ben & Jerry's – and the initial development of Pilgrim Park. The building of Ben & Jerry's factory was helped by a federal Urban Development Action Grant (UDAG), applied for by the village. The money has been repaid and reinvested by the Village Trustees to support other businesses.

While new development was happening in and around Waterbury Village, historic sections of the downtown were beginning to languish. For most of its history, Waterbury Village had been the commercial center of the community. The construction of I-89 dramatically changed traffic patterns through the village, resulting in part in its economic downturn. Inadequate parking for an increasingly automobile-oriented society also contributed significantly to this trend, which prompted commercial activity to shift to Route 100, toward Stowe. By the early 1990s, Waterbury's downtown was visually in disrepair – many storefronts were vacant, buildings were in poor shape, sidewalks were crumbling, and new development that did occur was often not compatible with the downtown's historic character.

The nonprofit organization, Revitalizing Waterbury, was founded in 1991 by a handful of Waterbury citizens determined to rehabilitate the historic Stimson and Graves buildings. Upon successful completion of that project, the group then turned its energy to another historical preservation project - the Central Vermont Railroad Station. From 1997 to 2006, Revitalizing Waterbury worked with the Village of Waterbury and variety of funding sources—most notably Green Mountain Coffee Roasters Foundation—on a major restoration effort. The fully renovated train station is currently owned by Revitalizing Waterbury and serves as Green Mountain Coffee Roaster's Visitor Center and Café, an attraction that draws hundreds of visitors to the heart of downtown Waterbury each year.

Various town lands have been annexed into Waterbury Village in recent decades to access sewer services, which are not available in other parts of the town. Colbyville, consisting of approximately 47 acres, was annexed by the village in 1981. In 1984, 11 acres of land along Route 100 were annexed in order to extend village water and sewer lines to the Ben & Jerry's site. In 1989, the village annexed another 32 acres off of Town Highway 15 to extend sewer to a potential residential development. In 1994, approximately 405 acres of land, including the Waterbury Land Company property (the former Guptil farm off Guptil Road), was added for the Country Club of Vermont golf course.

The last decades of the 20th century were characterized by ongoing improvements in municipal services and facilities. Two new recreation fields – Dascomb Rowe and Hope Davey – were established, and Rusty Parker Park was refurbished. A new water treatment facility was dedicated in 1992. Ongoing improvements have been made to local roads and bridges, including the construction of Bidwell Lane in the 1970s, the restoration of the

historic Winooski Street Bridge in the 1990s, and the proposed upgrade of Main Street through the village.

In 1995, the towns of Waterbury and Duxbury established a union school district and approved bond funding for the construction of a new middle school to serve the residents of both communities. Crossett Brook Middle School and Thatcher Brook Elementary School were dedicated in 1997.

Tropical Storm Irene. Overnight on August 28 and 29, 2011, Waterbury's physical landscape and local economy were rocked by the second major natural disaster in less than a century - Tropical Storm Irene. Fed by nearly a foot of rainfall in less than 24 hours, the Winooski River overran its banks at the head of the village (near the juncture of Routes 100 and 2) and, with additional overruns from smaller tributaries including Thatcher Brook, flooded the majority of buildings along Waterbury's Main Street. Given the location of Waterbury's historic village alongside the Winooski River, the flooding was widespread and pervasive. With floodwaters rapidly rising to five feet over portions of Main Street, Waterbury officials enacted an evacuation order for low-lying neighborhoods in Waterbury Village. The floodwaters did not begin to recede until the early hours of August 29.

The damage sustained by Waterbury in the wake of Tropical Storm Irene on August was a devastating combination of direct destruction of municipal infrastructure, widespread flood inundation of approximately 220 residential and commercial buildings along our Main Street corridor, and significant local revenue loss associated with the displacement of the majority of the Waterbury State Complex employees.

Prior to the 2011 flooding, Waterbury hosted between 1,300 and 1,500 state agency employees at the historic State Office Complex. As a result of the flooding caused by Tropical Storm Irene, the majority of these workers have been relocated to other facilities throughout the state. As of May 2012, only 200 state employees had returned to the Waterbury complex. At least 700 more are slated to return when restoration and redevelopment of the site is completed in 2015 (targeted date, under negotiation). The economic impact of this worker displacement was conservatively estimated at $3.7 million in lost labor income and $10.7 million in lost sales per year.

Flooding from the Winooski River damaged approximately one-third of Waterbury's homes. The residential losses from this flood event were so great that ReBuild Waterbury formed in the fall of 2011 as a long-term recovery project under the umbrella of Revitalizing Waterbury.

According to a post-flood survey conducted by Revitalizing Waterbury, nearly six in ten village businesses were forced to close in the immediate aftermath of Irene. Half of those reopened within a week, 27% reopened within 2 weeks, 10% reopened within a month, while the remaining were closed more than four weeks. Seven businesses have closed since August 2011, claiming a direct link to flooding damages and post-flood revenue losses. Based on confidential, self-reported information gathered by Revitalizing Waterbury in September 2011, the cost of damages to small businesses exceeded $2.5 million (distinct from State Office Complex and flood-damaged major employer Green Mountain Coffee Roasters).

Losses to Waterbury municipal infrastructure included significant damage to the historic municipal building at 51 South Main Street, complete inundation and widespread destruction of Dac Rowe Recreational Fields and the main wastewater pump station at 26 North Main Street, and extensive emergency road and sanitary/sewer line repairs along Main Street and connecting side streets throughout the village.

With the assistance of FEMA's Long Term Community Recovery Team (LTCR), Waterbury worked diligently through a seven-

Waterbury's Historic Districts

Waterbury Village Historic District
Mill Village Historic District
Colbyville Historic District
Waterbury Center Historic District
Waterbury Center-Village Park District
Cotton Brook Historic Archaeological District
Stevens Brook Historic Archaeological District
Woodward Hill Historic Archaeological District

month process to identify the initiatives necessary to rebuild the community at every level. The process included a Waterbury Community Recovery Fair on February 16, 2012, and a gathering of potential funding partners/LTCR Plan unveiling in May 2012. The complete plan is available at the Town of Waterbury offices.

2-2. Waterbury's Historic Resources

Evidence of Waterbury's past can be found throughout the community in the form of historic sites and structures. From a cultural perspective, these historic resources offer not only a physical link to Waterbury's past, but also visual texture to Waterbury's neighborhoods. The preservation of historic sites, structures, and architecture should not bind present and future development to replicate the past, nor prevent innovation and the expression of different styles; however, Waterbury's historic resources should be recognized as an important cultural component of the overall fabric of the community.

Historic Sites and Structures. The Vermont Division for Historic Preservation has identified three archaeological districts, five historic districts, two farm complexes, a cemetery, two bridges, and an additional 31 buildings and structures within Waterbury which are of historic and/or architectural importance to date.[1] These sites are currently listed on the State Register of Historic Sites and Structures.

Historic Districts. Of particular note is Waterbury Village's Historic Downtown District, which has also been listed on the National Register of Historic Places since 1976. It includes much of Main and Stowe Streets, and the Vermont State Hospital Complex. A number of the village's most historic structures were designed by William Deal (1833-1917), Waterbury's "premier Victorian builder." These include the former Waterbury Inn (destroyed by fire in 1953), the Methodist Parsonage, the Village Hall (Perkins-Parker Funeral Chapel), the Howard Bank Block, the Luce Block, the WDEV Block, and several private residences.

The Mill Village District, located on Stowe Street in Waterbury Village, has also been listed on the National Register since 1976. The grist mill and dam at the lower falls of Thatcher Brook form the heart of this district, which is named for the many 19th century industries once located above and below the falls.

Waterbury's other historic districts are not yet listed on the National Register; however, the Green Mountain Seminary and the Community Church in Waterbury Center have individual listings.

Waterbury currently has three historic archaeological districts. Although scant evidence remains of settlements and industries that existed prior to the damming of the Little River, these areas were an active and important piece of Waterbury's early development that has almost been forgotten. Abandoned roads, structures, cellar holes, and cemeteries are all that remain to mark their passing. These historic districts, now largely included in bounds of the Mount Mansfield State Forest and Little River State Park, should continue to be maintained and promoted in cooperation with the Division of Forests, Parks and Recreation.

1 See Maps 1-1, 1-2, and 1-3.

Such historic sites and features increase the area's recreational value, and broaden visitors' experiences in Waterbury.

Outbuildings and Structures. Also in danger of being lost through time and neglect are many historic outbuildings and structures, including barns, train sheds, carriage houses, and stone walls, that may not appear on current historic registers, but are nevertheless important features of Waterbury's past and current cultural landscape. An updated structures inventory should document such outbuildings. "Barn grants" and other funding may be available to assist private property landowners with their restoration and upkeep. Due to the potential practical infeasibility of salvaging some of these structures, documentation and cataloging efforts prior to elimination are being strongly encouraged.

Cemeteries. Waterbury has a number of cemeteries on public and private land that are often overlooked as historic resources. Cemeteries can provide a unique window into the area's past and the lives of its early settlers. The stones that mark early residents' graves often provide interesting and valuable information about their lives, deaths, family connections, and the society of their time.

Waterbury's cemeteries are also an important feature of its village landscapes. Of particular note are Hope Cemetery in Waterbury Village and the cemetery on Route 100 as they are the resting place of many of Waterbury's earliest and most prominent residents. Additionally there is a more contemporary facility in Waterbury Center, which also contains the remains of several prominent Waterbury citizens. These are well maintained and most of the stones are in very good condition.

Many of Waterbury's old cemeteries are being restored as historic sites and made available for residents and visitors to explore and appreciate. Two historic cemeteries can be accessed off of River Road leading to the Ice Center just outside of Waterbury Village. One is a revolutionary war cemetery that is visible from I-89. The other is a small cemetery used by Vermont State Hospital in its early years for many of its patients. This wooded upland cemetery, rediscovered in 1988, is now marked by a single monument.

Archaeologically Sensitive Areas. Much of Waterbury's past, including additional evidence of prehistoric and historic settlement, remains buried and hidden from view. In addition to designated archaeological districts, the state has defined "archaeologically sensitive" areas, including but not limited to 200 foot buffers along the Winooski River and other major waterways, which are known or likely to hold evidence of past settlement. Development in these areas should be undertaken with sensitivity to the possibility of important new discoveries. Information and assistance is available from the State Archaeologist.

Waterbury Historical Society. The Waterbury Historical Society, established in 1958, has contributed much to the documentation and promotion of Waterbury's historic resources. The society maintains a museum on the second floor of the Waterbury Public Library in Waterbury Village, and holds meetings that include public presentations on a variety of topics.

The society has also produced a number of publications celebrating Waterbury's history, personalities, and sites. These include a walking and automobile tour of Waterbury Village, Mill Village, Colbyville and Waterbury Center, and the books the *History of Waterbury, Vermont, 1915 – 1991* and *Waterbury Bridges the 20th Century*, an extensive compilation of photographs and historic events spanning the last century, was published in 2000. The society's efforts are entirely dependent upon volunteers, donations, grants, and book sales.

Downtown Revitalization. As noted, a number of recent preservation efforts have become associated with larger efforts to revitalize and improve downtown Waterbury, including the restoration of

80% of respondents to the Planning Commission's 2013 Community Survey agreed that Waterbury should continue or increase the preservation of its historic resources.

the Stimson-Graves Building on Stowe Street and the restoration the Central Vermont Railroad Station. These efforts have been spearheaded by Revitalizing Waterbury, a group formed in 1991 to promote public and private investment in the downtown. Much of the work to date has been accomplished by volunteers and businesses, with support from local officials and state and federal funding.

Downtown or Village Designation. In 2006, a group of volunteers formed to seek official "downtown designation" status through the State of Vermont's Downtown Program. This group became the Waterbury Downtown Partnership and included municipal staff, Revitalizing Waterbury volunteers, and community members at large. Waterbury's downtown received designation in 2006 making the area eligible for a number of benefits to property owners, business owners and the municipality itself.[1] In May 2012, the Vermont Downtown Board unanimously approved Waterbury's renewal application. Revitalizing Waterbury and the Town of Waterbury collaborated on this successful process, and share responsibility for maintaining good standing with the Vermont Downtown Program until the next renewal period in 2016-17.

National Register Nominations. National Register designation can be the initial step for many other preservation opportunities. Designation does not affect the owner's right to modify, maintain, or dispose of the property. Only projects that involve federal funds or permits must adhere to federal guidelines for structural modifications. Income-producing historic buildings on the National Register may qualify for federal and state tax credits when they undergo a substantial rehabilitation. Such rehabs have to preserve existing historic features, but may also include modern improvements. Also, nonprofit groups and municipalities may apply for matching grants from the state to restore historic buildings.

Certified Local Government Designation. Waterbury is not currently a Certified Local Government (CLG), but should consider membership in this program. The CLG program was created under the 1980 National Historic Preservation Act (NHPA) to strengthen partnerships between municipal, state, and federal agencies interested in furthering the protection of historic resources. A local government that has been certified by the Vermont Division for Historic Preservation to carry out purposes of the NHPA may qualify for additional funding in support of its historic preservation efforts.

1 See Designated Downtown Map 5-3.

2-3. Goals, Objectives and Actions

goals

1. The protection, maintenance, and continued functional use of Waterbury's historic structures, sites, and areas.
2. Improve awareness of and encourage the proliferation of Waterbury's historic and cultural identity.

objectives

Preservation

1. Identify and maintain current records of all Waterbury's unique historic assets.
2. Ensure adequate and consistent historic preservation efforts are applied
3. Promote incentives for the repair, preservation, and maintenance of Waterbury's historic structures and areas.

Awareness

4. Increase area residents' and visitors' awareness and appreciation of Waterbury's history and architecture.
5. Improve, encourage, and support the development of cultural activities and facilities in Waterbury.
6. Salvage and protect Waterbury's historic archives and artifacts.

actions

Preservation

1. The Planning Commission with assistance of the Community Planner to pursue Waterbury becoming a "Certified Local Government".
2. Work with interested parties (Historical Society and/or Students and/or Interns), to update our inventory of historical places and ensure, where appropriate they are included in the state and or national registries.
3. The Planning Commission to review boundaries of Downtown Overlay District and Waterbury Village Historic District and consider possible expansion, including areas on South Main Street to Healy Court not currently included in the Overlay District.
4. As new Zoning Regulations are added or existing ones amended, ensure that they apply adequate and consistent standards of review for historic structures that may be developed from appropriate state and local models.
5. Coordinate with the Waterbury Cemetery Commissioners, the Vermont Old Cemetery Association, area residents, and other interested persons to identify, maintain, and beautify Waterbury's old cemeteries
6. Ensure the preservation of the historic features and grounds of the State Office Complex, including the main horseshoe-shaped lawn, in Waterbury Village
7. Utilize Downtown Designation or Village Designation and media outlets to help educate property owners in the utilization of existing programs and tax incentives to restore Waterbury's historic structures.
8. Utilize Vermont Barn Grant program, explore, and incorporate creative, adaptive reuses of such structures.

Awareness

9. Work with town officials and the Waterbury Historical Society Board to find a suitable home for the Waterbury Historical Society where its artifacts can be preserved and shared with visitors.

10. Work with the Historical Society to develop and promote strategies such as pictorials and anecdotes on the Waterbury web site, walking tours, information plaques for historic structures, or highlighting Waterbury's unique features.

11. Work with the state agencies to maintain and promote the historic areas of the Mount Mansfield State Forest, such as the early Little River, Ricker Mountain and Woodard Hill, and the CCC Camp Site.

12. Work with Across Roads Center for the Arts to support the development and promotion of new community arts resources.

Dates from Waterbury's History

1700s

1763 Charter for the Town of Waterbury granted by Governor Benning Wentworth of New Hampshire; town named after Waterbury, Connecticut
1773 Lots laid out
1782 Land surveyed under the direction of Partridge Thatcher
1783 First permanent settler, James Marsh, arrives
1790 Town of Waterbury incorporated, total acreage of 23,040 acres
First town meeting held, first school built
1791 First U. S. Census – Waterbury residents number 93
1792 First grist mill erected

1800s

1840 Waterbury Center Post Office established
1841 Anti-slavery convention held
1849 Central Vermont Railroad extended to Waterbury
Waterbury's first newspaper, The Free Mountaineer, published (for a brief period)
1850 Tracts of land from Bolton, Middlesex added; total area increased to 32,768 acres
1856 Waterbury Library Association formed
1857 Henry Janes, M.D. establishes medical practice
1871 Colby Mansion erected in Colbyville
1882 Village of Waterbury incorporated
1885 Waterbury Inn dedicated, built by William Deal in 1965
1890 F.C. Luce & Company opens on Stowe Street
1891 Vermont State Hospital for the Insane opens (now the State Office Complex)
1895 Waterbury Record first published and ran through 1952
1896 Mount Mansfield Electric Railroad initiated between Waterbury & Stowe
1898 Waterbury High School established

1900s

1900 U.S. Census population numbers 2,810
Governor William P. Dillingham of Waterbury elected to the U.S Senate
1903 Poor House established on Blush Hill
1905 Waterbury Town Library founded in Waterbury Center
1906 Green Mountain Seminary closes

1910s

1912 Brisbin and Brisbin Pharmacy (later known as Vincents) opens on North Main Street
1914 Campfire Girls founded locally
1915 Small pox outbreak, chicken pox epidemic
1916 Waterbury Public Library founded in Waterbury Village (Janes House)
1917 Influenza epidemic
1919 American Legion formed

1920s

1920 Knights of Columbus formed
Opera House built on Stowe Street (Rialto), destroyed by fire in 1980s
1927 Major flood; lives lost, significant property damage, roads and bridges washed out
1928 Cement road (Route 2) laid between Waterbury and Montpelier
Cement road (Route 100) laid between Waterbury and Stowe
Winooski Street Bridge re-constructed, replacing a covered bridge lost in flood.
Small pox outbreak

1930s

1930 Village buys land for park in front of railroad station (Rusty Parker Park)
1931 WDEV AM radio station founded
1932 Cement road laid through Waterbury Village

1933 Vermont Telephone & Telegraph extended service to Waterbury
1936 WDEV tower erected, highest structure in New England
Waterbury Rotary Club founded
1937 Little River Dam built as a flood control project, creating the Waterbury Reservoir
1939 Pinnacle Park Ski-land opened on Wissell Mountain, first Winter Carnival held

1940s

1941 New pool, a WPA project, dedicated
1947 Waterbury Airport opened

1950s

1952 First dial telephone
1953 Historic Waterbury Inn destroyed by fire
1956 New village fire station built
1958 First police car purchased

1960s

1960 Waterbury segment of Interstate 89 opened
1963 Waterbury bicentennial celebrated
1964 Sewer Treatment plant was built
1966 Last class graduates from Waterbury High School, Harwood Union High School opened
Waterbury Center Elementary School closes
1968 First town manager hired
1969 State offices move to the Vermont State Hospital

1970s

1970 Ambulance service established
1972 Selectboard increases from three to five members
1976 Bidwell Lane constructed
Cold Hollow Cider Mill established at the historic Fuller-Gibbs Farm
1977 Waterbury Village listed on the National Register of Historic Places
1978 Dascomb Rowe Recreation Field dedicated

1980s

1980 Karl Suss America Inc. locates in Waterbury Center
1981 Waterbury Reservoir drained (through 1985)
1982 Rusty Parker Park dedicated
1983 Green Mountain Coffee Roasters first plant opens
1985 Ben & Jerry's Homemade Inc. factory constructed
Pilgrim Park under development on former Pilgrim Plywood Corporation land
1988 Exit 10 first published. Ran for 22 year to end of 2008.
1989 First town planner hired

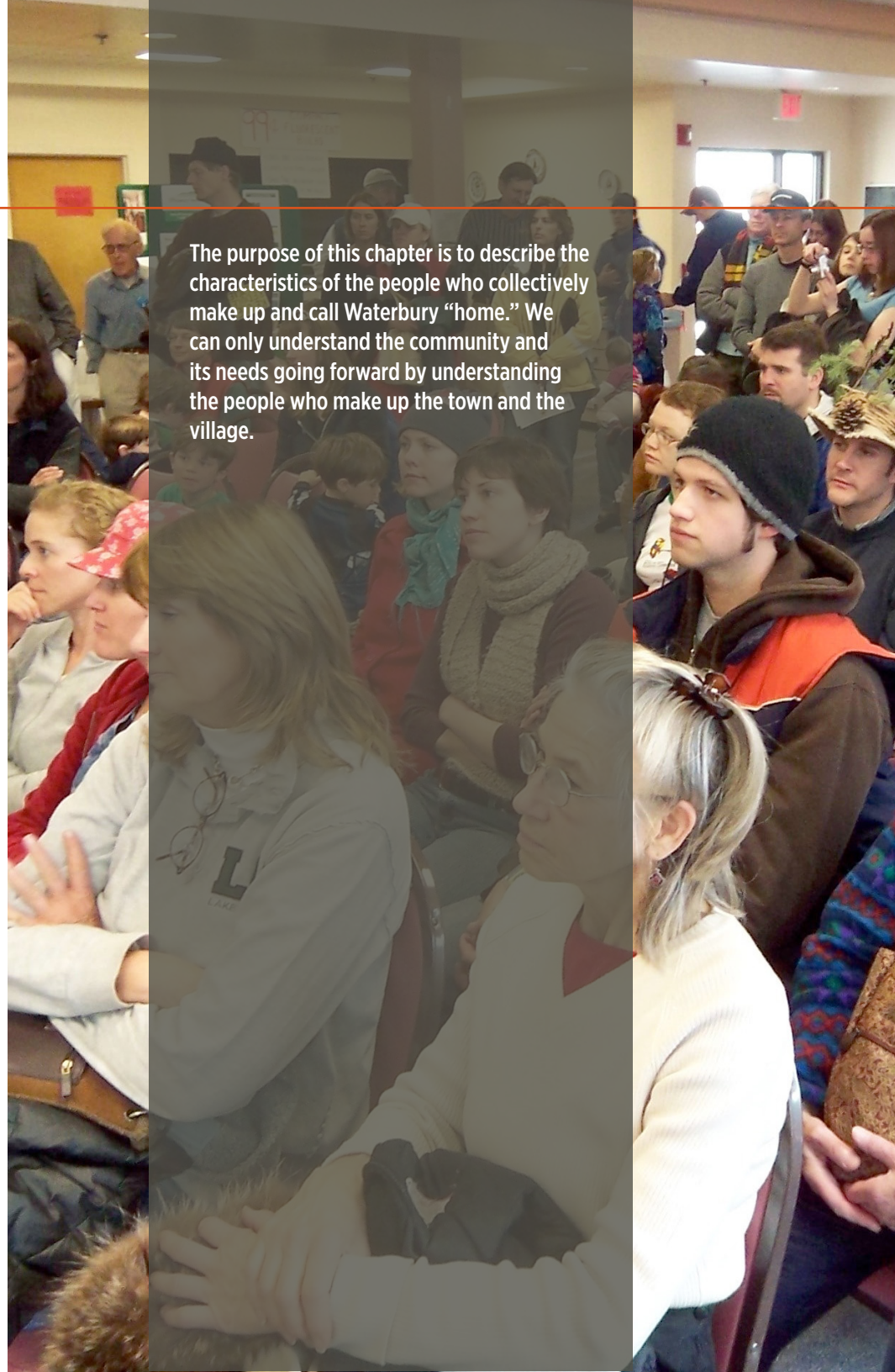
1990s

1991 Revitalizing Waterbury formed to save the Stimson and Graves Building
Waterbury Area Cultural Committee (WACC) established
1992 Earl Towne Water Treatment Facility is dedicated
Sewage system upgraded to use state of the art filtration system
1993 Hope Davey Memorial Field is dedicated
1995 Waterbury and Duxbury form a union school district
1997 Thatcher Brook Primary and Crossett Brook Middle Schools dedicated
Refurbished Winooski Street Bridge reopened
1999 CV Railroad Station restoration project gets underway

Present

2000 U.S. Census population numbers 4,915
Waterbury Reservoir drained for dam repairs
2010 U.S. Census population numbers 5064
2011 Hurricane Irene causes catastrophic flooding damaging many structures in the village and emptying the State Hospital.

3. DEMOGRAPHICS



The purpose of this chapter is to describe the characteristics of the people who collectively make up and call Waterbury "home." We can only understand the community and its needs going forward by understanding the people who make up the town and the village.

3-1. Population Trends

Waterbury's population, as of the 2010 U.S. Census, numbered 5,064 people, 1,763 of whom lived in the village.[1] Waterbury's population, with the exception of a few notable decades, has continued to grow since the first U.S. Census was taken in 1791. As Waterbury's population continues to change over the next decade, the demand for housing, educational and health services, public facilities, and public safety will be affected.

During the 1970s, Waterbury's overall population decreased, largely due to a sharp decline in the number of patients housed at the Vermont State Hospital in Waterbury Village. As a result, the Village of Waterbury has about 40% fewer residents today than it did in 1960. It was during the 1970s that the town's population outside the village surpassed that of the village for the first time due to 45% growth in the non-village population combined with the reduction in patients at the State Hospital.

Waterbury's population has grown modestly each decade since 1980 at a rate similar to the average for Washington County. The town has added about 600 residents since 1980 and while the village has about 130 fewer residents. The village's population remained virtually unchanged at around 1,700 residents during the 1990s, but grew slightly during the 2000s. Presently, around one-third of Waterbury residents live in the village.

Waterbury's population currently represents about 8.5% of Washington County's population. In 1960, the town accounted for about 10% of the county's population. With an average annual growth rate of 0.3% per year during the 2000s, Waterbury grew faster than most of its neighboring communities except for Barre Town, which had a growth rate of 0.4%.

1 See Figures 1, 2 and 3.

Group Quarters. For much of its history Waterbury was home to a large institutional population. The Vermont State Hospital, when it opened in 1889, had 207 patients. At its peak in 1968, it housed an average daily population of 1,078 patients, representing roughly one-quarter of Waterbury's total population. Changes in the treatment of mental illness, and the opening of regional care facilities around the state, have since reduced the number of people requiring hospitalization and shortened the length of hospital stays. As a result, the state hospital population has steadily declined. The intent is to continue to reduce local bed numbers, as more off-site capacity is developed elsewhere in the state.

In 1998, Dale Unit III at the state hospital was converted to the Dale Women's Correctional Facility, in part to relieve serious overcrowding in the state's prison system. This 45-bed facility, opened in 1999 and closed in 2009, was designed specifically to meet the needs of female inmates. The state has no current plans to re-open either a mental health or correctional facility at the former Vermont State Hospital site in Waterbury.

Waterbury Village also has two residential care homes – the Kirby House and the Squier House – that are licensed to accommodate up to 57 residents, including elderly residents and adult mental health patients. The Kirby House also provides limited respite and emergency housing.

According to the 2010 Census, there were only 54 residents living in group quarters, all in Waterbury Village.

3-2. Population Characteristics

Density. Given that Waterbury's total land area is fixed (at approximately 48.0 square miles), the overall population density varies only in relation to total population. In 2000, Waterbury had a combined population density of 102.4 persons per square mile, up from 95.6 persons per square mile in 1990.

Figure 1. **Recent Population Trends**

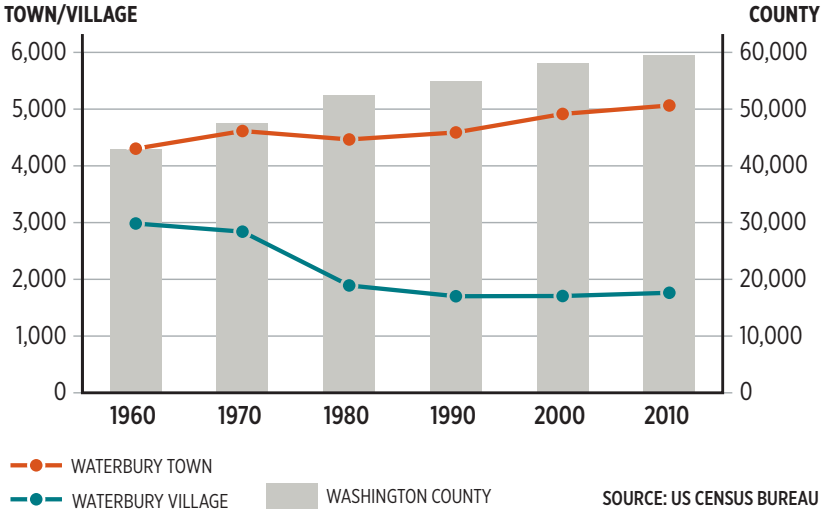


Figure 2. **Total Population**

	1960	1970	1980	1990	2000	2010
Waterbury Town	4,303	4,614	4,465	4,589	4,915	5,064
Waterbury Village	2,984	2,840	1,892	1,702	1,706	1,763
Washington County	42,860	47,659	52,393	54,928	58,039	59,534
Vermont	389,896	444,731	511,466	562,758	608,827	625,741

Source: U.S. Census Bureau.

Figure 3. **Population Change**

	1960s		1970s		1980s		1990s		2000s	
	#	%	#	%	#	%	#	%	#	%
Waterbury Town	311	7.2	-149	-3.2	124	2.8	326	7.1	149	3.0
Waterbury Village	-144	-4.8	-948	-33.4	-190	-10.0	4	0.2	57	3.3
Washington County		11.2		9.9		4.8		5.7		2.6
Vermont		14.1		15.0		10.0		8.2		2.8

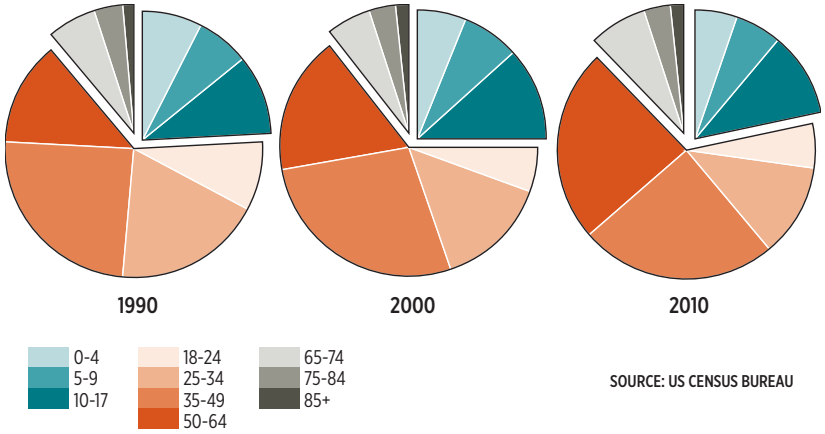
Source: U.S. Census Bureau.

Figure 4. **Median Age**

	1990	2000	2010
Waterbury Town	34.3	37.7	41.9
Waterbury Village	36.5	36.8	39.0
Washington County	34.3	38.5	42.3
Vermont	33.0	37.7	41.5

Source: U.S. Census Bureau.

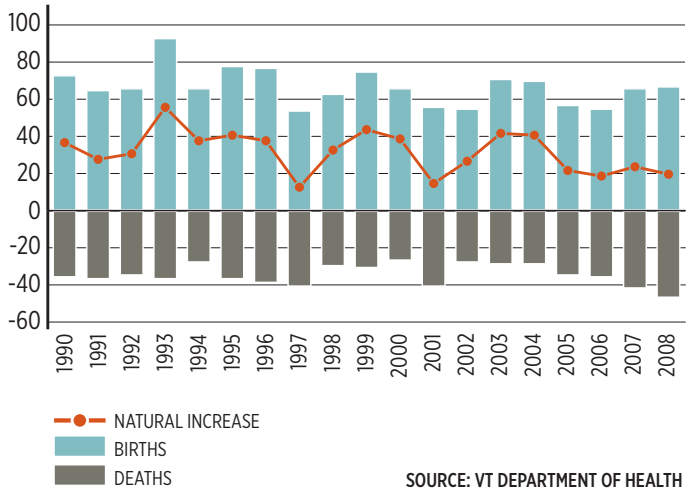
Figure 5. **Waterbury's Population by Age Group, 1990-2010**



Despite continued growth in the non-village population and the addition of land to the village, our population continues to be most highly concentrated in Waterbury Village. It is estimated that in 2000, village population density averaged 898 persons per square mile, compared with an average density of 70 persons per square mile in the rest of town.

Age Profile. Figure 5 illustrates the distribution of different age groups in Waterbury, Washington County, and Vermont, based on U.S. Census data. Age distributions in Waterbury are generally similar to county and state age distributions. The median age of village residents is lower than the median age in the town as

Figure 6. **Waterbury's Vital Statistics, 1990-2008**



a whole. The percentage of the village population in the 25-34 age group is greater than the percentage of the entire town population in that age group.

The median age of a Waterbury resident increased from 34 to 42 between 1990 and 2010. This reflects the fact that the number of children under age 10 in Waterbury has declined as the echo baby-boom (children born to the large baby-boom generation) ended, and that the oldest of the baby-boomers have started to turn 65. These are both common demographic trends throughout the state. Waterbury's population is younger on average than residents in most of its neighboring communities.

Each year, approximately 60 to 70 children are born to Waterbury residents, and the town has a higher birth rate than county or state averages. Between 30 and 40 Waterbury residents die each year. Taken together, these data result in a natural increase in the town's population of around 30 people. Natural increase has been driving overall population growth

Figure 7. **Income and Poverty Statistics, 1990-2010**

	Per Capita Income			Household Median Income			Family Median Income			% Residents in Poverty			% Children in Poverty			% Seniors in Poverty		
	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010
Waterbury Town	25,900	32,700	32,800	56,500	56,900	60,500	65,300	76,600	71,800	5.4	6.1	4.0	5.8	7.0	3.2	9.7	4.9	3.1
Waterbury Village	21,100	23,700	24,900	40,100	38,500	46,400	52,700	54,000	57,300		9.2	7.5		18.4	2.3		1.8	2.6
Washington County	22,600	26,700	28,300	49,500	51,900	55,300	59,100	64,700	67,000	8.3	8.0	10.5	9.9	9.8	13.8	11.9	6.8	7.5
Vermont	22,600	26,100	27,500	49,700	51,700	51,800	58,100	61,600	64,100	9.9	9.4	11.1	11.5	11.4	13.7	12.4	8.5	8.0

Note: All dollar amounts adjusted for inflation to 2010$.
Source: US Census Bureau 1990 & 200 Decennial Census, American Community Survey Five-Year Estimate (2006-2010)

Figure 8. **Education Level, 1990-2010**

	% of Residents Age 18 or Older																	
	No HS Diploma			High School Diploma			Some College, No Degree			Associate's Degree			Bachelor's Degree			Graduate or Professional Degree		
	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010	1990	2000	2010
Waterbury	19.7	12.6	5.2	35.4	26.0	26.9	15.5	16.0	19.9	8.6	9.0	8.5	14.5	24.4	24.9	6.2	12.0	14.7
Washington County	18.6	12.0	8.0	36.1	32.1	30.5	16.3	19.0	19.9	7.0	7.6	7.6	14.1	18.4	20.3	8.0	10.9	13.7
Vermont	18.9	14.0	9.5	34.5	32.1	32.0	17.8	19.7	20.6	7.0	7.3	7.8	14.2	17.2	18.7	7.6	9.8	11.4

Source: US Census Bureau 1990 & 200 Decennial Census, American Community Survey Five-Year Estimate (2006-2010)

and the town has been experiencing a net out-migration in Waterbury for decades.

The aging of the "baby boom" population reflects a nationwide trend that is expected to result in marked increases in retired and elderly populations – and the need for associated services and living arrangements – over the next two decades. The decline in younger age groups may result in fewer school enrollments over the same period, unless countered by increases from in-migration.

The median age of village residents, 39 as of 2010, is lower than the median age in the town as a whole. The percentage of the village population in the 25-34 age group is greater than the percentage of the entire town population in that age group. These age distributions reflect in part the wider variety of housing available in the village.

Income and Poverty. Reported incomes for Waterbury– particularly outside the village– tend to be higher than regional or statewide medians; as a result, poverty rates are typically lower. According to the 2010 American Community Survey, Waterbury's per

capita income was $32,800 and, after adjusting for inflation, had increased by $6,900 since 1990.

Also in 2010, the Census Bureau reported that 4% of town residents and 7.5% of village residents lived at or below the poverty line. This represented a reduction in the poverty rate from previous decades. In 2010, 3.2% of children in Waterbury lived in poverty as compared to 5.4% in 1990; and in 2010, 3.1% of seniors lived in poverty as compared with 9.7% in 1990.

The Vermont Department of Taxes estimated that the average adjusted gross income per Waterbury residents was $28,600 in 2010, which exceeded state and county averages, as well as the average in all neighboring communities except for Stowe.

Education Levels. Waterbury residents are generally better educated than county and state residents on average. Since 1990, the percentage of town residents with a bachelor's, graduate or professional degree has increased significantly, while the percentage without a high school diploma has dropped dramatically.

3-3. Population Projections

At the current rate of growth (15 people per year), Waterbury's population will exceed 5,200 by 2020. The best available regional and local population projections should be considered in any related municipal capacity studies and growth management programs.

4. LOCAL ECONOMY

4-1. Economic Activity

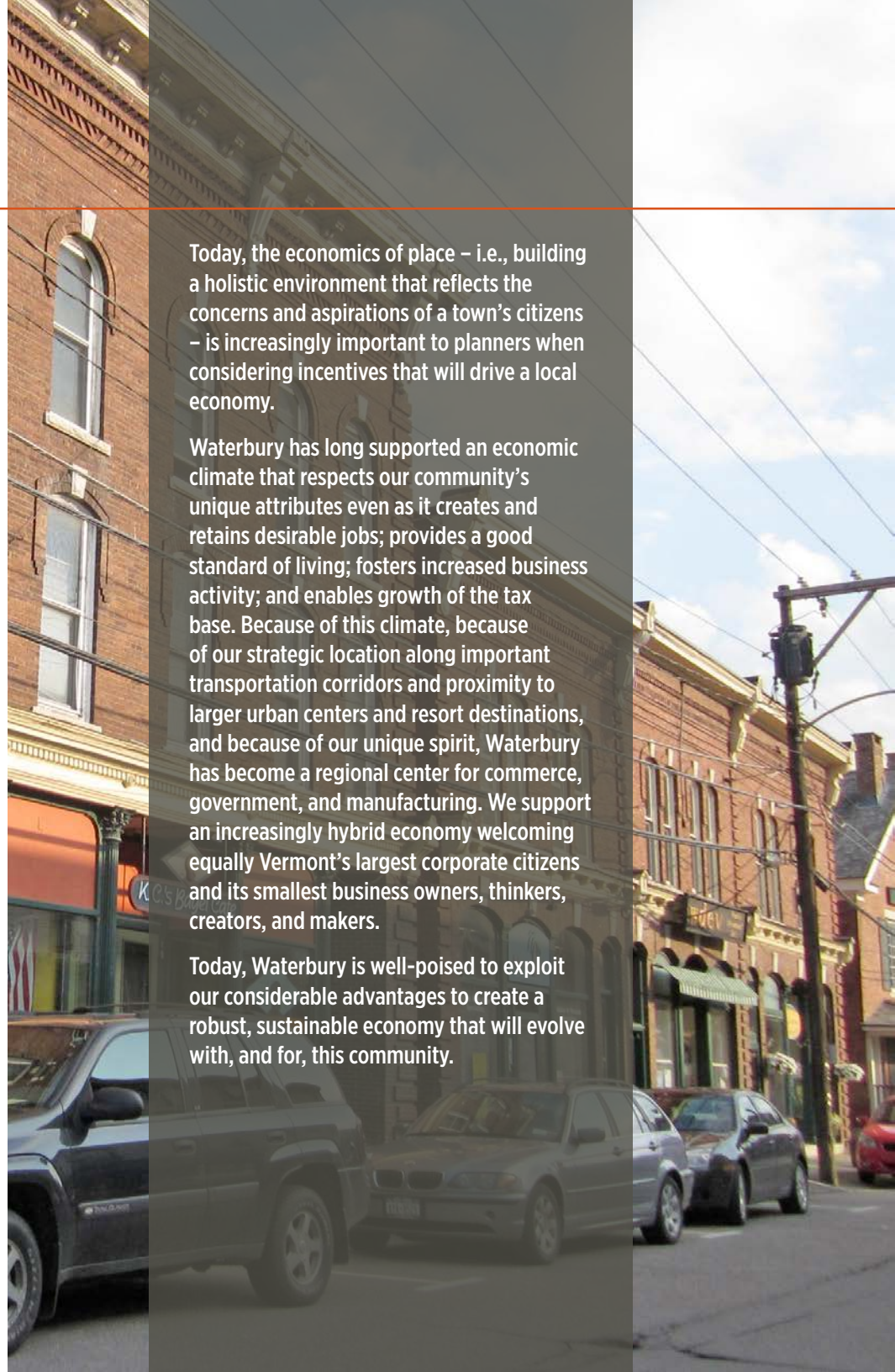
Employment. 750 new jobs were created in Waterbury during the 2000s. Waterbury enjoyed job growth at an average annual rate of 1.8% in a period that saw a 0.1% loss of jobs in Washington County and statewide. The number of businesses in Waterbury also grew during the last decade. The total number of employers increased from 259 in 2000 to 281 in 2010, indicating that a potentially significant portion of the job growth is attributable to new businesses. Total job growth is shown in Figure 9, below. [1]

Waterbury's continued success in creating new jobs and new employers, has depended, and will depend, on a favorable economic climate – a climate that contributed substantially to attracting Waterbury's two largest corporate citizens, Ben & Jerry's and Green Mountain Coffee Roasters.

Business Sectors. Much of the job growth during the 2000s occurred in the manufacturing, retail trade, and government sectors. Government, which until Tropical Storm Irene accounted for around 24% of Waterbury's total covered employment, experienced continued job growth during the 2000s. Manufacturing, which accounted for 14% of total employment in 2010, and retail, which accounted for 11% of total employment, also enjoyed continued growth.

Wages. The manufacturing and government sectors generally offer the highest annual average wages. This, and the large number of state government employees formerly working in Waterbury and likely soon to return, explains why average annual wages are higher in Waterbury than the average wage in

1 Figures based on Vermont Labor Market Information data on employment and employers, which includes counts each business location with employees and each job that is covered by unemployment insurance.



Today, the economics of place – i.e., building a holistic environment that reflects the concerns and aspirations of a town's citizens – is increasingly important to planners when considering incentives that will drive a local economy.

Waterbury has long supported an economic climate that respects our community's unique attributes even as it creates and retains desirable jobs; provides a good standard of living; fosters increased business activity; and enables growth of the tax base. Because of this climate, because of our strategic location along important transportation corridors and proximity to larger urban centers and resort destinations, and because of our unique spirit, Waterbury has become a regional center for commerce, government, and manufacturing. We support an increasingly hybrid economy welcoming equally Vermont's largest corporate citizens and its smallest business owners, thinkers, creators, and makers.

Today, Waterbury is well-poised to exploit our considerable advantages to create a robust, sustainable economy that will evolve with, and for, this community.

Figure 9. **Waterbury Jobs**

	1980	1985	1990	1995	2000	2005	2010
Total	1,711	1,846	2,986	3,283	3,876	4,378	4,623
Private	733	932	1,516	1,806	2,120	2,165	2,656
Gov't	978	914	1,470	1,477	1,755	2,213	1,967

Source: Vermont Department of Labor, Economic & Labor Market Information

Figure 10. **Average Annual Wage**

	1980	1985	1990	1995	2000	2005	2010
Waterbury	29,200	32,400	36,100	37,300	42,200	45,100	46,100
County	30,700	32,200	34,500	34,500	36,900	39,800	42,200
State	32,300	33,400	35,300	34,800	37,800	39,400	40,700

Source: Vermont Department of Labor, Economic & Labor Market Information adjusted to 2011$ and rounded to the nearest $100.

Figure 11. **Waterbury Tax Receipts**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Gross	500.3	585.4	382.2	153.2	117.0	172.5	216.7	210.2	164.7	130.0	131.5	122.8
Retail	26.9	27.8	29.9	28.9	30.4	32.6	31.4	33.3	32.0	32.0	29.4	29.4
Use	8.8	7.8	6.9	9	12.1	7.7	9.5	7.9	8.2	11.4	8.8	8.8
Meals	8.1	8.2	7.5	7.7	8.7	8.4	8.9	9.9	11.1	11.8	12.0	11.7
Rooms	4.3	4.3	4.4	4.7	4.0	4.7	4.7	4.5	4.3	4.4	4.6	4.5
Alcohol	1.4	1.4	1.4	1.4	1.6	1.7	1.8	2.0	2.2	2.4	2.4	2.4

Source: Vermont Department of Taxes adjusted to 2011$ and expressed in millions.

either Washington County or statewide. Average annual wages for the town, county and state are compared in Figure 10.

While much of the job growth in the past decade has been in sectors with relatively high average annual wages, significant job growth has also occurred in the retail and entertainment sectors, which typically offer lower wages and fewer benefits. Focusing economic development activities on the creation of well-paying jobs and/or the balance of wages in the retail, entertainment, and creative sectors with affordable housing adequate to the needs of Waterbury's changing demographics, can better ensure that more local residents earn a livable wage.

Tax Receipts. In addition to employment and wages, another useful measure of economic activity may be found in the gross retail sales, restaurant receipts, and commercial accommodation rentals generated by Waterbury businesses. Figure 11 shows total sales receipts reported by Waterbury businesses for each fiscal year between 2000 and 2011. Total annual retail sales, adjusted for inflation, grew by about 9% during this period, and by 2011 accounted for 6.9% of total retail sales in the county.

Figure 11 also shows total rooms, meals and alcohol receipts reported by Waterbury businesses between 2000 and 2011. Total rooms, meals and alcohol sales, adjusted for inflation, grew by about 35% during this period, and by 2011 accounted for 17% of total rooms, meals and alcohol sales in the county. Growth in rooms and meals receipts reflects in part expansion of the tourism industry in the neighboring Stowe and Mad River Valley resort areas, as well as the strength of Waterbury's primary and secondary trade areas. Greater diversity of restaurants in Waterbury Village, which reflect the village's growing popularity as an entertainment destination, have contributed to the increase as well.

4-2. Developing Economic Sectors

Within the overall picture of the Waterbury economy, several developing sectors have emerged recently as particularly suited to continued development. Here, we profile those sectors, and point toward positive actions that can be taken to encourage their expansion.

Start-ups, Home-Based Businesses and Co-Working. Start-up and small businesses, including home occupations, home-based businesses, and shared space businesses, are an important and traditional part of the New England economy. According to the American Community Survey, around 8% of Waterbury's employed residents work from home or telecommute and 11% of households reported self-employment income. For many, working from home provides an opportunity to earn an income while saving on transportation and day care costs. Among other benefits, home businesses also can provide valuable income tax deductions to the homeowner.

A successful home-based business may, as it begins to succeed, begin to take on more of the characteristics of a thriving commercial enterprise. The business may begin to have more of a commercial impact on adjacent property owners and the area, including increased traffic, additional signage, parked cars, and overall congestion. Noises and odors can become a nuisance. Home occupations should be encouraged and protected; however, they should also be controlled to ensure they do not become a nuisance or disrupt a neighborhood.

Shared space businesses – businesses that exist within a co-working environment – are a fast-developing part of the Vermont economy. Co-working has distinct advantages for sole practitioners and start-ups. It provides a supportive business environment to those not wanting to assume all of the expenses of renting and furnishing an office while encouraging networking among young entrepreneurs. A distinct benefit of co-working is the advantage it provides to those working within this "hive" environment. As entrepreneurs from different industries mix and collaborate, they generate new ideas, new solutions to problems, and, often, new products.

Independent Service Providers and Retailers. In order to combat sprawl within a small community – the tendency toward auto-oriented, low-density development – it is necessary to ensure that there are independent service providers and retailers sufficient to provide for that community's needs. While Waterbury boasts an impressive slate of service providers, thanks largely to the long-standing need provided by the State Office Complex, and the 1,100 state employees that are anticipated to return, a recent retail market analysis revealed significant opportunities in the retail trade areas.[1]

Specifically, the analysis found retail leakage in the following categories: clothing and clothing accessories stores; furniture and home furnishings stores; electronics and appliance stores; sporting goods, hobby, book, and music stores; and office supplies, stationery, and gift stores. Independent business owners reacted with enthusiasm to these findings. As of mid-2013, two businesses – both located within sight of the central intersection of Stowe and Main Streets – had expanded their offerings to reflect the demonstrated need. Encouraging more independent retailers to take advantage of the community's need for their products and services will strengthen the overall economic picture.

Agriculture and Local Food. The maintenance of working lands is a broadly shared value across Vermont. Farm and forest lands are the foundation for a substantive portion of the Vermont economy. The state's recent formation of a Working Lands Enterprise Board is further recognition of the economic development

1 A retail market analysis was prepared for Revitalizing Waterbury as part of branding work performed for the community by Arnett Muldrow & Associates in 2012/2013.

potential of working lands. Waterbury hosts a number of agriculture-based businesses that should be incorporated into a thoughtful municipal approach to the development of the local agricultural economy. Waterbury businesses that reflect Vermont's identity as an agribusiness powerhouse include: Waterbury's two largest private employers, Ben & Jerry's and Green Mountain Coffee Roasters; notable boutique food and beverage purveyors and restaurants, which have helped define Waterbury as a localvore's paradise; and the Waterbury Farmer's Market, which weekly draws residents and visitors to a lively dialogue among farmers, small producers, and consumers.

In short, Waterbury embodies the farm-to-plate localvore movement identified as a key to encouraging cohesive communities and expanding tourism throughout Vermont. The restaurant cluster recently established in downtown Waterbury includes several dining destination locations committed to the support of the local farm-to-plate economy.

While the area already has the critical mass necessary to define itself as a dining destination, there are still further opportunities to build on the existing food cluster and capture more of the regional market in this category.

- Arnett Muldrow, 2013 Market Study

Many local organizations are working to strengthen Waterbury's developing farm-to-plate economy. For example, the Waterbury/Duxbury Food Council was established to strengthen community by supporting and building a sustainable, healthy food system throughout the region. Among the council's goals are the expansion of local food production, distribution and consumption, and the increased access to healthy food for all. Encouraging the council's efforts, as well as those of other organizations committed to the farm-to-plate economy, will greatly strengthen Waterbury's overall economic climate.

Creative Economy. Similar to many Vermont small towns, Waterbury is home to a thriving community of performers, creators, designers, and makers, who together are responsible for much of the uniquely marketable character of the town. When viewed as a tourist amenity, the arts are clearly an economic driver. Clearly, then, members of Waterbury's creative economy, whether performers, makers, artists, or other creators, should be celebrated as important to the economy overall, and provision should be made for their greater integration into the community and the economy.

A 2010 study of the State of Vermont's arts activity, commissioned by Main Street Landing and the Vermont Arts Council, found that overall, direct employment in the arts throughout the state was estimated to represent 4,342 jobs. This places the arts as an industry above a number of other well known Vermont industries, including food, machinery, fabricated metal product, and wood product manufacturing in terms of job creation. When indirect employment was added, the figure rose to 6,361 jobs and a net economic output of nearly $450 million statewide. This does not include purchases ancillary to arts consumption, such as food and beverage sales and development of production.

4-3. Area Development

In the ongoing competition for notice by potential new business citizens, Waterbury enjoys a distinct competitive advantage of location. Just a 20 minute drive from Montpelier (Vermont's state capital), 30 minutes from Burlington (Vermont's largest city), and midway between the popular resort areas of Stowe and the Mad River Valley, Waterbury sits at the intersection of three of Vermont's most heavily traveled roads (Routes 2 and 100 and

Interstate 89). Amtrak also serves the community, with direct passenger service north to St. Albans on the Canadian border and south to New York, Philadelphia, and Washington, DC. Waterbury is also a freight pass-through for various rail companies that serve communities throughout the Northeast and Canada.

With numerous tourist attractions (including the Ben & Jerry's factory, the most-visited tourist destination in Vermont) and many and varied dining experiences, Waterbury has become a thriving dining and nighttime destination for the region. As well as being a tourist destination, Waterbury is a regional employment center. Approximately 1,500 people work at Waterbury's flagship corporate partners, Green Mountain Coffee Roasters and Ben & Jerry's. Until Tropical Storm Irene, the community housed 1,500 State of Vermont workers. As discussed below, the state expects to return the majority of those workers to Waterbury's downtown.

Waterbury's primary and secondary trade data profile a community with enormous growth potential; with its small town values, big city employment opportunities, and disaster recovery experience, Waterbury is uniquely poised to serve as a model for economic development for communities of varying sizes across the U.S.

It should be noted that business location (or relocation) decisions are influenced by a combination of factors, including access to transportation corridors, availability of water and sewer, quality of the education system, quality of the labor force, and cultural and social amenities offered by the community. In its pursuit of business growth, jobs, and tax base diversity, Waterbury should not lose sight of the quality of life in the community. The maintenance and further development of our transportation network is critical to the success of our local economy. On-going transportation planning and the implementation of the goals, objectives, and actions identified in the Transportation and Land Use chapters are key to the economic growth and success of Waterbury and the surrounding area.

Downtown Development. The term "downtown" generally refers to an area encompassing a significant concentration of commercial and employment activity unlike any other area in a given community. Downtowns are typically distinguished by mixed-use development, including retail, services, office, and residential space. Cultural and civic activities are also a strong component of a "downtown."

Waterbury Village, Waterbury's "downtown," is bounded by Route 100, Route 2, and Interstate 89 to the north, and by Route 100, Route 2, and the Winooski River to the south. A classic example of a 19th century New England village, downtown Waterbury is built to a pedestrian scale and features a diversity of buildings close to the street, many housing a mixture of uses and services. Home to a vibrant mix of residential neighborhoods, civic and cultural facilities, the community's largest concentration of commercial and manufacturing facilities, and independent large and small businesses, Waterbury Village is an attractive choice for businesses looking to relocate to a transportation hub with public infrastructure, available workers and good quality of life.

Since the 1970s, Waterbury Village has been home to the state's largest concentration of government office workers. Until the historic State Office Complex flooded during Tropical Storm Irene, 1,500 state employees, with their accompanying purchasing power, worked in Waterbury. As of the writing of this plan, the state is scheduled to begin reconstruction of the complex's largest building in early 2014. When completed, the the state's Agency for Human Services will be housed in a new building, which will be certified LEED Gold for energy efficiency.

Since Irene, the governor has continually reaffirmed his commitment to returning two-thirds of the displaced office

64% of respondents to the Planning Commission's 2013 Community Survey agreed that Waterbury should encourage more commercial development in Waterbury Village.

workers Waterbury. It should be noted that although the future of the State Office Complex currently seems secure, any development project is subject to changing circumstances. Prudence dictates that Waterbury should continue to explore other options to replace the revenue lost with the departure of the 1,500 state workers displaced by Irene.

Tropical Storm Irene also brought into sharp relief the inadequacy of Waterbury's municipal offices and facilities. The municipal offices were flooded during the aftermath of the storm, and are temporarily housed in the Waterbury Fire Station, which is untenable for the long term because of lack of storage space. As of the writing of this plan, a plan was in development to create municipal offices that would accommodate municipal administrative functions, local police, the community library, and the historical society. A Municipal Building Committee—comprised of the Select Board, Village Trustees, Library Commissioners, a member of the Historical Society, and six Waterbury residents—had been constituted.

In addition to the historic central business district and state office complex, Waterbury's downtown also encompasses a contiguous industrial area of approximately 96 acres, which includes Pilgrim Industrial Park (off Park Row) and Grenier Industrial Park (off Demeritt Place). It is adjacent to the New England Central Rail corridor and has historically been integrated into the surrounding village. The area is home to the Green Mountain Coffee Roasters facility and has benefited from community development funds to improve access to the property. Pilgrim Park offers significant development potential, and an opportunity to better integrate the industrial area with the historic business district through a mix of uses and a pedestrian-friendly development pattern.

In order to maintain a superior quality of life for a town's citizens, any reasonable municipal plan must balance civic priorities and development needs. To this end, the preservation and promotion of Waterbury's historic resources have played, and will continue to play, an important part of the revitalization and promotion of the downtown. Waterbury's downtown received state designation in 2006. This designation provides access to a variety of benefits and incentives designed by the state to encourage reinvestment in traditional community centers.

Today, downtown development efforts are widely supported by Waterbury residents and championed by numerous Waterbury organizations, including the Waterbury Area Development Corporation (see below); the Waterbury Tourism Council; and Revitalizing Waterbury. The Waterbury Tourism Council is dedicated to promoting Waterbury as a vacation and meeting destination; among other activities, the group maintains the tourist information booth on Route 100. Since its inception in 1991, Revitalizing Waterbury has served as a think tank, a convener, and a working cooperative. It has accomplished:

- The purchase and renovation of the Stimson & Graves building, which physically anchors a key position at the intersection of Stowe and Main Streets.
- The redevelopment of Waterbury's historic train station, accomplished in partnership with Green Mountain Coffee Roasters.
- A $1 million capital campaign designed to rebuild houses in the village which had been damaged by the flooding that ensued from Tropical Storm Irene.

Revitalizing Waterbury is currently working in cooperation with local, regional and statewide stakeholders (notably the

Long Term Community Recovery Plan Steering Committee and the Waterbury Area Development Corporation) to create and maintain a vibrant downtown that is inviting, safe, economically sound, lively and livable. Ongoing downtown development efforts not already mentioned include those projects in Waterbury's Long Term Community Recovery Plan that benefit the downtown and its residents and visitors.

Further, during 2014 and 2015, Waterbury's Main Street will be reconstructed, significantly improving the appearance of downtown. The project will include: installation of street trees and new sidewalks; expansion of on-street parking; and burial of utility lines.

Colbyville and Waterbury Center. Colbyville, the northwestern-most part of Waterbury Village, is contiguous with Waterbury Center, which is located on the west and east sides of Route 100. Because of their immediate proximity to Route 100, Interstate 89, and Stowe, both have been the focus of substantial residential and business growth in recent years.

Colbyville is home to Ben & Jerry's first manufacturing facility, the most-visited tourist destination in Vermont. Other development includes a small retail complex that houses a mix of resident- and tourist-friendly retailers and service providers. Waterbury Center, which once had a small, "village" feel, has grown over the years into a significant business community largely anchored by the Cold Hollow Cider Mill, another extremely popular tourist destination. Historically, development in the Triangle has been less significant than on the more accessible Route 100, which has seen the bulk of business development.

In order to further stimulate economic activity while increasing Waterbury Center's appeal as a residential community with a walkable downtown core, the focus on historic preservation that is so much a part of development in downtown Waterbury could profitably be applied in Colbyville and Waterbury Center. Such a focus would have the added benefit of visually unifying Waterbury Village and Waterbury Center.

Route 100 Corridor. The Route 100 corridor links Waterbury Village, Colbyville, Waterbury Center, and the communities of Stowe and Morrisville. A two-lane road, it is the only route from Interstate 89 to Ben & Jerry's, other tourist attractions, and Stowe. During times of peak tourist traffic, it is extremely congested. Several intersections are already extraordinarily difficult to navigate during traditional or visitor-imposed rush hours. As of the writing of this plan, several large commercial projects, including an 80-room hotel and an office complex known as the Energy Mill, are in various states of planning and development along the corridor.

When considering further development of the Route 100 corridor, traffic congestion should be a primary concern. The area also lacks the public infrastructure important to attract and maintain a critical part of the business community. Any further development in this corridor should be accomplished within a forward-thinking context that respects the history, values, and resources of Waterbury.

Route 2 Corridor. Route 2 links Interstate 89, Waterbury Village, Middlesex and points west, and Bolton to points east. Along Main Street in Waterbury Village, Route 100 merges with Route 2. It is used by residents of and visitors to Waterbury as a conduit to local destinations, and by commuters as an alternative to Interstate 89 when conditions warrant.

Route 2 has a small manufacturing, retail, and restaurant cluster, and boasts the necessary infrastructure for business development. Although the area, because of its proximity to the Winooski River, is prone to flooding, it is an attractive prospect for industrial expansion – particularly light industry – and should be explored as such.

4-4. New Economic Development Initiatives

Economic development is the process of creating prosperity by mobilizing human, physical, natural, and capital resources to produce marketable goods and services. Waterbury's economic development efforts have met with enviable results over the past decade; as well, the highest-paying employment sectors – manufacturing and wholesale trade – have increased substantially, and additional expansion potential exists in existing industrial parks. Through a concerted economic development program, the community can ensure that these trends continue.

Waterbury acknowledged the critical importance of this effort in 2013, with the formation of the Waterbury Area Development Corporation (WADC) to ensure the continuation of economic development efforts in Waterbury. The WADC is joined in its efforts by a coalition of local and regional government entities and nongovernmental organizations that share as their goal the continued good health of Waterbury's economy. Specifically, WADC is tasked with:

- Enhancing the existing business climate.
- Assisting current local corporations.
- Recruiting new businesses.
- Fostering and maintaining relationships with local and regional developers.
- Assisting land and building owners with filling commercial properties.
- Advising the Village Trustees on the administration and utilization of the Waterbury Village Revolving Loan Fund.
- Working with local and regional service providers to promulgate Waterbury's economic development interests.

WADC has identified specific areas of business sectors and locations that are ripe for development. These, including specific sites that WADC believes are primary candidates for development, are located throughout Waterbury, and are more specifically identified in the Economic Development Strategic Plan (EDSP), which is currently under development by WADC.

WADC believes strongly that, to attract the largest possible segment of all the economies already discussed, it is important that state and municipal regulations be responsibly and thoughtfully administered in order to allow responsible expansion to occur. Given the high wages paid by the manufacturing industry, and overall community support for continued light industrial development, the full and efficient use of existing industrial parks should be supported, along with the thoughtful development of areas suitable for adaptive light industry. Therefore, as the EDSP develops, to make its impact as strong as possible, every available location should be explored for industrial and complementary development as deemed suitable per location.

As part of its work, WADC is committed to the thoughtful exploration of initiatives designed to make Waterbury a more business-friendly community. These include services that will be provided at no cost to WADC partners, including those arising out of the recent acquisition of a Vermont Digital Economy grant. This grant will offer free services to Waterbury businesses, including classes that will assist companies in becoming more digitally savvy, a free 800-yard Wi-Fi zone (final location to be determined), and one-on-one consulting services.

Cultivate a vibrant economic climate that achieves sustainable economic growth throughout Waterbury; encourage a diversified local economy that welcomes a plurality of business types and sizes; and supply a diversity of jobs at livable wages.

4-5. Goals, Objectives, and Actions

goals

1. Cultivate a vibrant economic climate that supplies jobs at livable wages while maintaining harmony with the area's natural and historic resources and exploiting fully the area's human capital.

2. Encourage a diversified local economy that welcomes a variety of business types and sizes including the more traditional economic sectors and developing sectors including start-ups and home-based businesses; independent service providers and retailers; agriculture-based/locavore businesses; and the creative economy.

3. Support the local economy and its vibrant mix of businesses through traditional and not so traditional business incentives, including the provision for necessary infrastructure (parking, sewer/water, communications, electricity, transportation, etc.); the availability of simplified, clear regulatory action, including fair and efficient permitting; the establishment of enterprise zones, including, where appropriate, tax abatements and deferrals; the encouraging of workforce training; and, above all, the continued maintenance of the high quality of life Waterbury and its surrounding region are known for.

objectives

1. Encourage the development and redevelopment of key existing and new commercial and industrial uses and the prosperity of existing uses in appropriate locations.

2. Enhance the economic resurgence and ongoing revitalization of Waterbury Village's downtown area.

3. Appreciate the arts as an economic driver with quantifiable economic advantages for towns and regions that actively situate them within a local economy.

4. Preserve Waterbury's existing natural and historic resources as a means of ensuring future economic growth.

actions

Overall Economic Activity

1. Work with the Waterbury Area Development Corporation and its partners to develop and implement its five-year Economic Development Strategic Plan, and ensure that the Plan is a resource appropriate to guide Waterbury's economic development efforts.

2. Create, encourage and support economic development programs that directly benefit business and property owners that invest in the Waterbury community, including incentives such as tax stabilization; tax increment financing (TIF) districts; enterprise zones, including, specifically, enterprise zones that acknowledge and celebrate the creative economy within Waterbury; state and federal historic tax districts; and EB-5 (foreign investment) programs.

3. Identify those areas of Waterbury most appropriate for development and assist owners/developers in transforming businesses and properties into financial assets and economic engines for the community, using existing and contemplated economic development tools.

4. Invest in infrastructure that allows for commercial and industrial growth in areas designated for growth throughout the Village and Town of Waterbury.

5. Continue relationships with existing partners, and develop relationships with new partners, to promote Waterbury's location as a desirable site for relocating businesses.

6. Champion a business-friendly regulatory climate, and streamline the local permitting process, wherever possible, desirable, and appropriate, while still fulfilling planning and regulatory goals.

7. Leverage and protect the area's historic and recreational resources to attract visitors and generate economic activity throughout Waterbury.

8. Create and maintain innovative promotional materials, such as the municipal website and those of WADC and WTC and RW, to attract new businesses and support existing businesses.

Developing Economic Sectors

9. Invest the appropriate and necessary resources to cultivate and support businesses within Waterbury's developing economic sectors, including start-ups and home-based businesses; independent service providers and retailers; agriculture-based businesses and the locavore movement; and the creative economy.

10. Invest the appropriate and necessary resources to cultivate and support Waterbury as a viable environment for co-working.

11. Encourage businesses within Waterbury's developing economic sectors to remain in or relocate to Waterbury, in order to enhance the overall attractiveness of the town as a destination location.

Area Development

12. Take advantage of the Village of Waterbury's revolving loan funds to nurture start-up businesses and encourage existing businesses in the downtown area; encourage retail businesses within identified leakage areas to locate in the village.

13. Foster cultural, historic and entrepreneurial activities in the downtown area to draw attention to the downtown's potential for both commercial and residential growth.

14. Champion the development of an integrated Municipal Office Complex that supports and provides growth potential for Waterbury's municipal functions; the Waterbury Memorial Library; and the Waterbury Historical Society, and that can function as a community center and gathering place.

15. Focus on historic preservation as a part of economic development in Colbyville and Waterbury Center, in addition to the Village of Waterbury.

16. Accomplish any further development along the Route 100 corridor within a forward-thinking context that respects the history, values, and resources of the Town and Village of Waterbury.

17. Explore Route 2 outside the boundaries of the village for industrial expansion.

18. Encourage and support efforts to develop a master plan for downtown and other growth centers identifying specific areas for more growth, additional parking, better vehicular and pedestrian traffic and better and more cohesive wayfinding signage.

5. HOUSING

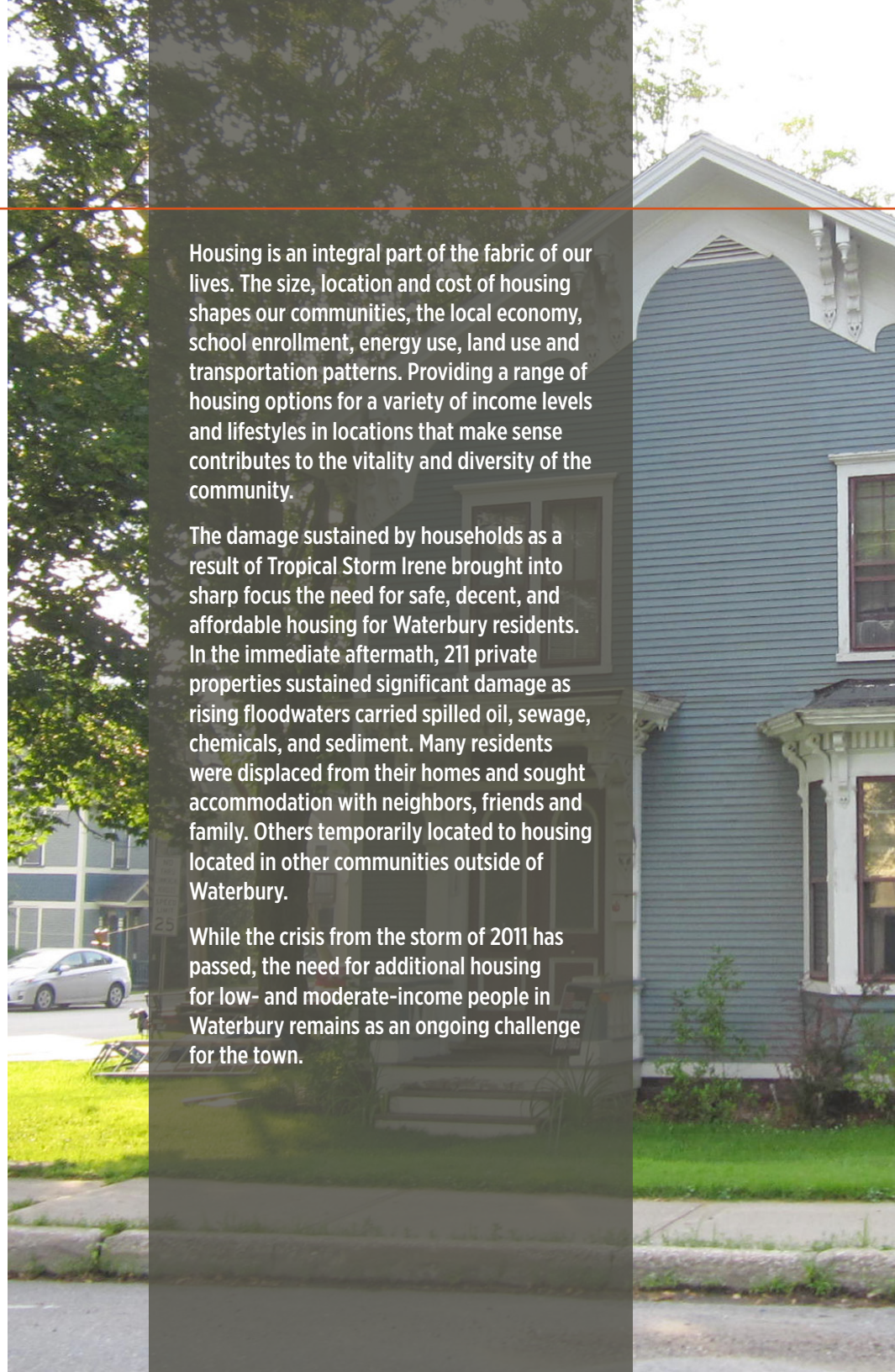
5-1. Household Demographics

The number of households in Waterbury continues to increase at a faster rate than the population growth. As of 2010, there were 2,207 households in Waterbury, 842 of which are located in the village. Nearly 200 new households were created in Waterbury during the 2000s. The rate of household growth in Waterbury, an annual average of 0.9% during the 2000s, remains higher than state and county averages, and higher than growth rates in most neighboring communities.

While the total number of households is growing, following national trends, Waterbury's household sizes have been decreasing for a number of decades. The 2010 Census found that the average household size in Waterbury was 2.27 people (down from 2.93 in 1980), while in the village it was 2.03 people (down from 2.78 in 1980). While the average family size was relatively consistent in the town and village (2.83 and 2.87 respectively), the household composition varied between the two. The most notable difference is the greater percentage of single-person households in the village and a higher percentage of both married couples with and without children in the town. The percentage of single parents with children, other family households, and non-family households were relatively similar in the town and village.

The number of single-person households and married couples without children living at home has been increasing in Waterbury, while the number of married couples with children at home has declined during the past 20 years. Smaller household sizes suggest that additional, more diverse types of housing will be needed to accommodate changing living arrangements.

Also in 2010, the Census Bureau reported that 4% of town residents and 7.5% of village residents lived at or below the



Housing is an integral part of the fabric of our lives. The size, location and cost of housing shapes our communities, the local economy, school enrollment, energy use, land use and transportation patterns. Providing a range of housing options for a variety of income levels and lifestyles in locations that make sense contributes to the vitality and diversity of the community.

The damage sustained by households as a result of Tropical Storm Irene brought into sharp focus the need for safe, decent, and affordable housing for Waterbury residents. In the immediate aftermath, 211 private properties sustained significant damage as rising floodwaters carried spilled oil, sewage, chemicals, and sediment. Many residents were displaced from their homes and sought accommodation with neighbors, friends and family. Others temporarily located to housing located in other communities outside of Waterbury.

While the crisis from the storm of 2011 has passed, the need for additional housing for low- and moderate-income people in Waterbury remains as an ongoing challenge for the town.

Figure 12. **Total Households**

	1980	1990	2000	2010
Waterbury Town	1,504	1,754	2,011	2,207
Waterbury Village	647	717	793	842
Washington County	18,626	20,948	23,659	25,027
Vermont	178,394	210,650	240,634	256,442

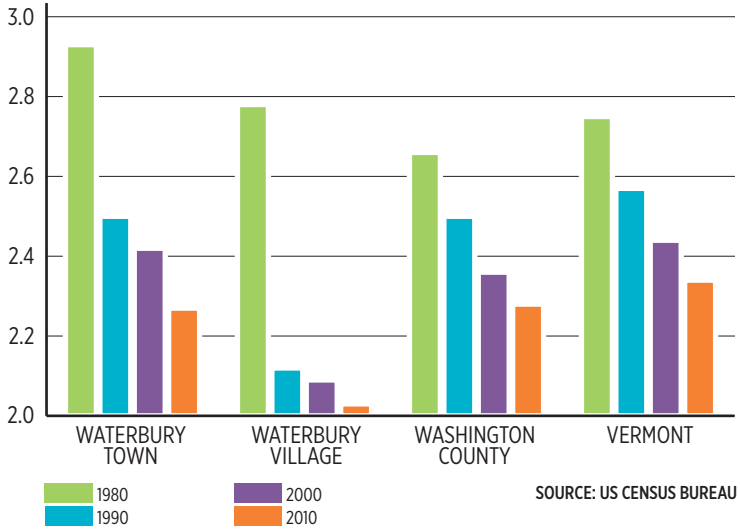
Source: U.S. Census Bureau.

Figure 13. **Household Change**

	1980s		1990s		2000s	
	#	%	#	%	#	%
Waterbury Town	250	16.6	257	14.7	196	9.7
Waterbury Village	70	10.8	76	10.6	49	6.2
Washington County		12.5		12.9		5.8
Vermont		18.1		14.2		6.6

Source: U.S. Census Bureau.

Figure 14. **Average Household Size**



Source: U.S. Census Bureau.

poverty line. This represented a reduction in the poverty rate from previous decades. In 2010 3.2% of children in Waterbury lived in poverty as compared to 5.4% in 1990; and in 2010, 3.1% of seniors lived in poverty as compared with 9.7% in 1990

5-2. Housing Type, Condition and Cost

According to the 2010 Census, there were 2,385 housing units in Waterbury, 900 of which were in the village. The rate of housing growth, which had slowed during the 1990s, rebounded during the 2000s when nearly 280 new homes were built in Waterbury. The town's rate of housing growth during the 2000s was greater than state or county averages, and greater than the rate in most neighboring communities. In the 2000s, more than 75 units were permitted. The majority of these units have yet to be built (they are part of the Blush Hill Meadows Condominium project, still under construction).

The types of residential units in Waterbury have been changing. In the town, the majority of housing units are detached single-family homes (60.3%) with a lesser amount of multi-family housing (23.9%) and duplexes (10.4%). In the village, there has been a slight increase in the number of detached single units (which in 2010 represented 42.6%of the housing stock) and an increase in multi-family units (up to 42.2% in 2010).

The number of mobile homes has dramatically decreased over the past 3 decades; in 1990 they represented 11.4% of the housing stock in the town and now in 2010 only represent 4.1% of the housing stock. Likewise there has been a decline in the number of mobile homes in the village from 3.3% in 2000 down to 1.7% in 2010. While existing mobile home parks have been maintained, the decrease in mobile homes may be attributed to the replacement of a mobile home on separate lots with convention/traditionally built homes.

62% of respondents to the 2013 Community Survey felt that the quality of housing in Waterbury was "good."

Local mobile home parks provide relatively affordable housing for many Waterbury residents who own homes on leased lots. The town's four parks are all privately owned. No new parks have been developed in Waterbury since 1984. There are currently 148 mobile homes in Waterbury; 125 are in the mobile home parks, representing 19.6% of the county total.

The one mobile home park within the village is located within the floodplain and was devastated by the 2011 flooding. The current owner has obtained a local zoning permit to rebuild the 11 units. The new neighborhood is designed to be a "cottage neighborhood" with 11 two-story manufactured homes raised a foot above the base flood elevation. Construction is anticipated to start in late 2013.

The occupancy characteristics of Waterbury's housing stock have remained fairly consistent in recent decades. According to the 2010 Census, 63.7% of housing stock in the town was owner-occupied and 28.8% renter occupied. Seasonal housing made up only 3.7%. These figures are similar to the past 3 decades. In the village, the majority of the housing stock is renter occupied (51.2%), with 42.3 % owner-occupied and an even lesser amount classified as seasonal (1.6%)

Older homes comprise a significant portion of Waterbury's housing stock, particularly in the village. The Census Bureau reported in 2011 that 42% of homes town-wide and 68% in the village were built before 1960. Nearly three-quarters of rental housing in the village is within a structure that is more than 50 years old. Older housing units may contain asbestos and/or lead paint and, unless the building has undergone extensive renovation, may not be very energy efficient. Due to the age of the units, ongoing maintenance and rehabilitation is a necessity. It is desirable for the community to be proactive in promoting housing rehabilitation rather than replacement in order to retain affordable units, promote energy efficiency, and retain the historic character of residential neighborhoods.

The price of housing in Waterbury increased between 2000 and 2010. Based upon Census data the median home sales price in Waterbury in 2000 was $107,000 (adjusted for 2011$); this increased up to $255,400 in 2010. The median home sales price in Waterbury is greater than both the Washington County median sales price ($180,600) and the Vermont State median sales price ($200,200) for the same period. Based upon 21 primary residences sold January-June 2013, the median sales price declined slightly to $235,000. Separate median sales figures for the village were unavailable.

According to the Vermont Housing Data for Waterbury and Washington County,[1] Waterbury's median monthly ownership costs from 2007-2011 were $1487, higher than those reported for the county ($1147). This median monthly mortgage figure includes mortgage loan payment, property taxes, insurance and utilities (including heat) Renters in Waterbury for the period of 2007-2011 were paying a median housing cost of $918, which was greater than the county's median gross rent of $802. Calculations are based upon gross rent for all units, which is the contract rent plus the estimated average monthly cost of utilities and fuels.

Based upon recent information from the National Flood Insurance Program, residents living within the floodplain who are required to carry flood insurance will experience an increase in flood insurance costs within the next year. An analysis

1 The Vermont Housing Data site is created and maintained by Vermont Housing Finance Agency (VHFA) and the Center for Rural Studies (CRS) at the University of Vermont with input and guidance from Vermont's housing community.

53% of respondents to the 2013 Community Survey felt that the availability of housing in Waterbury was "fair."

performed by the Vermont League of Cities and Towns showed that the average flood insurance for a house insured at $170,000 was about $1,600; this cost is anticipated to increase up to $4,000 with the rate changes. This increase will increase future homeownership costs, especially within the village where there is a high percentage of residential units within the floodplain.

5-3. Demand

Over the decade the number of housing units in Waterbury increased by an average of approximately 20 per year. If this is any indication of housing demand over the next ten years, 200 or more housing units will be needed by the year 2023. Since 2000, the vacancy rate in the town has increased from 1.7% up to 3.8%. The vacancy rate in Waterbury Village has also increased; in 2000 it was 2.4%, in and in 2010 it was up to 4.9%. In general terms a housing vacancy rate is considered "healthy" at about 5%. When vacancy rates fall below 5% it indicates that availability is limited and costs increase.

The Central Vermont Regional Planning Commission adopted a Regional Housing Distribution Plan in 2008, which called for the construction of approximately 8,800 new housing units in the region between 2000 and 2020. The distribution plan established the number of housing units for which each municipality should be planning to ensure that the region's housing needs and planning goals would be met.

Waterbury's targets were set as follows: 247 units between 2000 and 2009 (279 were constructed) and 417 units between 2010 and 2020. Even with plans for new multi-unit housing in the

Figure 15. **Total Housing Units**

	1980	1990	2000	2010
Waterbury Town	1,658	1,956	2,106	2,385
Waterbury Village	695	803	823	900
Washington County	22,113	25,328	27,644	29,941
Vermont	223,198	271,214	294,382	322,539

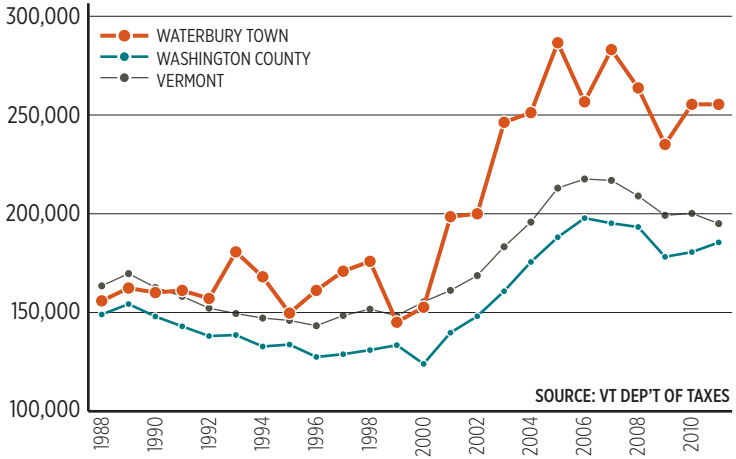
Source: U.S. Census Bureau.

Figure 16. **Housing Unit Change**

	1980s		1990s		2000s	
	#	%	#	%	#	%
Waterbury Town	298	18.0	150	7.7	279	13.2
Waterbury Village	108	15.5	20	2.5	77	9.4
Washington County		14.5		9.1		8.3
Vermont		21.5		8.5		9.6

Source: U.S. Census Bureau.

Figure 17. **Average Sale Price of Primary Homes**



59% of respondents to the 2013 Community Survey felt that the affordability of housing in Waterbury was "fair."

village, it is unlikely that Waterbury will be able to meet regional expectations. However, the housing targets set by the Regional Housing Distribution Plan were determined at the peak of the housing boom and now are unrealistically high region-wide.

5-4. Affordability

A common measure of housing affordability is that a household should not spend more than 30% of its gross income on housing costs. 'Housing costs' are typically defined differently for renters and homeowners: For renters, they include rent and utilities (heat, hot water, electricity, water and sewer charges, and trash removal; for homeowners, they usually include principal and interest on mortgage payments, property taxes, and property insurance, but not utilities.

Under federal and state law, 'affordable' housing is defined based on what a household earning up to 80% of the area median income (AMI) could purchase or rent without spending more than 30% of its income on housing costs. In Waterbury, the AMI is based on an average for all of Washington County. The U.S. Department of Housing and Urban Development (HUD) defines annual income limits for federal and state housing programs based on its estimate of AMI and household size. For FY2013, the area median income (AMI) for households in Washington County was set at $49,900 for a one-person household and $64,100 for a three-person household. This would mean that the maximum expense allowable for 'affordable' housing in Washington County in FY2013 would be $998 per month for a one-person household and $1,282 for a three-person household.

As is the trend throughout much of the U.S., an increasing number of Waterbury residents pay more than 30% of their income toward housing costs. The Census Bureau reported that for the period 2007-2011, 40% of Waterbury's households spent more than 30% of their income on housing each month. Additional factors that affect affordability but which are not reflected within Census housing data are transportation costs and availability of public transportation. While much of village housing is located in proximity to the commuter bus, which provides mass transit between Burlington and Montpelier, the greater majority of housing within the town is served neither by public transit nor by bicycle or pedestrian facilities.

While State and Federal programs clearly define the parameters of 'affordable' housing, more communities are responding to changing demographics by considering the meaning of affordability for a variety of income levels. Some use the term 'workforce' housing to highlight the need to offer more middle-income housing, i.e., housing that is affordable to the majority of employees within an area and/or critical workers who serve the community, such as teachers, police officers, and service industry workers.

Home ownership is a goal of many middle-income families, but often a goal not easily attainable in Waterbury. During the early 2000s, Waterbury's home prices shot well above the county median sale price. In 2000, the median sale price of a home in the Town of Waterbury (adjusted for 2011 dollars) was just over $107,000; by 2010, it had risen to nearly $255,400. By contrast, the median sale price of a home in Washington County was $180,000 in 2010. A household would need to be earning about $68,000 per year and have $20,000 for a down payment to make a $250,000 home affordable. For the period 2001-2011, the median household income for owners in Waterbury was $69,800 and for renters was $37,500.

In a market where more traditional housing stock is out of reach, buyers often turn to mobile homes for affordable housing. In 2012, 43 private residences were sold in the town. Thirty-eight of these were single-family dwellings, with an average price of $281,000; three were condominiums, with an average price of $262,000; and two were mobile homes with land, with an average price of $90,500. In addition, four mobile homes without land were sold, with an average price of $23,000; this further demonstrates the affordability of mobile homes when contrasted with other homes on the market. Based upon the redevelopment plan for the flood-devastated Whalley Mobile Home Park the replacement of affordable mobile homes will be with manufactured cottages marketed at approximately $105,000 per unit.

Responding to the challenge of finding affordable housing in our region, in 2012 the Central Vermont Community Land Trust prepared a Housing Needs Assessment for Waterbury and Washington County. This analysis provided a more detailed look at demographic, economic and housing data, and highlighted for decision-makers those elements of the regional population particularly challenged in finding safe, decent, affordable housing. The study concluded that CVCLT's resources would best be used to address affordable housing issues in Waterbury to support:

- Development of mixed-income Low Income Housing Tax Credit (LIHTC) Family Rental Housing, particularly near Exit 10, where Burlington-Montpelier commuters would have convenient access to transit and to the highway
- Expansion of the Homeland tax relief program for homeowners, especially with higher grant limits (higher grant limits are needed because Waterbury is a higher-cost community)
- Greater access to HARP (Home Affordable Refinance Program) funding for owner-occupier multi-family purchase and rehabilitation (VHFA does not currently permit HARP funding for these types of projects)
- Development of senior-designed ownership housing designed for the accessibility needs of a household wishing to age in place
- Development of more robust and affordable financing for mobile home ownership
- Rehabilitation of rental housing throughout the town
- Development of deep-subsidy rental housing
- Development of additional special needs housing to serve Waterbury and Washington County residents, including assisted living facilities or service-enriched rental housing for frail elders

Combined with a strong capacity to serve a more regional market need, Waterbury was identified by the study as being a good candidate for a Low Income Housing Tax Credit development project, especially for a mixed income development.

The Ladd Hall affordable housing project is being developed by the Central Vermont Community Land Trust (CVCLT) on a site on S. Main St. that has been part of the State Office Complex and is being sold to CVCLT by the state. The original 1890's part of the building will be converted into three apartments. The rear portion of the building that has less historic significance will be demolished and reconstructed into an additional 24 apartments. All the units will be made available to low and moderate income households of varying age including families and senior citizens. The entire building will be ADA accessible. The new construction portion will also meet the VHFA Multi Family Energy Design Standards.

5-5. Special Needs Housing

Special Needs Housing is a broad term used to describe housing which is accessible to people who face complex challenges and may require in-house services for support. This may include men,

woman, youth and families with children who earn less than 30% of median income, who are homeless, or who may suffer from chronic disabilities. Elderly people who require full time care may also require special housing needs.

There are currently 62 subsidized housing units in Waterbury, including both Section 8 units and equity subsidized units. Most units are designated for low-income seniors, and all units are currently located in Waterbury Village. Over the last two decades, subsidized housing for the elderly increased by 14 units with the rehabilitation of the Stimson-Graves Building.

The Central Vermont Community Land Trust, in partnership with Housing Vermont and the town, completed a reconstruction of the Green Mountain Seminary Building in Waterbury Center in 2002. This $2.7 million reconstruction addressed both the need for affordable housing and the renovation of one of the town's most historic properties. The Green Mountain Seminary, located on Hollow Road in Waterbury Center, offers 14 apartments for low and moderate income residents and two market rate units.

According to the 2012 Housing Needs Assessment prepared for the Central Vermont Community Land Trust, design or service needs housing consists of assisted living facilities or service-enriched rental housing for frail elders as well as ownership housing designed for the accessibility needs of an aging household. The assessment identified Waterbury as one of several communities in Washington County having the greatest need and market capacity for ownership housing across the range of senior incomes to meet the needs of a household that wishes to age in place.

As previous stated in Chapter 3 of this plan, for much of its history Waterbury supported a large institutional population. The Vermont State Hospital, when it opened in 1889, had 207 patients. At its peak in 1968 it housed an average daily population of 1,078 patients, representing roughly one quarter of Waterbury's total population. Changes in the treatment of mental illness, and the opening of regional care facilities around the state, have since reduced the number of people requiring hospitalization and shortened the length of hospital stays. As a result, the state hospital population steadily declined. Due to the flooding from Tropical Storm Irene, the State Hospital in Waterbury closed in 2011 and the State's mental health hospitalization needs are being accommodated elsewhere in the state.

There are currently two residential care homes in Waterbury (down from three in 1990). The Kirby House and the Squire House have the combined capacity to house 57 residents, including elders and adult mental health patients. According to the 2010 Census, there were only 54 residents living in group quarters, all of which were in Waterbury Village. The Kirby House also provides limited respite and emergency housing. Subsidized apartment units experience very short vacancy between renters, and waiting lists are common. Waterbury was identified in the assessment as well suited to meet the demands for this aspect of special needs housing because of access to public transportation.

5-6. Housing Density and Distribution

During 19th century and the first half of the 20th century, the housing density in Waterbury was characterized by the two dense villages: Waterbury Village and Waterbury Center, both surrounded by rural countryside with farms and forest lands. After the 2nd World War, Waterbury experienced the start of significant suburban scattered single-family housing development in many areas of the town outside of these villages.

What has followed is an increase in low density scattered development in outlying areas. This trend continued through the year 2000 with a pace of residential development of

approximately 25-30 dwelling units being permitted annually from the year 1990 to 2000. From the year 2000 to 2010, this pace slowed with one 16-unit multi-family affordable housing development constructed in Waterbury Center (the Green Mountain Seminary building) and a 63-unit multi-family market rate development permitted, but not constructed, in the Colbyville area of the Village of Waterbury (Blush Hill Meadows). Based upon permitting information compiled in the town and village reports, from 2010 to 2012 the pace continued to slow down to approximately 10 dwelling units permitted each year, predominantly single-family housing units in the village and in the town.

In 2007, the Central Vermont Regional Planning Commission undertook a build-out study, the purpose of which was to provide a broad-brush look at current trends, existing controls and future land use scenarios and options. The study found that the majority of developable land is located within the low-density residential growth areas and that "very low-density growth in these areas is likely to continue absent of any policy change." These low-density areas have historically been farm or forest land and still contain rural-like qualities which contribute to the natural resource base and aesthetic qualities of the area. The map titled "Distribution of Recent Residential Development, 1999 – 2013" further illustrates that a majority of residential development is occurring the outlying rural areas.

The majority of Waterbury's single-family housing is located outside the village and the majority of multi-family housing is located within the village. In 2010, 69% of single-family homes were located outside the village and 71% of multi-family units were located within the village. Multi-family and attached housing units represented 56% of all housing in Waterbury Village in 2010.

Under the current zoning regulations multi-family housing is allowable in a portion of the Village of Waterbury, predominantly along South Main Street and in the vicinity of the Primary School. Higher residential densities are encouraged in the some of the zoning districts within the Village of Waterbury where public wastewater is available. Multi-family development is also allowed in some areas outside the village, but it is not allowed in the Medium Density, Low Density, or Conservation zoning districts.

Residential Planned Unit (cluster) Developments (PUDs) are allowed in all zoning districts, with the exception of the Industrial District where residential use is not allowed. There are a total of six PUDs in all of Waterbury. Up to a 25% density bonus is allowed in PUDs in exchange for the inclusion of low- and moderate-income housing units, preservation of agricultural land, or the provision of publicly accessible park or recreation land.

Changes to Title 24 Chapter 117 now allow for "mandatory clustering" which can be utilized to help protect natural resources and the previous limits on density bonus have now been removed which can help provide incentives for developers to cluster development. As identified in the CVRPC Study this provides "an interesting option for the town's residential zones" and "a sliding scale for density bonuses which awards greater density to development which are closer in proximity to existing settlements/neighborhoods could be considered as a means of reinforcing traditional settlement patterns." Respondents to the 2013 Waterbury Survey also supported the ideas of encouraging clustered or planned unit development outside designated growth center.

The map titled "Distribution of Existing Residential Structures" illustrates the general density and distribution of current residential structures. It should also be noted that the 2007 build out study included a GIS sampling of densities and minimum lot sizes. The study found that "prevailing existing densities in both village zones (Waterbury Village and Waterbury Center) appear to be higher than that allowed under current zoning."

Implications of this suggest that current density requirement may be inhibiting future residential growth within the village areas.

When asked on the 2013 Waterbury Survey what would be the most effective steps Waterbury could take to manage future residential growth, citizens ranked allowing high-density housing at the state office complex property first followed by allowing multi-family housing in a larger portion of the village. Also when asked where should Waterbury encourage more residential development the majority of respondents supported housing to be located within the village.

The Future Housing Distribution Maps 1-6 and 1-7 show the anticipated location of 60% - 80% of the demand for the period of 2010 to 2020 (334 housing units) identified in the Regional Housing Distribution Plan that is part of the 2008 Central Vermont Regional Plan. Even though this number of units may be unrealistic, considering the current rate of residential permitting, this map identifies where new housing could be distributed. Based on existing densities, available public infrastructure, and the land use policies of this plan, approximately 50% of the new units will be located in the growth centers of Waterbury Village and Waterbury Center and 50% of the new units will be located outside of these growth centers.

One strategy for accommodating a higher percentage of the future housing distribution in the two growth centers to help achieve the land use goal to "Guide future growth and development by reinforcing Waterbury's traditional pattern of concentrated settlements surrounded by rural countryside", is to examine where higher densities of housing can be achieved in the growth centers and how they might be expanded in the future to add areas where higher density housing could be achieved.

The chart below shows the anticipated number of units by the areas that are also identified on the Future Land Use Maps. The anticipated future units range from 60% (250 units) to 80% (334 units) of the targeted demand (417 units) over the 10 year period. This planning exercise is intended to show the desired distribution of this estimated number of dwelling units based on the goals and objectives set out in this Municipal Plan. It is expected that a much higher percentage of the new units in the Growth Centers will be multi-family units than outside the Growth Centers where the housing type will be predominantly single-family units, single family units with accessory dwellings, and duplexes. The Future Housing Distribution Maps 1-6 and 1-7 show the range of 250 to 334 future housing units distributed as follows:

Figure 18. **Housing Distribution Plan**

	Housing Units
Village of Waterbury Growth Center	90-125
Mixed Use: Commercial/Industrial	25-35
Village Residential	40-55
Rural Residential/Agricultural	25-35
Waterbury Center Growth Center	30-42
Mixed Use: Commercial/Industrial	10-14
Village Residential	20-28
Outside the Growth Centers	125-167
Route 100 Corridor	20-27
Rural Residential/Agricultural	90-120
Agricultural/Forestry/Conservation	15-30
TOTAL	**250-334**

Lastly, consideration of the number of residential properties located in the floodplain and the impacts of recent flooding highlight the need for careful consideration of how to retain

current housing units in the floodplain, and where to locate future housing units, especially within Waterbury Village and along Route 2. The floodplain is a valuable natural resource which when free from development allows for the storage of flood waters when rivers overtop their banks during flood events.

Currently, the Waterbury Zoning regulations allow for new development in the floodplain. New residential development must be built at least 1 foot above the base flood elevation. Properties which sustain substantial damages or which undergo substantial improvements must come into compliance with the elevation requirement, yet historic buildings are exempt.

Based upon 2013 Survey results an overwhelming majority of respondents supported restricting development in areas with important natural resources and a majority of respondents also felt that floodplains should be regulated more to protect the floodplain resource.

5-7. Goals, Objectives and Actions

Specific goals and objectives were determined based on a Housing Needs Assessment completed by the Central Vermont Community Land Trust in 2012 as well as consideration of Waterbury's Housing Data Profile, information compiled from the 2010 and 2013 US Censuses and other Vermont housing data resources as well as input received from residents from the 2013 Community Survey.

goals

1. Ensure the availability of safe, decent and affordable housing for all current and future Waterbury residents.
2. Create new housing in locations that maintain the integrity of neighborhoods while increasing density, respecting the natural environment, and minimizing the need for infrastructure improvements.

objectives

1. Encourage development of affordable housing near employment, public transportation, and the area of available services to meet needs of Waterbury's elderly, recently retired, physically disabled, young families and professionals, and low and moderate income households.
2. Encourage the creation of more diverse types of housing that takes advantage of existing housing stock and accommodates smaller household sizes and other changes in household type.
3. Ensure that all new housing is of quality construction and is consistent with the character of the community.

4. Encourage the development of a program to assist with the renovation of rental housing in order to bring buildings into compliance with building and safety codes, increase energy efficiency and improve the quality for renters of all income groups.

5. Encourage the development of a housing renovation program in Waterbury to enable homeowners to make needed updates to older homes, meet building and safety codes, comply with energy efficient guidelines and offer quality environments for homeowners of all income groups.

6. Support housing that employs creative site designs maximizing development potential, minimizing environmental impact, preserving open space, and ensuring greater efficiency in infrastructure.

7. Encourage public/private partnerships to develop housing options in Waterbury to meet changing demographics.

actions

1. Utilize the village's Urban Development Action Grant (UDAG) and Community Development Block Grant (CDBG), and the town's CDBG revolving loan funds for renovating affordable housing stock, for both homeowners and landlords, and to assist with the construction of new affordable housing.

2. Ensure that Waterbury's bylaws allow for residential development in locations of employment and service areas to serve people with special needs and seniors who wish to age in place.

3. When public funds are being used to assist affordable housing projects and single family homes, give highest priority to projects which will be permanently affordable (99 or more years).

4. Promote the utilization of the Central Vermont Community Land Trust's Home Ownership Center to assist with the purchase of homes for people of diverse income levels.

5. Ensure that current and future zoning practices support and encourage the development of safe, decent and affordable housing.

6. Explore participation in the FEMA sponsored Community Rating System in order to reduce anticipated increases in flood insurance premiums.

7. Explore the expansion and infill of the village growth centers, allowing higher density residential and mixed uses that include housing.

8. Encourage partnerships with non-profit agencies such as Habitat for Humanity, Central Vermont Community Land Trust, and Housing Vermont to provide assistance with financing affordable housing projects.

9. Consider formation of a Housing Task Force with local and regional partners, including those identified in Action 8, to facilitate the implementation of the actions in this chapter to include exploring areas, sites, and specific projects that will create a diversity of housing options in Waterbury.

10. Explore increasing density for Planned Residential and Planned Unit Developments to encourage residential development that reduces infrastructure and housing costs while respecting the natural environment.

6. NATURAL RESOURCES

6-1. Topography

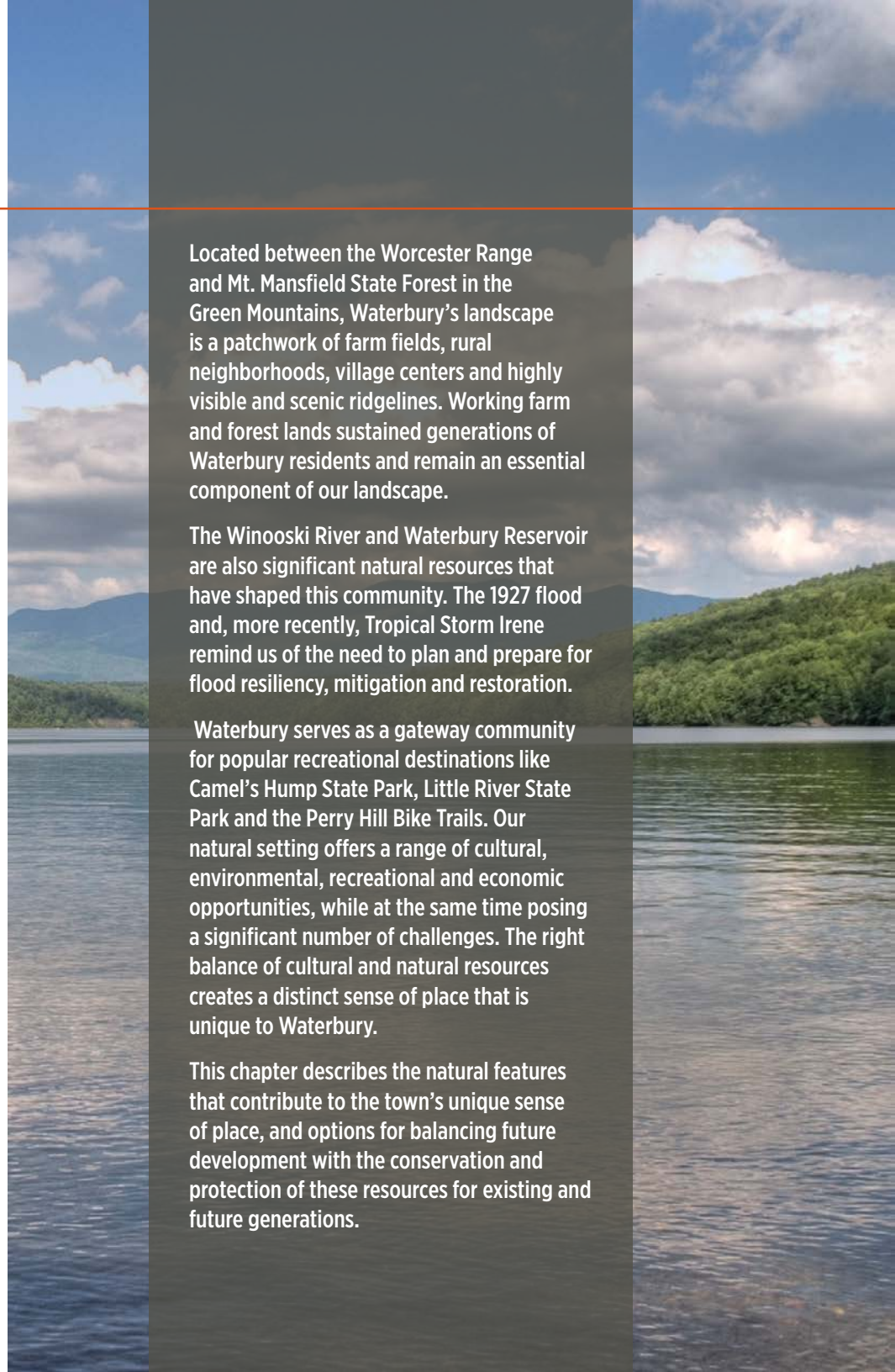
Waterbury's landscape is characterized by prominent peaks, rolling hills, and broad river valleys. The Green Mountain and Worcester Ranges, extending north and south respectively, define the town's western and eastern boundaries. Waterbury's settled areas are more gently rolling, except within Waterbury Village, which lies largely in the level floodplain of the Winooski River Valley. Elevations in town vary from around 400 feet near the Winooski River, to over 2,000 feet in the Worcester Range and approximately 3,400 feet atop Ricker Mountain.

Waterbury's mountain brooks and streams drain into the Winooski River, which flows northwest along the base of the Green Mountains, forming the southern boundary between Waterbury and Duxbury. The Winooski watershed is part of the larger Champlain basin, eventually draining into Lake Champlain.

Steep Slopes and Ridgelines. It is no accident that much of the town's historic development occurred on generally level terrain. Development on steep slopes traditionally has been challenging. More recently, areas like Waterbury Center, which extend up the Worcester Range, have seen an increasing amount of residential development. Such development, however, poses a number of environmental risks, including increased stormwater runoff, erosion, and stream sedimentation.

Development constraints associated with different slope categories, and associated management strategies, as identified by the U.S. Natural Resource Conservation Service (NRCS), are included in Figure 19.

A primary development constraint associated with steep slopes is correspondingly poor soils. Slope information should be used in conjunction with soil information to evaluate the erosion



Located between the Worcester Range and Mt. Mansfield State Forest in the Green Mountains, Waterbury's landscape is a patchwork of farm fields, rural neighborhoods, village centers and highly visible and scenic ridgelines. Working farm and forest lands sustained generations of Waterbury residents and remain an essential component of our landscape.

The Winooski River and Waterbury Reservoir are also significant natural resources that have shaped this community. The 1927 flood and, more recently, Tropical Storm Irene remind us of the need to plan and prepare for flood resiliency, mitigation and restoration.

Waterbury serves as a gateway community for popular recreational destinations like Camel's Hump State Park, Little River State Park and the Perry Hill Bike Trails. Our natural setting offers a range of cultural, environmental, recreational and economic opportunities, while at the same time posing a significant number of challenges. The right balance of cultural and natural resources creates a distinct sense of place that is unique to Waterbury.

This chapter describes the natural features that contribute to the town's unique sense of place, and options for balancing future development with the conservation and protection of these resources for existing and future generations.

Figure 19. **Development Suitability by Slope**

Slope	Recommended Management
<3%	Suitable for development, may require drainage improvements.
3-8%	Most desirable for development, having the least restrictions.
8-15%	Suitable for low density development with consideration given to erosion control, runoff and septic design.
15-25%	Unsuitable for most development and septic systems, construction costly, erosion and runoff problems likely.
>25%	All construction should be avoided, careful land management is required.

Source: U.S. Natural Resource Conservation Service

Figure 20. **Vermont Water Quality Standards**

Class	Description
Class A	Uniformly excellent, high quality waters of significant ecological value, and suitable as public water supplies, with disinfection. Includes all surface waters above 2,500 feet in elevation, and other waters as designated by the Water Resources Board.
Class B	Managed to maintain consistently good water quality for wildlife habitat, recreation, and potable water supplies, with disinfection and filtration. Includes most surface waters.
WMZs	Includes stretches of river specifically designated to receive and assimilate the outflow from wastewater treatment facilities.

Source: Vermont Agency of Natural Resources

Figure 21. **Local Water Quality Classifications**

Water Body	Management Class
Thatcher Brook	Class A (headwaters, water supply source)
Winooski River	Waste Management Zone (downstream of treatment plant)
Waterbury Reservoir	Impaired lake and watershed

Source: ANR Natural Resources Atlas

potential and development difficulty of individual sites. Slopes of 15-25 percent, for example, may not be as severe a constraint depending on the soil types present.

In addition to the potential for sedimentation and erosion, development on steep slopes and hillsides is likely to be more visible from a greater number of locations throughout Waterbury. Because higher elevation land often serves as the background to the community's most scenic views, development in such areas can stand in stark contrast to its surroundings.

To address these concerns, it is important that development on steep slopes and ridgelines are reviewed for potential environmental and visual impacts. In 2006, Waterbury adopted the Ridgeline, Hillside, Steep Slope Overlay Zoning District which applies to land above 1,200 feet in elevation. Land development in this area, including subdivisions, are subject to conditional use review. In addition, the overlay district regulations requires applicants to present habitat studies, erosion control plans and visual analysis's to help protect natural resources for development in the areas that are above 1,500 feet in elevation.

6-2. Water Resources

We rely on clean cheap water supplies not only for sustenance, but also for business and industrial operations, for public health and safety, and for recreation. The loss or diminution of water supplies and water quality cannot be taken lightly. The cumulative loss of clean and reliable water can have devastating effects on the health, safety and well being of our community and the natural systems in our vicinity.

Surface Waters. Major surface waters in Waterbury include Thatcher Brook, Little River and its tributaries (Cotton and Stevenson Brooks to the west, and Bryant and Alder Brooks to the north and east), the Winooski River, and the Waterbury

Reservoir.[1] Streams, including those that are blue-lined mapped by the State of Vermont, those that have a measurable flow of water during any time of year and those that include a definable stream bank or streambed, are numerous. These streams, as small as some may be, contribute greatly to the health and viability of waters within Waterbury.

The Winooski River, which stretches 7.7 miles through Waterbury and defines the town's southern border, is its largest river, and is also an important aesthetic and recreational resource. The headwaters of Thatcher Brook, located just over the town line in Stowe, are Waterbury's main water supply. The tributaries of the Little River, which was dammed in 1938 for flood control, now drain into the Waterbury Reservoir. Major watersheds within Waterbury include the Little River, Thatcher Brook, and the Winooski River.

The Waterbury Reservoir normally covers 840 acres, has a maximum depth of 100 feet and a watershed area of nearly 60,000 acres, It is one of the area's most important scenic and recreational resources. Since 1953 the dam has also supported a hydroelectric facility, currently operated by Green Mountain Power. There is concern that fluctuating water levels under past management have resulted in shoreline erosion and fish habitat degradation. This should be addressed under future relicensing agreements.

Other bodies of water found in Waterbury include ponds that result from beaver activity, typically related to wetlands, as well as man-made ponds constructed either for fire protection or private enjoyment. In the past Waterbury occasionally required the construction of fire ponds in development reviews, but this raised questions of municipal liability so they are no longer required in the reviews.

Surface waters such as rivers, streams, and lakes strongly influence the pattern of growth and settlements, often becoming the focus of development. As Waterbury grows and develops, and the demand for water increases, management becomes increasingly important to prevent water quality degradation and to maintain adequate water supplies.

Under current Vermont Water Quality Standards, all surface waters in the state are classified by the Water Resources Board as either Class A or B waters, or waste management zones (formerly Class C waters), based on related water quality management goals. These classifications represent minimum water quality standards to be achieved and maintained.[2]

Privately constructed ponds involving streams, whether for fire protection or pleasure, may require a state permit for construction, but are otherwise not usually subject to state water quality standards. Such ponds, however, can result in undesirable impairments to fish habitats (increases in temperature, disruption of spawning areas), water quality (sedimentation, contamination), and the introduction of non-native fish species into the watershed. The construction of ponds that will have the potential to degrade stream resources should be discouraged.

The Winooski watershed is one of 17 watersheds in the state that will be evaluated under the Agency of Natural Resources' ongoing Vermont Basin Planning Process. This watershed initiative requires that a basin assessment be conducted by the state every five years, resulting in the preparation of a basin plan. Plans are specifically intended to address water quality problems, including impaired waters, identified in the assessment report. Management strategies and tools will be recommended as appropriate to meet Vermont Water Quality standards. Plan preparation is guided by a watershed advisory committee, and is required to include extensive public participation.

1 See Map 2-3.

2 See Figures 20 and 21.

The state's stormwater management program is necessitated in part to meet the requirements of the federal Clean Water Act. The primary program that governs and monitors water quality is the discharge permit program (National Pollution Discharge Elimination System or NPDES). The Agency's Department of Environmental Conservation evaluates applications for discharge permits to determine whether the proposed runoff from a project (non-point source), or discharge from a municipal waste water treatment facility (point source), will comply with water quality standards. This permitting process requires higher water quality standards and treatment for development located in impaired watersheds that do not meet water state quality standards. The Waterbury Reservoir and its watershed are listed by the state as impaired due to sedimentation and turbidity in the reservoir.

Shorelands and Streambanks. Naturally vegetated shorelines and streambanks enhance water quality, shoreland protection, and the overall health of a stream or lake by:

- Providing bank support and stabilization.
- Helping to prevent lakeshore erosion, bank undercutting and collapse, and in-stream scour and sedimentation.
- Providing food and shelter for fish and wildlife.
- Providing breeding habitat and dispersal corridors for wildlife.
- Intercepting and filtering out pollutants such as silt, fertilizers, toxic chemicals, and livestock waste.
- Keeping water temperatures cool during hot summer months when fish are susceptible to heat stress.
- Moderating harsh winter temperatures.
- Inhibiting algal growth.
- Slowing surface water runoff, and thereby maintaining base flow in streams.
- Helping to prevent the establishment of invasive species.
- Increasing wildlife diversity.
- Reducing flood and ice damage to the stream channel and adjacent lands and structures.

Activities that can or are likely to harm bank vegetation should be avoided. Buffer areas along a body of water, known as "riparian buffers", can minimize or prevent many of the negative effects that encroaching development and other land uses may have on water quality, natural resources, recreation, and scenic beauty.

The Agency of Natural Resources has recently updated its "Riparian Buffer Procedures" which apply only to development subject to state review (e.g., under Act 250). Under these procedures, minimum recommended undisturbed buffer zones are typically 100 feet around lakes and larger ponds and either 50 feet or 100 feet along streams. These minimum widths may, however, may be increased as needed for sites with steep slopes, unstable stream channels, sensitive ecological areas, or projects posing greater risk to water resources, or rare, threatened, endangered, or sensitive species.

Since these procedures do not apply to smaller developments, municipalities are also encouraged to adopt buffer requirements under local regulations to protect shoreland and streambank areas, and local water quality. Figure 22 offers suggested minimum buffer widths with respect to the slope of adjacent streambank and shore lands. Generally, 20 feet of buffer should be added for every 10% increase in slope.

A number of studies suggest that buffers of 100 feet or more offer the most water quality protection. Buffers necessary for wildlife habitat protection may extend from 200 feet for smaller animals to up to 600 feet for larger animals and local bird communities. Reductions in buffer widths, in association with increased buffer management requirements, may be necessary for projects within already developed riparian and shoreland areas, or on pre-

Figure 22. **Recommended Minimum Buffer Widths**

Adjacent Slope	Minor Streams	Major Streams & Rivers	Lakes & Ponds
0-10%	25 feet	50 feet	50 feet
11-20%	45 feet	70 feet	70 feet
21–30%	65 feet	90 feet	90 feet
31–40%	85 feet	110 feet	110 feet
>40%	Additional 20 feet for each 10%		

Source: *How to Include Fish and Wildlife Resources in Town and Regional Planning*, Vermont Department of Fish & Wildlife

existing small lots, where it would be difficult to meet desired buffer widths.

Flood Plains. A significant proportion of the village and some areas of the town lie in the Winooski River and Thatcher Brook floodplains.[1] Major floods occurred in the Winooski River valley in November 1927, March 1936, September 1938, and August 2011. The 1927 flood was caused by a combination of heavy rain and saturated soils and resulted in loss of life and property.

During Tropical Storm Irene in 2011, the Winooski River overran its banks at the head of the village (near the junction of Routes 100 and 2) and, with additional overruns from smaller tributaries including Thatcher Brook, flooded the majority of buildings along Waterbury's Main Street. Floodwaters overran Main Street and nearly all its local arteries in the heart of the village, only bypassing the elevated Stowe Street. Flooding was pervasive: over one-third of village residences and businesses were impacted by flooding. Forty-nine buildings at the Waterbury State Complex were completely inundated. 211 private properties sustained significant damage as floodwaters carried spilled oil, sewage, chemicals, and river mud.

1 See Map 2-3.

Flood control reservoirs on three tributaries to the Winooski River control the 100-year storm runoff from 214 square miles of the drainage area: Jail Branch at East Barre, North Branch at Wrightsville, and the Little River in Waterbury.

The Winooski River continues to flood its banks frequently with heavy rains, and with the exception of 2011 flooding, little damage has been reported since the completion of these flood control projects.

Waterbury's unique basin geography amplifies flooding symptoms because of its location downstream of the Worcester and Green Mountain Ranges. Weather patterns are also becoming unpredictable and storm intensities are greater because of the increasing volume of water in the atmosphere. Because of these factors, land uses and public investments in Waterbury's floodplain areas should be carefully planned and regulated in an effort to minimize property loss, loss of life, and water contamination in the event of flooding while building greater resilience to future flood damage through restoration and maintenance of floodplain function.

Both the town and village have adopted flood hazard regulations that restrict future development in the floodplain to prevent loss of property and life in the event of a 100-year flood. It is important to remember that these regulations are important not only to reduce local hazards, but also to reduce downstream impacts.

In the wake of Irene, the Federal Emergency Management Agency (FEMA) assisted Waterbury in a Long-term Community Recovery process that identified 22 projects, including a flood study, that would examine ways to reduce flooding levels in the Village of Waterbury. Waterbury also enacted a Flood Hazard Mitigation Plan with the assistance of the Central Vermont Regional Planning Commission. That plan identified a variety of disaster mitigation projects that could be accomplished, including flood

mitigation. A flood action and response plan was also created by two volunteer organizations: ReBuild Waterbury, and Vermont Campus Compact which includes college students from the University of Vermont. Collaborations between such groups and nearby towns will help communities communicate across town lines and share safety responsibilities and clean up efforts.

A number of other methods are available to communities and landowners to reduce the threat of flooding, particularly in upland areas outside regulated floodplains. These are discussed in detail in *Community Planning for Flood Hazards*, issued by the Vermont Department of Housing and Community Affairs in 1998 for municipal use.

Wetlands. The term wetland generally refers to marshes, swamps, bogs, fens, and similar areas where water is a significant factor in the presence of plant and animal communities. Wetlands serve a wide variety of functions beneficial to the health, safety, and welfare of the general public. They:

- Intercept stormwater runoff and reduce flooding.
- Supply and protect ground water.
- Filter pollutants from stormwater runoff.
- Stabilize soils and minimize erosion.
- Provide spawning, feeding and general fish habitat.
- Provide habitat for fish, wildlife, migratory birds, and endangered and threatened species.
- Serve as educational and scientific resources.
- Provide recreational and economic benefits.
- Contribute to open space and scenic beauty.

Statewide, it is estimated that Vermont has lost nearly 50% of its wetland resources due to draining, dredging, filling, excavation, pollution, and other activities. Although technology exists to create new wetlands, the process is expensive and usually results in a poorer quality wetland than that created by natural forces.

In 1990 the Water Resources Board adopted the Vermont Wetland Rules (most recently amended in January 2002) to regulate development within and adjacent to wetland areas. Three classes of wetlands have been established to determine levels of protection under these rules.

- Class I wetlands are considered to be exceptional or irreplaceable in their contribution to Vermont's natural heritage and merit the highest level of protection. To date, no Class I wetlands have been identified in Waterbury.
- Class II wetlands are those that are also found to be so significant, either alone or in conjunction with other wetlands, that they merit protection under the rules. They include most wetlands shown on the National Wetlands Inventory Maps (1978), as updated annually and depicted on the Vermont Significant Wetland Inventory Maps.[1]
- Class III wetlands are those which have not been determined to be so significant as to merit protection, either because they have not been evaluated or because, when last evaluated, they were not determined to be significant.

The wetland rules establish a 100-foot buffer zone around all Class I wetlands, and a 50-foot buffer zone around all Class II wetlands. The rules also establish conditional uses allowed within regulated wetlands and associated buffer zones. Activities such as hunting and fishing, hiking and boating, bird watching, scientific research, educational activities, and wildlife, fisheries and silvicultural management do not require state of federal review, provided they do not influence water levels in a wetland and do not involve any draining, filling, or grading.

Waterbury's recently adopted subdivision regulations consider the impacts of subdivision of land on Class I and II wetlands.

1 See Map 2-3.

Ground Water. Many Waterbury residents rely on private or community wells, supplied by underground aquifers, as their primary source of potable water. Groundwater supplies are replenished through aquifer recharge areas that have not yet been extensively mapped, but generally include upland areas of steep slope, fractured rock and shallow soils, sand and gravel deposits, and wetlands. Depths to seasonal and permanent high water tables, and well yields, vary throughout town. The state maintains well log data.

Since 1985, the state has required the delineation of Source Protection Areas (SPAs) for all existing and proposed public or community water systems. These are surface and subsurface areas surrounding a spring or well that serve as natural recharge, collection, transmission, and storage zones for public water supply systems. Waterbury has three source protection areas identified in Figure 23 and on accompanying maps. In addition, a small portion of the Bolton Valley's source protection area (WSID# 20611) extends into western Waterbury, along the drainage divide.

As development increases, so too does the potential for ground water contamination. Major sources of ground water contamination include underground storage tanks, waste disposal sites (legal and illegal), septic tanks, agricultural activities, and the use and storage of road salt, which has resulted in groundwater contamination in the village. In terms of public investment, the prevention of ground water contamination is a more cost-effective approach to maintaining water supplies than its cleanup and the subsequent development of new water sources.

Source Protection Plans (SPPs) are now required for all public community SPAs in order to receive operating permits. These plans, developed locally, identify potential sources of contamination within the SPA, assess related risks, and define strategies to manage potential contamination risks and

Figure 23. **Source Protection Areas**

WSID#	Name	Type	Source #s	SPP Approved
5284	Waterbury Village	Community	006,007,008	3/18/99
5286	Kneeland Flats MHP	Community	001	6/10/97
5287	East Wind	Community	001	2/26/98

Source: Vermont Department of Environmental Conservation, February 2002

emergencies. An SPP is currently in place for each of the three SPAs identified above. Land use regulations can define uses and standards within delineated SPAs to ensure that development does not pose a threat to public water supplies.

Vermont's groundwater protection law (10 VSA Chapter 48) sets forth general policies for SPAs, and the Agency of Natural Resources (ANR) has published recommended land use guidelines for SPAs. In addition, in 2008 the Vermont Legislature passed Act 199 that enhanced groundwater protection in Vermont by declaring groundwater to be a public trust resource that must be managed by the state for the benefit of all Vermonters.

Act 199 also established a large groundwater withdrawal-permitting program that requires any commercial groundwater withdrawal of more than 57,600 gallons per day to obtain a permit from ANR. One of the criteria that a large groundwater withdrawal must meet is that the withdrawal must conform to any municipal or regional plan. As such, Vermont municipalities have the authority to control where and to what extent large groundwater withdrawals occur through their municipal plan, as well as the ability to regulate commercial extraction through zoning.

6-3. Air Quality and Climate Change

Waterbury is like most of Vermont in that the air quality is excellent. Waterbury lies within a Class II "attainment" or "clean air" region as defined by Vermont's Air Quality Implementation Plan, Moderate changes in existing air quality are permissible, allowing for additional industrial, commercial and residential growth. New development cannot exceed maximum levels of pollution emissions as defined by Vermont's Air Pollution Control Regulations. Larger development projects must obtain air quality permits through the Vermont Department of Environmental Conservation, Air Quality and Climate Division.

Local air quality is also affected by vehicle emissions due to increases in traffic and the associated congestion. This is a regional issue since Waterbury is a transportation hub that includes many vehicles passing through our road network to reach other parts of the region. Heating sources can also have a negative impact on local air quality.

An additional concern is the impact on air quality from out-of-state industrial activity such as pollution from coal-fired power plants in the Midwest. These pollutants contribute to conditions such as acid rain that impact the fragile ecosystems of our higher elevation forests and the alpine areas of the mountaintops.

The relationship between air pollution, greenhouse gases such as CO_2, and climate change is now well documented. Climate change and global warming appear to be having a dramatic impact on severe weather events such as Tropical Storm Irene and periodic flash flooding that have a direct impact on many aspects of our local community life. It is anticipated that adaptation to the need to slow down climate change will be a major planning issue moving into the future.

6-4. Geology

Mineral, Sand & Gravel Resources. Bedrock materials most frequently found in Waterbury are schist, gneiss, quartzite, phyllite, greenstone, amphibolite, serpentinite, talccarbonate, and steatite. There are currently no operating mines or rock quarries in town.

Several sand and gravel deposits are located within Waterbury, although most are found on state land or in relatively heavily settled areas (e.g., Waterbury Center). The locations of mapped sand and gravel deposits are shown on Map 2-5. One active gravel pit, located on the Sweet Road near Loomis Hill, is currently in operation.

Gravel is an important local and regional resource for the maintenance of public highways and the construction of new homes and businesses. There are advantages in securing access to local sources of sand and gravel. However, extraction in or near populated areas may have adverse impacts, such as truck traffic, noise, and visual degradation. Although the quantity of the resource in any particular area is limited, operations can go on for 20 years or more. Extraction practices should be carefully controlled – particularly where such resources are located in built-up areas, to minimize adverse impacts on residential neighborhoods. Lands subject to earth and mineral extraction should be reclaimed to minimize adverse impacts on adjoining areas, and to allow for redevelopment.

Soil Suitability. Waterbury's soils are largely derived from glacial till. Details regarding the distribution of soil types, their characteristics and their suitability for a variety of land uses are provided in the *Soil Survey of Washington County*, published by the U.S. Natural Resource Conservation Service (NRCS).

Historically, most development outside of Waterbury Village has relied upon on-site septic systems for waste disposal. Thus soil conditions are a critical factor in determining the location and intensity of development outside of areas served by central

wastewater treatment facilities. The NRCS has evaluated predominant soil types in Vermont and placed them into six categories corresponding to their suitability for on-site disposal. Over half of Waterbury's land area (17,900 acres) is classified as marginally suitable or unsuitable for on-site systems. These lands are generally located at high elevations, on steep slopes and in wetlands and floodplains.

The greatest concentrations of suitable soils for septic systems are located in Waterbury Village, the Kneeland Flats area, land in and to the south of Waterbury Center, and land accessed by the Sweet Road and in the north-east portion of town.[1] However recent and proposed changes to state rules governing on-site systems – which allow for the siting of systems on slopes up to and potentially in excess of 20%, and alternate systems such as peat filters – may open up additional upland areas to development.

Agricultural Soils. The economic viability of agriculture is dependent upon the availability of suitable farmland. The best farmland is characterized by "prime" and "statewide" agricultural soils. Prime soils possess the highest potential productivity and the fewest limitations for agriculture. Statewide soils have good potential for growing crops, but also one or more limitations that will restrict the choice of crops and/or require more intensive management. An estimated 577 acres of prime and 5,199 acres of statewide agriculture soils have been identified in Waterbury.[2] Both prime and statewide agricultural soils are finite and have been designated a state resource (defined as "primary" agricultural soils by the Vermont Environmental Board).

These prime agricultural lands, which are usually well-drained and level to moderately sloped are found along flood-plains, or historic lake beds or historic lake shores. These areas also tend to be ideal for residential and commercial development. While it is important to ensure that development occurs where the land and economy can support it, it is likewise important to protect Waterbury's agricultural resources and the potential for local food production.

Efforts to maintain Waterbury's agricultural land base should focus, in part, on protecting prime agricultural soils to ensure their availability for future agricultural enterprises. The Town of Waterbury adopted subdivision regulations which seek to prevent undue adverse impacts to prime agricultural soils when considering the subdivision of land. For more information about agricultural land use in Waterbury, refer to Chapter 11, Land Use.

6-5. Forest Resources

Waterbury's forest resources contribute to Waterbury's ecological, economic and social well being. Forest land, in this context can simply includes areas with the immediate potential to grow or currently growing trees, shrubs, herbs and others forest species. A healthy forest includes these attributes and retains the ability for self renewal of all forest species, species interactions and functions overtime. This requires the ability for productive growth of forest species, found in large intact areas, unfragmented by development and connected to or in close proximity to other forests.

Healthy forest resources protect water and soil quality by filtering, cooling, slowing and absorbing waters. Forest lands provide habitat for virtually all birds, mammals, amphibians and reptiles expected to be found within the town. In addition to ecological health, forest land contributes to Waterbury's tourism economy through forest-based tourism like recreation, hunting, scenic and wildlife viewing. Forests are an integral part of the ecological, economical and social health of upland communities

1 See Map 2-6.
2 See Map 2-1.

like Waterbury. Protecting forest resources is important to Waterbury's community.

Ownership Patterns. The total acreage of Waterbury's forestland is estimated to exceed 25,000 acres (nearly 80% of the town). Of these, roughly 13,000 acres are held by the state as State Forest or State Park land.

In 2012, just fewer than 2,000 private landowners owned a total of 17,000 acres. Of these, roughly 130 private landowners owned 12,000 acres (forest and non-forestland) in parcels 25 acres or more. Roughly 70% of the private land is owned by 6% of the landowners. These ownership patterns are important to recognize for planning purposes.

In 2012, 66 private landowners owning 5,674 acres were enrolled in Vermont's Current Use Program. The Current Use Program, or Use Value Appraisal program (UVA) enables owners of productive forest or agricultural land to be taxed at the land's use value, rather than market value. In return, landowners agree to follow an approved forest management plan, and to not subdivide their forestland below 25 acres. The roughly 6,000 privately owned acres not enrolled in Vermont's Current Use Program are either ineligible for the program or the landowners are unaware of, or have made a conscious decision to not enroll in the program.

Over time, it is expected that a greater percentage of landowners will own land in Waterbury as parcels become subdivided and smaller. The smaller the parcel size, the more fragmented forests become. Fragmented forests are considered less resilient to disturbances, less diverse, support less wildlife and recreational opportunities, and reduce the viability of local forest products economy. Waterbury should encourage development patterns that reduce the likelihood of these outcomes.

Forest Industry and Management. Waterbury is home to loggers, firewood producers, log truck drivers, arborists, maple syrup producers, timberland owners, foresters, portable sawmill owners and operators. No sawmills are present in Waterbury.

Many of the forest landowners in Waterbury choose to harvest their own wood, or engage in the forest products economy by hiring loggers to cut and sell timber, firewood, biomass or other wood products. Forest landowners enrolled in Vermont's Current Use Program prepare and follow a state-approved Forest Management Plan.

Forestry is well regulated in Vermont and protects waters, soils, and ecosystem health from irresponsible logging operations through a variety of laws, which can be found by contacting Vermont Forest Parks and Recreation.

A healthy local forest product industry is important and in addition to providing economic resources to help cover the costs of owning land, supports local businesses and the responsible use of natural resources. These economic resources can also help cover the costs of ecological restoration and responsible land stewardship. The success of the local forest products industry is related to the amount of available productive forest land and landowners and residents willing to engage in or be accepting of forestry. These are intertwined. Town planning should work to encourage appreciation for owning forestland, promoting responsible uses and management of forest land and encourage keeping forest as forest.

Recreation. Most Waterbury landowners do not own enough forest land to engage in the forest products economy. However, most engage in forest-based recreation. Most recreation occurs in forestland and requires relatively healthy and intact forests for appreciation. Bike, ski or hiking trails require many acres of intact, non-developed land for optimal use. Recreationists appreciate the costs of owning land and managing land. In addition to the residents of Waterbury that engage in forest-based recreation, much of Waterbury's tourist economy requires

forest land for recreation. Tourists engaging in forest-based recreation will also patronize our shops, restaurants, and hotels.

Conclusion. Waterbury should plan to protect forest resources in order to preserve scenic resources, recreational opportunities, wildlife habitat, water and soil quality, and timber and non-timber forest products and producers. Planning should identify important forest areas and carefully consider development in these areas. Consolidating development in areas that do not impact productive forest landscapes, forest soils, keeping forests intact and unfragmented, and plan for the access to forest lands during subdivision are all important tools in the protection of forest resources.

6-6. Wildlife Resources

Wildlife resources can be described as wildlife species, populations, individuals, and their respective habitats. Wildlife popularly refers to mammals, reptiles, amphibians, birds, and fish but can refer to all animals. Habitats are those areas that are required by wildlife for their needs. Wildlife resources are important for ecological functions, but also a source of food, income and enjoyment.

Core Habitats. The size of the habitat is relative to the size of the animal and can occur over large areas. Species like the American black bear, white-tailed deer, moose, or bobcat require large areas whose habitats will overlap with multiple parcels and town boundaries. When the protection of these core habitats are considered in planning, numerous other species that also use portions of these core habitats are also protected.

Increasingly suburban patterns of development usually result in landscapes characterized by small, remnant patches of habitats. These fragments typically produce less desirable wildlife habitat than contiguous woodlands, and gradually result in a shift in predominant wildlife species, from deer, moose, game birds and songbirds to often undesirable "habitat generalists," such as pigeons, sparrows, skunks, and raccoons. The following are some of the habitat needs of specific species.

Deeryards. Deeryards or deer wintering areas are characterized by coniferous forest on predominately south or west facing slopes, typically below elevations of 2,000 feet. In addition to providing winter shelter critical to the survival of white tail deer, nearly half (169 species) of Vermont's vertebrate species rely on coniferous forests for at least part of their life need.

Approximately 5,480 acres of deeryard have been identified in Waterbury. Large proportions of these areas are located within or near state forestlands. Barnes Hill is also considered to host significant deer habitat.

These deer winter areas are identified on a coarse scale and are not updated regularly. While without disturbance, wintering areas do not change significantly between years, it is important to determine the accuracy of any softwood areas or areas mapped as winter areas. These areas can be utilized by generations of deer over many decades, if appropriate habitat conditions are maintained.

Development within or adjacent to deer wintering areas decreases the amount of land available for deer survival and may contribute to a decline in Waterbury's deer population. It may also increase the incidence of human-deer conflicts. Encroachments can be managed to a certain extent through the appropriate siting and management of new development to minimize habitat fragmentation and provide adequate buffering.

Bear Habitat. The mountainous, forested landscape we appreciate in Waterbury for recreation and beauty is also a stronghold for the black bear. Waterbury's portion of Mount Mansfield State Forest has been identified as bear production habitat. The area reportedly supports a relatively high density of cub-producing females. Generally, contiguous and remote forestlands contain

critical habitat necessary for bear survival and are considered essential for the long-term stability of Vermont's bear population. Forest types characterized by heavy mast production (beech and oak stands) are especially important.

The upland portions of the Worcester Range in Waterbury as referenced in the Wildlife Resources Map have been identified as seasonal bear habitat, a region frequently used by bears, including cub-producing females. These areas contain critical seasonal feeding areas and travel corridors.

A result of human encroachment into bear habitat is bear-vehicle collisions, which rarely turn out well for either the bear or the automobile. According to the Vermont Department of Fish and Wildlife, Waterbury has had an unusually high number of such collisions in recent years. This is likely due to a combination of factors including the presence of a large bear population, significant travel corridors and forest fragmentation for residential development.

To ensure the survival of the black bear (and other species with similar habitat needs), Waterbury's forest lands should be carefully managed with appropriate siting and management of new development to minimize habitat fragmentation and provide adequate buffering. Forestry, agriculture, and recreation are generally compatible uses; however, low density housing, even if scattered proportionately across the land, can diminish bear habitat if located inappropriately.

Forest Birds. Waterbury's forests are part of Bird Conservation Region (BCR) 14 – the Atlantic Northern Forest, as delineated by North American Bird Conservation Initiative. This region provides seasonal breeding habitat for some of the greatest diversity of bird species found anywhere in the continental United States. With elevations up to 3,000 feet and a mix of forest types (hardwood, softwood, and mixed forest), Waterbury offers outstanding opportunities for bird conservation. The National Audubon Society (Audubon Vermont) has identified a 290,936 acre area, which includes the entirety of the Town of Waterbury, as the Mansfield/Worcester Priority Block, denoting its significance to bird conservation within the state.

Among the forest birds that have been documented and known to utilize forestland in Waterbury as nesting or migratory stopover habitat are those that have been identified by the state as being Species of Greatest Conservation Need. Bicknell's Thrush and Canada Warbler are listed as high priority. Cooper's Hawk, Northern Goshawk, Red-shouldered Hawk, American Kestrel, Ruffed Grouse, American Woodcock, Black-billed Cuckoo, Chimney Swift, Olive-sided Flycatcher, Veery, Wood Thrush, Chestnut-sided Warbler, Black-throated Blue Warbler, Bay-breasted Warbler, and Blackpoll Warbler are listed as medium priority.

Thoughtful and intentional stewardship of public and private forestland can be designed to integrate forest bird habitat management with other forest uses, including timber production, maple sugaring, and recreation. Overall habitat quality can be enhanced through management activities that maintain a diversity of native tree species, control non-native invasive species and insect pests, create forest stands made up of a variety of tree size classes (seedling/sapling, pole timber, saw timber, large sawtimber), and provide for input and recruitment of dead woody material on the ground and standing dead trees (snags) and cavity trees. Town planning and zoning that minimizes forest fragmentation and conversion of forestland to non-forest cover is also a critical component of long-term bird conservation efforts in Waterbury.

Rare, Threatened and Endangered Species. Species can be listed as state threatened or endangered and protected by Vermont's Endangered Species Law. Those with federal status are protected by the Federal Endangered Species Act. In terms of state listing, often local municipalities can assist in the information sharing

and oversight of protection, though not required. A statewide rare species is defined by the State of Vermont as those species with: a state rank of S1, which are very at risk of extinction or extirpation due to extreme rarity (often 5 or fewer populations or occurrences), very steep declines, or other factors; or S2, which are at high risk of extinction due to very restricted range, very few populations, steep declines, or other factors.

Observed occurrences of rare, threatened and endangered species (RTE) are recorded by the State of Vermont.[1] However, due to the fact that most discoveries of RTE species occur in conjunction with development projects, little is know about the presence and quantity of these species in our community. A resource inventory of municipal lands should take place in addition to working with willing private landowners to conduct resource inventories. Waterbury recently adopted subdivision regulations that consider the impact of RTE species in the subdivision of land.

Significant Natural Communities. The Vermont Fish and Wildlife Department defines a natural community as "…an interacting assemblage of plants and animals, their physical environment, and the natural processes that affect them". These are predictable and based on characteristics like soils, topography, climate, and temperature, among others. Where conditions are rare, communities can be rare. Where development has been concentrated around specific soils or conditions, these communities may also be rare.

Vermont Fish and Wildlife recognizes 80 natural communities. These communities are ranked based on their rarity using S1-S5 system with S1 being extremely rare and S5 common. They are further classified by Element Occurrence (EO) with a condition from A (excellent) to D (poor) on a local and statewide basis. A natural community in an excellent (A) condition is typically one without recent logging, natural disturbances, or other factors that would have altered its condition.

Significant natural communities are defined as those communities with: a state rank of S1 or S2, and an EO condition of either A, B or C; a state rank of S3 or S4, and EO condition of A or B; or a state rank of S5 and an EO condition of A.

In addition to statewide frequency, it would be of value to identify the occurrence and frequency of natural communities within the town to determine rarity on a local scale. This will require a natural community inventory that identifies these communities and their condition. Communities along cliffs, ridges, or rivers are likely have some local significance.

Wildlife Corridors. A wildlife corridor is an area of land used by wildlife to travel between core habitats. The size (width and length) and condition of a corridor varies based upon the individual wildlife species in question. Whether the wildlife is spotted salamanders or moose, the movement of individual animals across the landscape is critical for healthy wildlife populations. Corridors between core habitats supply plenty of land area for animals to find food, shelter, and mates; provide animal's free movement between summer and winter ranges; and allows genetic flow between populations to prevent inbreeding.

Although our understanding and identification of all the wildlife corridors in Waterbury is not complete, one of the most critical documented wildlife corridors is found near the Waterbury/ Stowe town line, in the area known as Shutesville Hill. This is one of the few areas in Waterbury and Stowe where wide-ranging large mammals such as moose, black bear, and bobcat can find sufficient contiguous forest cover linking the large core habitats of the Worcester Range and CC Putnam State Forest to the east

1 Vermont's Fish and Wildlife Diversity Program maintains information of occurrences and these can be requested at anytime at 802-241-3700 or email fwinformation@state.vt.us.

and Mount Mansfield State Forest to the west. Route 100 bisects this corridor and although it does not eliminate the function of the corridor it does present an added challenge to animal movements.

Maintaining the function of the Shutesville Hill and other wildlife corridors can be achieved in part through zoning, compatible land management activities, public outreach and education, and conservation easements set in place by willing private landowners.

6-7. Invasive Species

Non-native, invasive species deteriorate native habitats and ecosystems. To help ensure the natural diversity of plant and animal growth, as well as the recreational and tourism resources, Waterbury must be cognizant of spreading non-native species that pose a risk to native habitats. These non-native organisms can aggressively out-compete native flora and fauna and in the case of insects that are without native predators, cause high mortality in their hosts. Invasive species aren't inherently threatening; however, they do directly compete with many of our natural resources.

Examples of terrestrial vegetation invasive species common to the Waterbury area include but are not limited to Japanese Knotweed, Winged Euonymus or "Burning bush," Garlic mustard, Japanese Barberry, poison parsnip, wild chervil, and multi-flora rose, and bush honeysuckles.

A number of terrestrial insects have been having a large impact of forests in New England that have either not been introduced to Vermont or have been introduced to a limited extent. These include Asian Longhorn Beetle, Hemlock Wooly Adelgid and, most notably, the Emerald Ash Borer. These organisms are most successful in recently or frequently disturbed sites or stressed environments.

In addition, it is likely that the Emerald Ash Borer will soon be present in Waterbury. Very few ash trees exist within the village; however, many forest landowners have ash present in their woods. It will be important for organizations, including the Waterbury Conservation Commission, to be prepared for the Emerald Ash Borer response.

Trained individuals can support local efforts to limiting the spread of invasive species in Waterbury. By receiving training to identify invasive species, volunteers can help slow or prevent the spread of invasive species. The Waterbury Conservation Commission, Vermont Fish and Wildlife, Vermont Forests, Parks and Recreation, the Nature Conservancy and NRCS are available resources.

Waterbury should put in place mechanisms and policies to prevent the introduction and spread of invasive species through transportation and infrastructure projects and maintenance. Specifically, the sand pile at Moran Lane, Guptil Road in Waterbury Center, and Dump Road all contain sand, gravel or debris with invasive species. This road material is intended for community projects and the movement of these earthen road materials could introduce invasive species to areas not currently infested with invasive species.

6-8. Open Lands and Scenic Resources

Open land – whether it is farmland, forestland, wetland, ledge, hillside, slope, or public land – is an environmental, economic, and cultural resource. These open spaces provide livelihoods, recreation, wildlife habitats, and water supplies. They contribute to the desirability of the area for tourism, help define Waterbury's rural character, and contribute to our quality of life.

According to the community survey, nearly 85% of residents rate their ability to enjoy scenic views in Waterbury as good to excellent. When asked about the most important resources to protect in Waterbury, scenic views ranked second behind historic buildings.

Waterbury has numerous scenic vistas of surrounding mountains and valleys, which contribute to its visual character. Both the Green and Worcester Mountain Ranges are prominent features when traveling east or west on the highways adjacent to the Winooski River in the southwest part of town. From hills to the west and east of Route 100, the mountains, the Winooski River Valley, and the Waterbury Reservoir create a magnificent view. Travelers along Route 100 can see broad expanses of mountains and rolling hills and the snowy peak of Mount Mansfield in Stowe.

It is for these reasons and others that Waterbury and Stowe joined together to nominate Route 100 to the Vermont Byways Program in 2008. The nomination was enthusiastically accepted into the program and is officially designated as the "Green Mountain Byway". It should be noted that the that the Byway Corridor encompasses both towns in their entirety and is not limited to Route 100 or its right-of-way.

The nomination cited the following intrinsic resources: historic and archaeological qualities, cultural qualities, natural qualities, recreational qualities, and scenic qualities. The "Green Mountain Byway Vermont Byway Corridor Management Plan" dated October 30, 2008 fully details each intrinsic quality. The Natural Qualities and Scenic Qualities sections speak directly to the open lands and scenic resources this plan strives to protect.

The management plan summarizes that sustaining activities such as agriculture, forestry and recreation depend on and have thrived on the rich abundance of natural resources of the land. Protecting and increasing public awareness of these resources within the corridor will be an essential part of sustaining harmony between humans and the environment. The plan goes on to rank the corridor's scenic quality high (+3 on a scale of +3 to -3) for its long distance views of high ridges, alternating patterns of undeveloped meadows and historic farmsteads and their associated cultivated lands, historic buildings and settlement patterns, and the variety and extent of classic Vermont scenes and landscape patterns which contribute to this area's unique sense of place.

Waterbury adopted regulations in 2006 to ensure residential development in high elevations and steep slopes would not have a detrimental impact on scenic and natural resources. As Waterbury continues to accommodate and direct new growth, and the pressure to develop its open land increases, difficult decisions will need to be made regarding the value of such open lands to the community and perhaps the region. Some resources may be more critical to Waterbury's environmental, economic, and cultural wellbeing than others. Such lands should be identified and adequate measures developed to ensure their protection for future generations.

6-9. Impact of Development on Natural Resources

The role of planners is to be well informed and make conscience decisions over the future of our community. We depend on these natural resources like water and air to be safe, available, predictable and have an ability to renew. Others resources provide more intangible benefits like recreation or scenic vistas. It is also understood that development, transportation, and recreation, for example are all important aspects of our community. However, each will have certain impacts on one or many natural resources.

The goal of land use regulations should be to make sure that the impacts of development are not unduly adverse. The cumulative impact of development, including forest fragmentation should be taken into consideration in the review of individual development projects. Furthermore, our planning should promote natural resources by protecting significant and rare resources and also prevent natural resources from becoming rare.

6-10. Goals, Objectives and Actions

goals

1. The responsible stewardship and sustainable use of Waterbury's natural resources in a manner that protects and enhances the town's and the broader region's environmental wellbeing for the benefit of present and future generations.
2. The conservation of natural features that contribute to Waterbury's ecological health and biological diversity.
3. Flood resiliency, mitigation and restoration following flood events such as Tropical Storm Irene.

objectives

1. Identify and protect significant natural resources, including streams, Class I & II wetlands, prime agricultural soils, wildlife resources, significant natural communities, and rare, threatened or endangered species.
2. Accomplish the protection of identified natural resources through measures and programs that support where appropriate, the sustainable use of those resources, including management of productive forests, agricultural use of prime agricultural soils, recreational use of land and water, and the generation of renewable energy in appropriate locations.
3. Support the continuation and expansion of the state's current use program to tax farm and forest properties at their productive value rather than their development potential. Encourage the participation of Waterbury landowners in this program.
4. Support the efforts of private landowners, and local, regional and statewide conservation organizations to protect open space in Waterbury through voluntary programs.

5. Control the extraction of groundwater for commercial purposes carefully to ensure that water is extracted at sustainable rates and to prevent the depletion of water supplies in the community.

6. Work in partnership with neighboring communities to protect the ecological integrity of shared natural resources such as the Mount Mansfield State Forest, the Worcester Mountain Range, and the Winooski River.

7. Complete forest, wildlife, wetland, waterway and natural community inventories with the help of landowners to expand understanding and inform decision making processes.

8. Prevent and control the spread of invasive exotic species in Waterbury through town actions, public engagement with landowners and other residents, and collaborative efforts with other towns and partners.

9. Protect and enhance the quality of Waterbury's surface waters through the maintenance of riparian buffers along river corridors and streams.

10. Mitigate damage sustained from flooding through land use regulations, flood proofing of critical facilities in the floodplain, engaging landowners in proactive measures to flood proof, and participate in the FEMA sponsored Community Rating System (CRS) to help further these efforts and reduce flood insurance premiums.

actions

1. Prohibit road salt storage areas in the special flood hazard area or regulatory floodplain, Class I or II ground water zones, well head protection areas, and any other areas designated as an important ground or surface water protection area.

2. Identify and apply for grants to develop enclosed structures for salt and sand storage.

3. Determine best practices to reuse waste or materials collected from the spring gathering of winter sand on the roadsides.

4. Discourage the spread of non-native invasive plants caused by infestation of municipal sand and gravel storage areas. Regularly check for and remove invasive species within town owned and managed dirt, sand, gravel piles or other materials intended for community projects.

5. Work in partnership with the VT Department of Environmental Conservation to expand chloride sampling and to examine chloride data from Waterbury waterways.

6. Work in partnership with Better Backroads to implement best management practices for maintaining roads.

7. Work with public and private landowners to establish riparian buffers where needed and maintain existing adequate riparian buffers.

8. Conduct a more detailed geomorphological assessment of Waterbury's significant waterways to determine site-specific vegetated buffer and setback requirements. Consider developing a more accurate fluvial erosion zone map of these waterways and the associated fluvial erosion zone regulations.

9. Incorporate adequate setback distances and riparian buffer standards for streambanks into development review regulations. Include best practices for stream crossings, such as bridges and culverts, in order to minimize streambank disturbance.

10. Preserve and enhance public access to Waterbury's waterways.

11. Limit development on lands with a slope greater than 25%, on lands above 1500 (plus or minus) feet in elevation, and on all prominent ridgelines and hilltops.

12. Support the continuation and development of agricultural and sustainable forestry operations in Waterbury to maintain economic viability of open spaces and ensure food security.

13. Pursue completing a Land Evaluation and Site Assessment (LESA) program for Waterbury's agricultural and forest lands to rank land based on respective values.

14. Consider mechanisms for funding Waterbury's Conservation Fund.

15. Design land subdivisions and land development outside of designated growth areas, to minimize development on and fragmentation of significant natural resources.

16. Enact, incentivize and support measures to preserve prime agricultural soils for continued agricultural use and prevent the fragmentation and development of these resources through the town's land use regulations.

17. Support the work of the Waterbury Duxbury Food Council.

18. Work with VT Fish & Wildlife Department to conduct community mapping project to identify wildlife corridors in order to focus conservation efforts or locate areas appropriate for wildlife crossing structures.

19. Promote habitat incentive programs to private landowners in order to better manage wildlife habitat in Waterbury.

20. Monitor the expansion or relocation of utilities (e.g. electrical facilities) for their effect on natural and scenic resources.

21. Minimize conflicts between current land uses and the extraction of mineral resources. Continue to update standards regulating the extraction of mineral resources, impacts on adjacent uses, and the reclamation of the site.

7. ENERGY

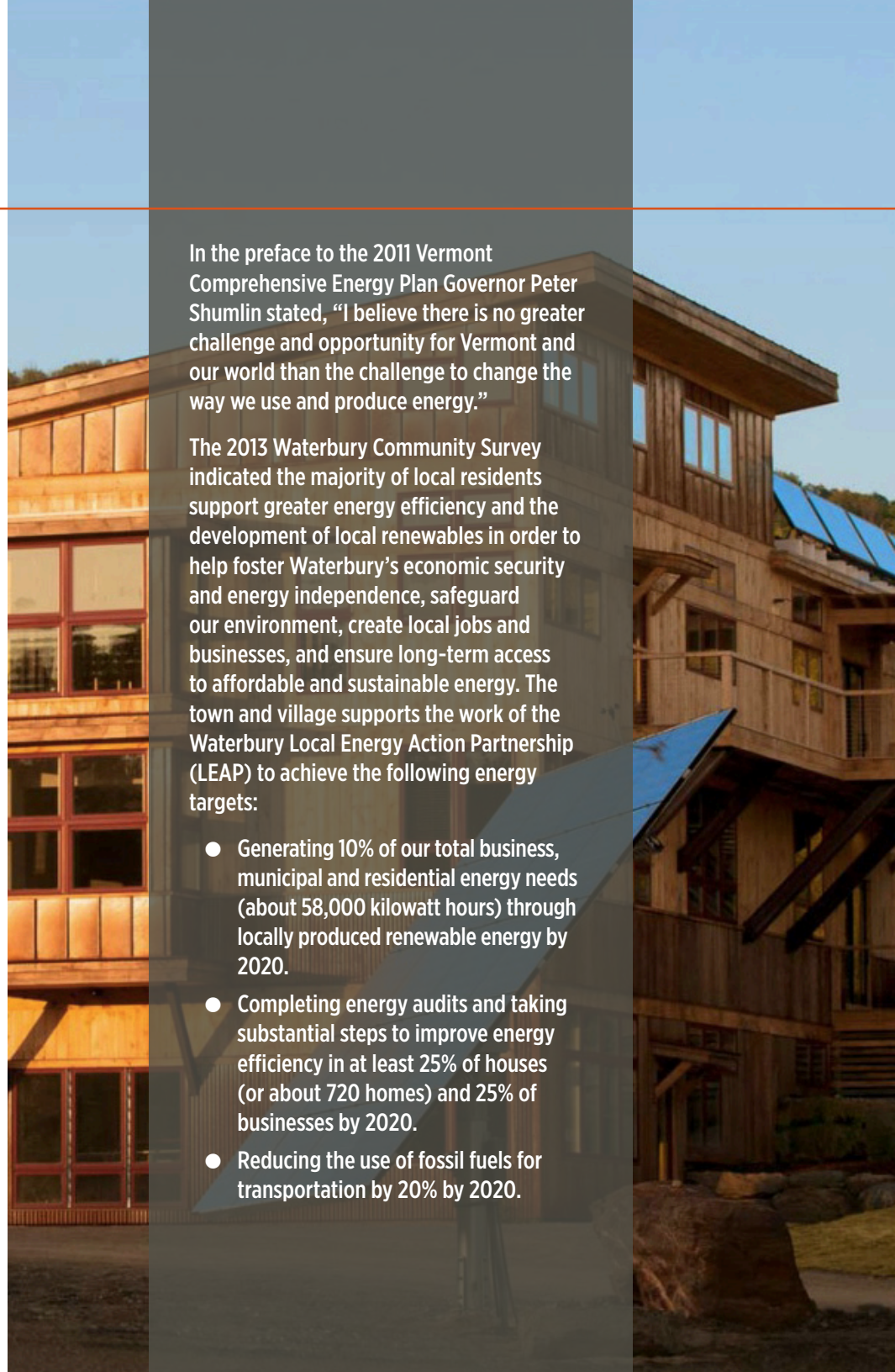
7-1. Vision

Waterbury will work to help the state meet the specific energy targets established in the state's Comprehensive Energy Plan[1] in three areas: renewable energy use, energy efficiency, and transportation efficiency:

- Renewable Energy Use. Waterbury will support increased use of renewable energy by conducting land assessments to identify the most attractive sites for solar orchards and other renewable projects; establishing site review criteria for evaluating potential large scale renewable energy projects; encouraging greater use of renewables among municipal buildings; and facilitating small scale wind and solar use by local residents and businesses. Waterbury will strive to generate 10% of its total business, municipal and residential energy needs (about 58,000 kilowatt hours) through locally produced renewable energy by 2020.
- Energy Efficiency. Waterbury will encourage greater energy efficiency among its residents, businesses, and municipalities. Waterbury will work with local groups to encourage greater use of energy audits and to utilize LEED certification as appropriate. Waterbury hopes that at least 25% of houses (or about 720 homes) and 25% of businesses will have undertaken energy audits, and taken substantial steps to improve their energy efficiency by 2020.[2]
- Transportation Efficiency. Waterbury will encourage greater transportation efficiency by supporting the expansion of public

1 Vermont Department of Public Service. 2011. Comprehensive Energy Plan: Vermont's Energy Future – Volume 1. Available at: www.vtenergyplan.vermont.gov

2 The Comprehensive Energy Plan has a goal of substantially improving the energy fitness of 25% of the state's housing stock by 2020. Waterbury has approximately 2817 households and 752 businesses (see http://www.manta.com/mb_51_ALL_LNP/waterbury_vt). Of these, at least 217 homes have already had an energy audit and taken action on the results within the past 10 years.



In the preface to the 2011 Vermont Comprehensive Energy Plan Governor Peter Shumlin stated, "I believe there is no greater challenge and opportunity for Vermont and our world than the challenge to change the way we use and produce energy."

The 2013 Waterbury Community Survey indicated the majority of local residents support greater energy efficiency and the development of local renewables in order to help foster Waterbury's economic security and energy independence, safeguard our environment, create local jobs and businesses, and ensure long-term access to affordable and sustainable energy. The town and village supports the work of the Waterbury Local Energy Action Partnership (LEAP) to achieve the following energy targets:

- Generating 10% of our total business, municipal and residential energy needs (about 58,000 kilowatt hours) through locally produced renewable energy by 2020.
- Completing energy audits and taking substantial steps to improve energy efficiency in at least 25% of houses (or about 720 homes) and 25% of businesses by 2020.
- Reducing the use of fossil fuels for transportation by 20% by 2020.

transportation, carpooling, and bike/ pedestrian access and to encourage greater use of electric and more fuel efficient vehicles. By 2020, Waterbury aims to reduce the use of fossil fuels for transportation by 20%.

7-2. Statewide Energy Trends

In 2011, Vermont released its Comprehensive Energy Plan. Key findings of that plan include:

- Vermont's goal is to virtually eliminate reliance on oil and fossil fuels by 2050, and to generate 90% of the state's energy from renewables.
- In 2009, the most recent year for which data was available from the U.S. Department of Energy's Energy Information Agency (EIA), 52% of Vermont's energy use was met by petroleum-based fuels. Natural gas consumption, which is constrained by pipeline infrastructure, provided 6% of overall energy use.
- Other energy sources, which included nuclear energy and all renewable energy sources (hydro, biomass, wind, and solar accounted for the remaining 42% of Vermont's energy supply.
- Vermont's energy use breaks down as follows: transportation, 34%, residential sector, 31%, commercial and industrial sector, 36%. Approximately two-thirds of the energy used in Vermont is for heating and transportation.

While residential energy demand has increased since 1990 due to a net increase in households, there is a declining trend in residential demand per household (0.3% annually since 1990). The transportation sector accounted for the largest portion of the increase in state energy demand since 1990 with an average annual growth rate of 1.3%. Commercial energy demand has been growing at a rate of 1.1% per year since 1990, but is actually declining slightly on a per-employee basis. Energy demand by the industrial sector decreased an average of 0.2% per year since 1990, although much of the decline actually occurred during the 2007-09 recession.

Fuel prices are typically higher in northern than in southern New England. Significant increases in the costs of gasoline, diesel fuel, and heating fuel over the last decade have led to ongoing national debates over energy supplies and policies, including the use of federal fuel reserves to reduce the cost of heating fuel in the northeast. Price spikes in recent years highlight our area's heavy reliance on limited sources and types of fuel and leave the local population, particularly low-income residents, vulnerable to fuel shortages and price fluctuations.

Vermont's average annual electric use is forecasted to increase 0.4% annually through 2030, although this projection does not account for the potential increase in demand that would be caused by widespread use of electric vehicles. Demand for thermal energy from petroleum fuels (especially space heating) is forecasted to decline statewide at an average annual rate of 0.9% through 2027 as efficiency improvements will offset increased demand resulting from residential and economic growth.

7-3. Waterbury's Energy Trends

Electricity. In 2012, Waterbury used approximately 57,855 megawatt hours (MWh) of electricity annually - 67% by commercial and industrial customers and 33% by residential customers. Waterbury's commercial and industrial consumption has grown about 4% annually since 2005, and residential consumption has grown about 2% annually since 2005.

The Vermont Public Service Board regulates utility rates. In 2009, GMP's average rate for all electricity delivered was 12 cents per kilowatt-hour, compared with a New England average of 16 cents per kWh.

According to the community survey, 75% of respondents supported small-scale solar for personal use and 55% supported commercial solar. 50% supported residential wind turbines and 34% supported commercial wind farms. 45% supported micro-hydro for personal use. 44% supported biomass for personal heating and 47% supported large-scale biomass.

Home Heating. 2010 American Community Survey data indicate that 42% of homes in Waterbury are heated with fuel oil, which represents a decline from 53% in 2000 and 58% in 1990. The percentage of homes heated with propane or bottled gas increased from less than 30% in 1990 to 47% in 2010. The percentage of homes in Waterbury heated with electricity has dropped below 1%.

Municipal Energy Use. Together the town and village spent approximately $328,859 on energy for municipal operations in calendar year 2012: 52% on electricity; 33% on gasoline and diesel fuel; and 15% on heating fuel.

Together, the Thatcher Brook Primary School, Crossett Brook Middle School, and Harwood Union Middle and High School spent approximately $439,492 on energy during the 2012/2013 school year - 54% on electricity and 46% on heating fuel. The cost of gasoline and diesel fuel for bussing was covered in the cost of leasing the service and is not available as a separate cost.

7-4. Renewable Energy

Waterbury has several renewable energy resources available, most notably hydropower, solar, wind and wood. Development of these non-fossil fuel resources supports local jobs and economies by keeping energy expenditures and investments in state.

Since 1998, the state has allowed "net metering." Under net metering, a household or business can use small-scale renewable energy to generate power for their own use and sell any excess back to the utilities. State tax credits and incentives further encourage the use of renewable energy.

Hydroelectric. In the past, local waterways powered numerous mills and provided small-scale electricity across Vermont. Remnants of Waterbury's water-powered past can still be seen in Colbyville and Mill Village. Today, power from in-state and out-of-state hydroelectric dams (most notably Hydro Quebec) supply more than one-third of Vermont's annual power needs.[1]

One hydroelectric dam remains in operation in Waterbury. The Little River #22 facility at the Waterbury Reservoir is owned by Green Mountain Power and produces 15,500 megawatt hours of power per year. The DeForge Hydroelectric Station at Bolton Falls, located to the west of town in Duxbury, is also owned by GMP and produces 25,800 megawatt hours per year.[2]

No new potential sites for large-scale hydroelectric facilities have been identified in Waterbury. Small upland tributaries may offer feasible micro-hydro sources of power for individual homes.

Figure 24. **Solar Sites in Waterbury**

	PV		Thermal	PV & Thermal		Total	
Residential	48	*217.3 Kw*	9	5	23.2 Kw	62	240.5 Kw
Business	4	*301 Kw*	0	1	42 Kw	5	343 Kw
Municipal/School	1	*2.5 Kw*	0	0		1	2.5 Kw
Total	53	*520.8 Kw*	9	6	*65.2 Kw*	68	*586 Kw*

Source: Vermont Energy Atlas and Waterbury LEAP

1 Vermont Department of Public Service, 2011.
2 Vermont Energy Atlas.

Solar. Converting radiation from the sun into electricity is a clean, renewable energy source. Solar photovoltaic (PV) cells convert sunlight into electricity for homes and businesses, while solar thermal arrays provide hot water for domestic use and may even be designed to augment a household's heating system.

Advances in technology have improved solar efficiency and solar arrays are becoming more affordable. The cost to install one kilowatt of PV in Vermont fell by nearly 40% from 2004 to 2011. Federal and state incentives and leasing programs have improved financial accessibility to the technology. Green Mountain Power's willingness to pay a small premium for solar energy (the "solar adder") has also helped to support the burgeoning solar industry. In 2011, the State of Vermont ranked tenth in the nation in per capita solar PV.[1]

As of February 2013, solar collectors were installed at 68 sites in Waterbury with a total photovoltaic capacity of 588 kilowatts. Two commercial sites account for nearly half of Waterbury's solar capacity – Cold Hollow Cider Mill (148 Kw) and Green Mountain Coffee Roasters (100 Kw). The Waterbury Select Board is currently exploring the feasibility of installing a photovoltaic system that would generate enough electricity to equal the current needs of all Waterbury municipal buildings.

Waterbury has made great strides to incorporate solar energy into its energy portfolio. Currently, Waterbury ranks fifth among Vermont municipalities in residential solar power generated per capita. A number of south-facing roofs and slopes provide the potential for even greater use of the technology, although some roofs may need to be retro-fitted to support solar panels.

According to the Vermont Energy Atlas, there are over 2,100 potential rooftop solar sites in Waterbury with a potential capacity of nearly 2.9 megawatts. There are also over 3,200 acres of potential solar sites suitable for ground-mounted solar arrays, 1,672 acres of which are not classified as agricultural soils.

Commercial leasing programs now allow households and companies access to solar energy at fixed costs that often are less than their current electricity bills. Further advances in technology will likely improve the efficiency, and lower the cost, of solar panels. Finding space for additional solar arrays remains an issue in Waterbury, particularly for residents and businesses lacking south-facing rooftops or land.

Wind. Improvements in turbine technology in combination with federal and state subsidies have recently made investments in wind power more attractive across the country as well as in Vermont. The Vermont Energy Atlas identifies two potential industrial scale wind energy sites in Waterbury that receive sustained winds averaging more than 20 mph. Several hundred residential (30 meters high), small commercial (50 meters high), and large commercial (70 meters high) sites with moderate wind speeds of 15-20 mph have also been identified. Almost all sites are located on ridge lines in the Worchester Range and in the Green Mountain range.

The 2013 Community Survey indicated that there is less local support for wind farms for utility energy production than other types of renewables. The survey results suggest that many worry about the impacts large-scale wind may have on our natural and scenic resources, particularly Waterbury's forested ridgelines.

In order to support large-scale wind projects, we believe that projects must meet certain criteria to ensure that do not cause undue negative impacts on natural, recreational, and aesthetic resources. Waterbury plans to establish clear and specific guidelines that can be used when evaluating proposed large scale wind projects.

Wood. Historically, wood has been Vermont's, and Waterbury's, most abundant local energy source. Statewide residential

1 Vermont Department of Public Service, 2011.

firewood consumption grew from 275,000 cords per year in 1997 to 315,000 cords in 2008, a nearly 15% increase.[1] Current use of cordwood for heating in Waterbury is unknown. In addition to firewood, wood biomass heating, in the form of woodchips and pellets, is becoming more popular.

Biomass fuels, cord wood and methane from farm animal waste or landfill gasses account for 14% of the state's heating needs.[2] According to the Vermont Energy Atlas, Waterbury's forests have the ability to produce 5,765 tons of low grade wood material, equivalent to an electric capacity of 2,719 megawatts.

Use of wood biomass in the Waterbury area for heating is unknown, but two examples are Harwood Union High School and the Green Mountain Club:

- In the fall of 2008, Harwood installed a woodchip-fired heating system for its 170,000 square foot facility with a grant through the Vermont Fuels for Schools Program. During its first heating season, the system consumed 900 green tons of woodchips (replacing 35,000 gallons of heating oil) and saved the school over $34,000 in heating costs.[3]
- The Green Mountain Club on Route 100 in Waterbury Center installed a wood gasification boiler in 2011. The boiler provides all the heat and hot water for the club's seasonal staff building and is fired by sustainably harvested wood from club lands in Lowell, Vermont.

There are potential negative side effects to extensive wood harvesting and burning, among them habitat impairment, soil erosion, sedimentation and water pollution if forests are not properly managed, as well as the degradation of air quality and an increase risks of accidental fires. These are, however, easily manageable risks. Best forest management practices, as outlined by the state and independent forest certification groups, can reduce the adverse impacts of harvesting while regular maintenance of wood stoves and adherence to fire codes lessens the risk of accidental fires.

According to the Vermont Department of Public Service (2011), the maximum efficiency for wood-fueled electricity generation is about 25%. Use of wood for heating is calculated as carbon-neutral; that is, the carbon sequestered by a tree during its lifetime balances with the carbon emitted during its burning. If factoring in the fossil fuels used to cut and haul wood/wood biomass, as well as the inefficiencies of current biomass burning, wood may not be fully carbon neutral. More efficient burning of woody biomass would greatly improve biomass's potential for wider adoption as a local power source.

Other Local Renewable Energy Sources. Other local renewable energy sources include:

- Methane recovery systems that convert farm manure or landfill gases into electricity
- Bio-fuels produced from green crops such as soy beans, or from waste vegetable oil
- Geothermal energy, which uses the temperature differential in water taken from deep wells to heat and cool buildings

7-5. Energy Efficiency and Energy Conservation

Energy efficiency is commonly viewed as the most effective and lowest-cost option for reducing energy consumption from electricity, heat, and transportation. Energy efficiency and conservation efforts such as improved insulation and weatherization of new and existing structures, improvements in building design, and the use of high-efficiency vehicles often have a dramatic impact on reducing fuel consumption and fuel bills and are strongly encouraged by the town. In a challenging economy and at a time of increasing concern for the impacts of

1 Vermont Department of Forests, 2009.
2 Vermont Comprehensive Energy Plan, 2011.
3 Biomass Energy Resource Center, 2010.

climate change, steps to reduce fuel use, fuel expenditures, and to shrink emissions make good sense for the pocketbook and the environment.

Waterbury LEAP. Waterbury LEAP (Local Energy Action Partnership) is a local non-profit organization with a mission to "promote energy efficiency and the use of renewable resources, and to engage our community in reducing carbon emissions in Waterbury, Vermont and the surrounding area."

LEAP is one of more than 100 Vermont municipal energy committees, and is widely considered one of the most active and productive such organizations in the state.[1] Waterbury LEAP is the only energy committee in Vermont to become a 501(c)(3) non-profit. It took that step because its stated goal is "to help turn Waterbury into the greenest town in Vermont by 2020."

LEAP is tracking its progress and guiding its efforts through the use of a number of measurable indicators that will show Waterbury's progress and allow the town to have friendly challenges with other communities. Some recent LEAP iniatives include:

- Hosting a free LEAP Energy Fair each April that has become one of the largest in the state with 600+ attendees and 70+ exhibitors on many energy-related topics.
- Raising the funds and placing solar PV panels on Thatcher Brook Primary School and Crossett Brook Middle School.
- Initiating the Waterbury/Duxbury Solar Year in April 2012 and in 11 months helping to double local residential solar capacity in those two towns.
- Participating in the Vermont Home Weatherization Challenge in 2013 with the target of weatherizing 3% of the homes within our community in one year.
- Assisting the Town of Waterbury and Crossett Brook Middle School evaluate the possibility of establishing solar orchards that would help to meet a significant portion of the electrical needs of the municipal buildings and the school.

Efficiency Vermont. Efficiency Vermont helps all Vermonters to reduce energy costs, strengthen the local economy, and protect the environment by making homes and businesses energy efficient. A volumetric charge on electric customers' bills supports energy-efficiency programs.[2]

Efficiency Vermont provides technical assistance, rebates, and other financial incentives to help Vermont households and businesses reduce their energy costs with energy-efficient equipment, lighting, and approaches to construction and major renovation. Additionally, it partners extensively with contractors, suppliers, and retailers of efficient products and services throughout the state.

It is operated by a private nonprofit organization, the Vermont Energy Investment Corporation, under an appointment issued by the Vermont Public Service Board.

Energy Audits and Energy Efficiency Measures. The Environmental Protection Agency estimates that half of the energy used in most buildings is for heating and cooling. Much of this energy is lost - seeping through cracks in windows and doors for instance - which wastes energy and money and makes homes and businesses less comfortable.

Weatherization is the practice of modifying a building to protect its interior from the elements, to reduce energy consumption, and to optimize energy efficiency. Investing in thermal efficiency improvements – primarily air sealing, insulation, and heating system replacements—can dramatically reduce a home's heating

1 See www.waterburyleap.org.

2 http://www.efficiencyvermont.com

Figure 25. **Waterbury Homes Weatherized, 1995-2012**

	Waterbury	Waterbury Center	Total
Low-Income Weatherization	123	29	152
Efficiency Vermont	48	8	56
All EVT Contractors	171	37	208
% of Total Homes	8%	4%	7%

Source: Central Vermont Community Action Council and Efficiency Vermont

energy use and an owner's fuel bills. Vermonters' 2010 fuel bills were nearly twice as much as those of a decade earlier.

An estimated 62,000 single and multi-family homes in Vermont will require energy efficient improvements by 2020. The state's volatile weather conditions play a critical role in how buildings can cost-effectively be heated and that most of the economic benefit of money Vermonters spend on fossil fuel accrues outside the state. At current fuel prices home energy efficiency investments can save Vermont residents approximately $1,000 per year.[1]

As a result, the task force suggests "comprehensive and rapid weatherization" of Vermont's buildings to:

- Reduce the vulnerability of Vermont ratepayers to fuel market volatility and dramatic weather fluctuations.
- Ensure that more of the money spent on energy will stay within the Vermont economy.

One of the most important goals in the 2011 Vermont Comprehensive Energy Plan is for the state to use energy audits, weatherization, and other tools to substantially improve the energy fitness of 25% of the state's housing stock by 2020.

1 Thermal Efficiency Task Force Report, 2013.

A building energy audit is a service where the energy efficiency of a structure is evaluated by a person using professional equipment (e.g., blower doors, infrared cameras) to identify best ways to improve energy efficiency in heating and cooling the house. The goals are to:

- Evaluate the building's overall thermal performance.
- Identify cost effective ways to improve the comfort and efficiency of the building.
- Estimate the potential savings in fuel and expenses for the proposed changes.

Many building and energy contractors in Central Vermont offer home and business energy audits for a fee (typically ranging from $300-$500). Depending on income, some families or individuals may qualify for free audits or energy efficiency grants from Efficiency Vermont or other organizations.

In 2008 and 2009, Waterbury LEAP partnered with Efficiency Vermont to provide free building energy audits to almost a dozen local businesses and to all Waterbury municipal buildings. Many of the audit recommendations were acted upon in the following year.

As noted above, in January 2013 Waterbury LEAP joined the Vermont Home Energy Challenge and will strive to have an additional 3% of Waterbury homes weatherized by the end of the year. Our community will need to continue on the pace of weatherizing 2-3% of our homes per year to reach LEAP's goal of weatherizing 25% of the housing stock by 2020.

Transportation Efficiency. According to the 2011 Vermont Comprehensive Energy Plan, transportation accounts for the highest share of overall energy use in Vermont, at 33.7%. Nationally, transportation represents 28.6% of overall energy use. This difference is a result of Vermont's higher dependence on automobile transportation due to the state's rural character,

more dispersed population, as well as a relatively small industrial base.

Gasoline and diesel account for more than a quarter of all energy consumed in Vermont across all energy sectors. Gasoline and diesel consumption is twice that of fuel oil and kerosene used for heating. Petroleum combustion in the transportation sector is also the state's largest contributor to greenhouse gas emissions.

Fuel prices are typically higher in northern than in southern New England. Significant increases in the costs of gasoline, diesel fuel, and heating fuel have occurred over the last decade. Price spikes in recent years highlight our area's heavy reliance on limited sources and types of fuel and leave the local population, particularly low-income residents, vulnerable to fuel shortages and price fluctuations.

Waterbury has witnessed an ongoing growth in commuter traffic, due largely to the increasing number of families in which both parents work, the number of residents who are employed in Montpelier and Burlington, and the I-89 Exit 10 interchange which brings commuters through Waterbury from outlying areas. As a result, traffic on the state roads through Waterbury has continued to increase. Traffic on Route 2 has increased by around 30% between 1990 and 2010.

The percentage of Waterbury's employed residents driving alone to work has remained at around 70% since 1990. In 2010, the American Community Survey reported that only 14% of working residents carpooled and only 1% took public transportation. Within the village, 11% walked to work.

The 2011 Vermont Comprehensive Energy Plan highlights two important areas for local and statewide policies and actions:

- Reduce Petroleum Consumption. Vermonters should reduce consumption by replacing current transportation energy—nearly exclusively petroleum fuel–based—with more sustainable, cleaner, and renewable fuel alternatives, such as electricity and natural gas, while increasing vehicle efficiency.
- Reduce Energy Use in the Transportation Sector. Vermonters should redesign our transportation system to include more efficient transportation options and land use patterns that maintain mobility for all and for the movement of goods, in order to ensure a thriving Vermont economy and quality of life.

There is currently one commuter parking lot in Waterbury. Limited public transit services are provided through Green Mountain Transit Association, a nonprofit transportation provider serving the central Vermont. Waterbury and its residents would benefit from programs and facilities to encourage increased ridesharing, use of mass transit, walking and biking, and an overall reduction on our community's dependence on the automobile.

Energy-Efficient Design. It is much more time- and cost-effective to plan, design and build a structure and its systems with energy efficiency in mind at the outset than to perform weatherization activities after the building has been constructed.

Leadership in Energy and Environmental Design (LEED) consists of a suite of rating systems for the design, construction and operation of high performance green buildings, homes and neighborhoods. Developed by the U.S. Green Building Council, LEED is intended to provide building owners and operators a concise framework for identifying and implementing practical and measurable green building design, construction, operations and maintenance solutions.

Across Vermont, in 2012 nearly one-third of new homes were EnergyStar rated. The 2011 Vermont Comprehensive Energy Plan sets a goal of 60% by 2020.

School Energy Efficiency. Schools are one of the largest consumers of energy in most Vermont communities. Because they are

such large consumers of a variety of energy sources, they often offer significant opportunities for saving fuel and taxpayer expenditures. There have been local efforts to save schools, and local taxpayers, fuel and funds.

In 2010, a team of students at Crossett Brook Middle School conducted a research project and proposed specific steps the school could take to replace older, less efficient lighting with more energy-efficient technology. They presented their recommendations to the Waterbury-Duxbury School Board and the plan was unanimously accepted. Thanks to their work, local taxpayers, are saving approximately $6,000 per year in energy costs.

During the 2012/2013 school year, Harwood Union High School participated in the Vermont Whole School Challenge organized by Efficiency Vermont and the School Energy Management Program. Over the course of the school year students and teachers, with assistance from outside groups such as Efficiency Vermont and Waterbury LEAP, are striving to cut the school's overall electric use by 10%.

Local Food. The average food item in the average grocery store travels between 1,000 and 1,500 miles to reach the table.[1] Food transportation consumes a considerable amount of energy, and the related emissions contribute to climate change. A typical meal bought from a conventional supermarket chain - including some meat, grains, fruit and vegetables - consumes 4 to 17 times more petroleum for transport than the same meal using local ingredients.

The Waterbury-Duxbury Food Council is a local volunteer group with a mission to strengthen community by supporting and building a sustainable, local healthy food system. In 2012, the group conducted an assessment of current assets, including natural resources, manufactured assets, financial assets, human assets, and community assets. The assessment found that Waterbury has:

- A favorable growing climate, abundant water, land available to grow on, some of which has prime soils and soils of statewide distinction.
- A centralized location at the crossroads of a well-developed state highway system linked to a well-maintained local road network.
- At least 25 small producers with experience growing/raising various products.
- One of the few commercial-scale composting operations in Vermont as a source of grower inputs.
- 18 processors making very popular specialty products.
- A vibrant restaurant community with 22 establishments from coffee shops to fine dining, most with a demonstrated willingness to use local ingredients.
- At least 16 retailers of different sizes who recognize the consumer demand for local product.
- A knowledgeable consumer base seeking to meet their food demands more locally and willing to support food-related endeavors with their time, energy and money.
- Numerous home producers which serve a great portion of our meals extending into "micro-scale" sale or bartering to friends and neighbors.

1 Worldwatch Institute.

Explore the concept of community siting standards for small- and large-scale renewable energy projects.

7-6. Goals, Objectives and Actions

goals

1. Continued access to affordable and sustainable energy.
2. More efficient local homes and buildings (both private and municipal).
3. Higher portion of energy needs provided by locally-produced renewable energy sources.
4. Reduced dependence on fossil fuels, particularly for transportation.

objectives

1. Improve the thermal efficiency of homes, businesses and public buildings through greater use of energy audits and design efficiency.
2. Increase the development and use of renewable energy sources (biomass, hydro, solar, wind).
3. Reduce the use of transportation-related fossil fuels.
4. Increase education on renewable energy and energy efficiency.
5. Increase the supply of local food.

actions

1. Work with LEAP, to encourage local residences and businesses to have energy audits and perform weatherization work to the greatest extent possible.
2. Encourage new municipal and other town buildings to meet LEED standards and encourage current structures to become more energy efficient.
3. Give consideration to the importance of energy efficiency and conservation when conducting residential and economic planning, and when creating local zoning regulations.
4. Consider additional incentives (e.g., tax credits, property tax exemptions) and other regulatory mechanisms to encourage businesses and residents to undertake weatherization, efficiency or renewable energy projects.
5. Develop clear siting guidelines for renewable energy projects.
6. Evaluate existing zoning for its impact on the use, development and location of renewable energy projects.
7. Support efforts to assess and inventory suitable locations for commercial-scale renewable energy generation projects.
8. Promote municipal solar, school solar, and community solar or other renewable energy projects on town, village, or state land, and take steps to help viable projects move forward.
9. Support local carpooling and car-sharing initiatives, mass transit, bike and pedestrian efforts to improve transportation efficiency and reduce emissions.
10. Encourage, to the extent possible, the use of energy efficient municipal vehicles.

11. Participate actively in the regional transportation planning process to ensure that regional plans support the goals, objectives, and policies of this plan.

12. Ensure that the design of Waterbury's Main Street follows Vermont's Complete Streets guidelines.

13. Support land use and conservation policies that encourage ongoing forest management to maintain a local source of fuel-wood, including independent certification under the Forest Stewardship Council.

14. Encourage compact and mixed-use patterns of development that reduce the need for automobile travel.

15. Enact land use and conservation policies that encourage agricultural uses on prime agricultural soils to increase the supply and access to locally produced food and promote the establishment and maintenance of community gardens

16. Support local organizations (including LEAP, Waterbury in Motion, Waterbury Farmer's Market and Food Council) in their efforts to assess, plan, finance, and promote specific efforts to meet the energy efficiency, conservation and sustainability goals and objectives.

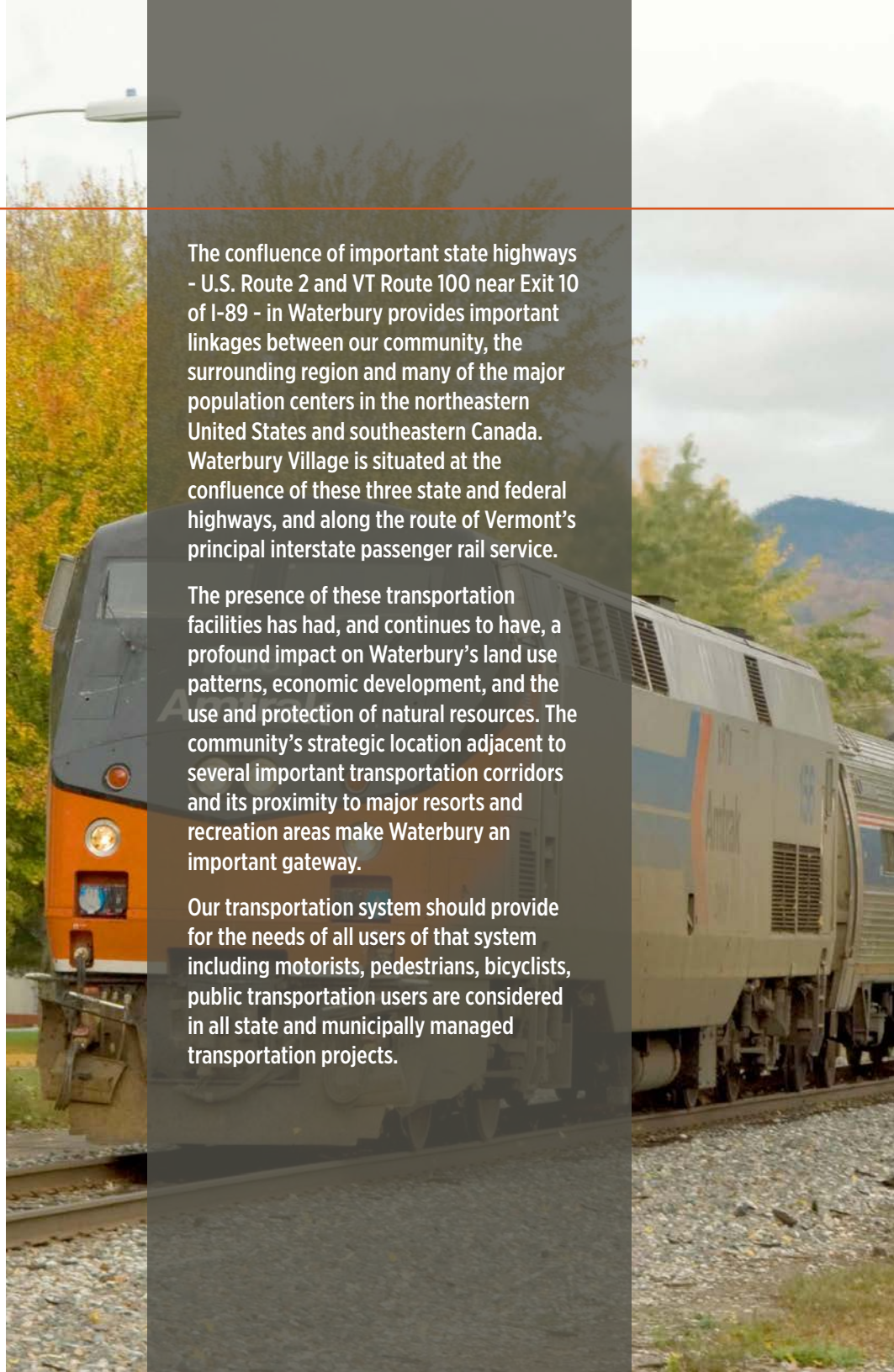
8. TRANSPORTATION

8-1. Road and Highway Network

The road and highway network forms the backbone for Waterbury's transportation system. Like most other parts of the state and country, automobiles and trucks are the primary means used for moving people and products to their destinations. This has had far-reaching implications on the growth and development in Waterbury, and continues to shape local settlement patterns and development activity. Waterbury has over 73 miles of local, state, and federal highways, over 15% of which are located within Waterbury Village. A breakdown of roads and highways, by classification, is presented in Figure 26.

State Highways. Interstate 89 (I-89) runs along the Winooski River valley and extends between the eastern portion of Waterbury Village to the western portion of the town. It is a limited access, divided highway and it provides an express route to Burlington and Montreal to the north and west and to Montpelier and southern New England to the south and east. Exit 10 of I-89, is located in the village at VT Route 100, and provides access to major tourist destinations, including Stowe to the north and the Mad River Valley to the south, both via VT I00, and to Bolton Valley to the west via U.S. Route 2.

Approximately 25,000 vehicles per day travel on I-89 through Waterbury. Traffic on I-89 increased only modestly during the 2000s (4%), as compared to a 32% increase between 1990 and 2000. There were 6,000 more vehicles traveling on I-89 through Waterbury in 2000 than there were in 1990, which reflects both growth in Central Vermont and a shift in employment patterns as more of the region's residents commuted to work in Chittenden County. The slowing of the region's growth rate in the 2000s and the availability of transit between Central Vermont and



The confluence of important state highways - U.S. Route 2 and VT Route 100 near Exit 10 of I-89 - in Waterbury provides important linkages between our community, the surrounding region and many of the major population centers in the northeastern United States and southeastern Canada. Waterbury Village is situated at the confluence of these three state and federal highways, and along the route of Vermont's principal interstate passenger rail service.

The presence of these transportation facilities has had, and continues to have, a profound impact on Waterbury's land use patterns, economic development, and the use and protection of natural resources. The community's strategic location adjacent to several important transportation corridors and its proximity to major resorts and recreation areas make Waterbury an important gateway.

Our transportation system should provide for the needs of all users of that system including motorists, pedestrians, bicyclists, public transportation users are considered in all state and municipally managed transportation projects.

Figure 26. **State and Local Road Mileage, 2001**

Classification	Mileage
I-89	8.3
State/U.S. Highways	10.3
Class 1 Town Road	1.4
Class 2 Town Road	7.9
Class 3 Town Road	38.6
Class 4 Town Road	6.9

Chittenden County have both contributed to slowing the increase in traffic on I-89.

U.S. Route 2 and VT Route 100 are important regionally for moving traffic through Waterbury to other destinations, and providing linkages and access to I-89 for motorists traveling greater distances. U.S. Route 2 runs parallel to the Winooski River in the southwest part of town, and provides access to rapidly growing Chittenden County to the west and Montpelier to the east. VT Route 100 generally runs north-south through the town and village, linking Waterbury to Stowe to the north and the Mad River Valley to the south. In addition to providing important regional Routes, U.S. Route 2 and VT Route 100 are essential to the town's local transportation needs. Many of Waterbury's neighborhoods can only be reached from other parts of the community by utilizing either or both of these two state highways.

As with I-89, the significant growth in traffic on U.S. Route 2 and VT Route 100 through Waterbury also leveled off during the 2000s. As of 2010, 12,000 to 13,000 vehicles per day traveled Route 100 between Waterbury Village and Exit 10, 15,000 to 16,000 went between Exit 10 and Waterbury Center, and 9,000 to 11,000 traveled on the section north of Waterbury Center. While traffic growth has stabilized in recent years, the highways through Waterbury are heavily used and carry significant traffic volumes. The heavy traffic causes ongoing wear and tear on the highway. Significant rehabilitation efforts have been completed for much of I-89 in Waterbury, including rehabilitation to two bridges in Waterbury north of Exit 10.

According to the VT Route 100 Access Management Plan, prepared for VTrans in 2004, the section of Route 100 between Waterbury Village and Route 15 in Morrisville is "one of the busiest non-interstate two-lane highways in the state." That study found that the Route 100 roadway alignment is generally adequate, although some physical deficiencies were identified. These include:

- Narrow shoulders along the length of the highway;
- Numerous locations with restricted sight distance;
- Horizontal alignment problems, especially at locations with limited sight distance; and
- The lack of pedestrian facilities in villages, including Waterbury Center and Colbyville.

The study predicted that traffic volumes would increase at an annual rate of 1.9% over the ensuing 20-year period. The actual rate of increase from 1990 to 2000, however, exceeded an annual average of 3.0% along some segments in Waterbury. To address deficiencies identified as part of the corridor study planning process, several physical improvements to the segment of the highway in Waterbury were recommended, including:

- Curbs and sidewalks in Colbyville and Waterbury Center;
- Specific improvements to several intersections, including Guptil Road, Hollow Road, Howard Avenue, and Laurel Lane;
- The creation of a town road connecting Stowe Street with Guptil Road;
- Installation of climbing Janes on Shutesville Hill;
- Access management and traffic calming along the corridor; and
- Improvements to the state park & ride facility.

Some of the recommendations of the 2004 study have been implemented (e.g., signalization of the Stowe Street/Blush Hill and Route 100 intersection, access management improvements, and reconstruction of the Waterbury Park and Ride) even though the study was not officially endorsed by the municipality's elected officials or voters. Other study recommendations are in the planning stages or may occur in the future. The recommended roundabout at the intersection of Guptil Road has not been implemented, and this intersection continues to be problematic for local traffic using Guptil Road competing with through-traffic traveling between Waterbury and Stowe on VT Route 100. In addition to the recommended improvements, the junction of Route 100 and North Main Street (Routes 2 and 100) will be reconstructed as a roundabout to better manage traffic flow through this busy intersection.

Traffic on U.S. Route 2, which serves as Main Street through Waterbury Village, remains heavy at 11,000 to 13,000 vehicles each day, but drops off considerably outside the village. Traffic through Waterbury Village increased 12% during the 1990s, but that growth did not continue in the 2000s and downtown traffic levels remained essentially unchanged during the decade. The most significant improvement planned for this highway is the reconstruction of Main Street in the village. That project, scheduled for construction in 2015, includes the burial of power lines and improvements to village sidewalks and streetscape. It should be noted, however, that the portion of U.S. Rt. 2 and VT Route 100 that travels through Waterbury Village is a Class I road maintained by the municipality. U.S. Route 2

Municipal Roads. Waterbury maintains nearly 55 miles of local roads. They include heavily used regional collectors, lightly used small roads primarily serving a few local residents, and Class IV roads that no longer serve automobile traffic and are not maintained by the municipality.

In Vermont, municipal roads are designated as Class 1, 2, 3, 4, or legal trail. Class 1 roads include all state highways under the jurisdiction of municipalities-typically state routes through village centers. Class 2 and 3 roads are defined for the purposes of state aid and must be negotiable, under normal conditions, year-round by a standard passenger car. Class 2 roads, as designated by the state, typically provide access to neighboring towns. Class 4 roads are not generally maintained on a year-round basis. Class 3 and 4 roads are designated by the local Selectboard. A breakdown of road mileage, by class, is included in Figure 26. Roads are shown by surface type on Maps 3-1 and 3-2.

Until 1997, VTrans applied the American Association of Surface and Highway Transportation Organizations (AASI-ITO) highway design standards to roads in the state (as did transportation agencies for each of the other 49 states). In response to growing concern that AASHTO standards were inappropriate for Vermont's small villages and rural settings, the state prepared and adopted Vermont State Standards for the Design of Transportation Construction, Reconstruction and Rehabilitation of Freeways, Roads & Streets. These include standards for roads serving urban, village and rural contexts that are designed specifically for Vermont than national standards. These standards should govern future upgrade and construction of state, town and private roads in Waterbury.

Several improvement projects are planned, however, to address current deficiencies. Projects which are included on the VTrans "Transportation Improvements Projects" (TIP) list are summarized in Table 8.2.

In addition to scheduled improvement projects, which generally address normal deterioration of existing facilities, other improvements have been identified to provide new or expanded development opportunities in Waterbury Village. These projects, which are described in detail in the Village of Waterbury Transportation Infrastructure, Parking and Circulation Study,

Figure 27. **Transportation Improvement Projects**

Type	Location	Descriptions
Bridge	US Route 2	Over Little River
Bridge	Farr Road	Relocate Farr Road
Bridge	Stowe Steet	Reconstruction of BR 36
Bridge	I-89	Rehabilitate BR46 North and South, and 46 A
Paving	US Route 2	Waterbury Village to Bolton
Paving	VT Route 100	Waterbury Village to Stowe
Roadway Project	US Route 2	Reconstruct Main Street
Roadway Project	Route 2/ Route 100	Construct Roundabout
Enhancement	Stowe Street	Install Sidewalk

Source: Vermont Agency of Transportation, Transportation Improvement Program

prepared by Community Planning & Design and dated April 1999, include the following:

- The upgrade of Railroad Street to provide an alternative access to Pilgrim Park recently completed;
- The construction of a new road connecting Pilgrim Industrial Park with Grenier Industrial Park and Demeritt Pl also completed.; and,
- The extension of Bidwell Lane to connect Foundry Lane with Park Row (through the Village Shopping Center).

Each of these connections provides additional development opportunities and reinforces vehicular and pedestrian connections within the downtown.

The community has not identified other pressing issues related to roads and traffic. According to the community survey, most respondents rated such issues as the need to protect open space, revitalize the downtown, protect natural resources and maintain the community's rural character as more important than improving traffic and transportation. Increasing traffic volumes, and corresponding congestion, could result in a shift in attitudes in the future. The town should be in a position to maintain a safe and efficient road network for the foreseeable future through:

- An ongoing program of road maintenance.
- Strategic improvements to the road network, including access management and traffic calming (see below).
- Regulatory standards to ensure that new development does not overburden the capacity of existing or planned roads.

Road Maintenance. Maintaining and enhancing the local road network in a safe and cost effective manner is an important community responsibility. The town and village merged their respective highway and street departments in 1995, at which time the town assumed all responsibility for road maintenance, including village sidewalks and streetlights. The cost of road maintenance is second to education in terms of annual cost to the community. In 2012, the town expended over $1,223,000 on the highway department. Respondents to the 2011 Community Survey rated the condition of local roads as fair and winter maintenance as good.

Upon consolidation of the two highway departments, the town constructed a new 7,500 square feet maintenance facility on Guptil Road in Waterbury Center. The town garage, finished in 1998, has improved the highway department's ability to serve its maintenance functions and maintain the department's equipment. The capital improvement program (CIP), adopted by the Selectboard on an annual basis, provides a detailed budget for highway and recreation infrastructure and equipment and fire department equipment needs in Waterbury. The CIP budget that was approved in 2012 includes funding for paving town roads, bridge and culvert improvements, downtown infrastructure improvements including sidewalk replacement, the replacement of existing highway maintenance and fire department equipment, and recreation field improvements.

Access Management. The frequency, location and design of points of highway accesses, also known as curb cuts, have a direct bearing on the safety and efficiency of both town roads and state highways. The design of curb cuts also is important with regard to stormwater management and road maintenance. Managing access can improve safety and better maintain highway capacity over time.

The Vermont Route 100 Access Management Plan prepared by RSG consultants in 2004 identified a number of locations where access to the highway might be better managed through design changes and modifications. Several techniques may be applied through Waterbury's zoning regulations, road policies and ordinances, and additional land use regulations (e.g., subdivision regulations). These include requirements for:

- Minimum sight distance at a driveway or street intersection;
- Maximum number of driveways per lot;
- Mandatory shared driveways;
- Maximum width of curb cuts;
- Minimum and maximum driveway lengths;
- Minimum or maximum on-site parking, shared parking, and parking design;
- Minimum area for loading and unloading; and
- Landscaping and buffers to visually define and enhance access points.

The Waterbury Planning Commission has successfully applied several of these tools through the site plan review process in recent years, especially along Route 100. Continued attention to access management will enable local boards to balance the needs of motorists, pedestrians, and bicyclists, as well as improving safety and highway efficiency.

Access permits on Route 100 are approved by VTrans. However, these points of access shall be subject to the town's development standards shall require a minimum number of points of access on this highway.

Traffic Calming. Techniques to maintain relatively slow traffic speeds in settled areas, enhance pedestrian safety, and improve the overall environment are often referred to as traffic calming. Such techniques include narrow vehicle traffic lanes, sidewalks, medians, on-street parking, roundabouts, raised and/or textured crosswalks, bulb-outs, street-tree plantings and street furniture. Traffic calming is especially important along state highways and town roads in Waterbury Village, Colbyville, and Waterbury Center.

Complete Streets. Act 34 of 2011 calls for state and local governments to ensure that Vermont's transportation system provide for the needs of all users of that system including motorists, pedestrians, bicyclists, public transportation users are considered in all state and municipally managed transportation projects. These types of transportation facilities are often referred to as "complete streets" and speak to the need for all modes of travel to be incorporated into the design and construction of transportation improvement projects.

8-2. Parking

Providing a sufficient amount of parking in Waterbury Village, primarily in the immediate vicinity of the Stowe Street and Main Street intersection, has been identified as an issue of concern for many years. The town and village have cooperated toward the development of a municipal parking lot on Elm Street. This new lot, in combination with on-street parking, the existing municipal public lot on Bidwell Lane, and other private off-street parking, does not provide adequate parking opportunities in this area. The continued economic vitality of the village depends in large measure on developing and maintaining an adequate supply of conveniently located parking, both on and off-street.

Outside the village, off-street parking does not appear to be a significant problem. New developments have been required to provide sufficient parking. Of greater concern than the availability of parking is the location and design of parking lots. To the extent feasible, parking areas should be located to the side and rear of buildings, and be adequately screened, to maintain the historic character of Waterbury Village, Waterbury Center, and Colbyville and to maintain scenic views along state highways in other commercial areas.

Park and Ride. A park and ride lot on Lincoln Street near Route 100 and Stowe Street was reconstructed by VTrans in June 2010. This facility has a capacity of 70 vehicles and provides a convenient location for commuters to car share or utilize the Link Express bus that provides daily service between Montpelier and Burlington. GMTA buses also stop at the park and ride lot.

The existing park and ride lot has been at capacity for the past two years according to a CVRPC survey (including recent counts from July 2013). Feasibility analysis of sites for an additional park and ride has been done in the past and a renewed effort to develop an additional site is now warranted. A new feasibility study of possible sites should be carried out with possible funding from CVRPC and the Vermont Agency of Transportation (VTrans). The VTrans Park and Ride program is also a possible source of funding to develop an additional park and ride lot.

8-3. Pedestrian and Bicycle Circulation

In Waterbury Village, where historic settlement patterns reflect a pedestrian scale and orientation, an extensive sidewalk network exists. Many existing sidewalks, however, are in a state of disrepair. Fractured and uneven sidewalks can not only be a potential safety hazard, but can also discourage additional pedestrian activity in the downtown. Several crosswalks are provided along Main Street and signs are posted for vehicles to yield the right-of-way to pedestrians. Opportunities to enhance the village sidewalk system include better defining and strengthening pedestrian crosswalks, extending a sidewalk/bike path to the Crossett Brook Middle School in neighboring Duxbury, and expanding pedestrian links to and within Pilgrim Park and the reconstructed state office complex.

There are no sidewalks outside of the village, or in the area of the village west of Route 100. Most of Waterbury's rural roads, both paved and unpaved, have little or no shoulder and many residents have expressed concern for pedestrian safety along them. This appears to be a particular concern in Waterbury Center and Colbyville, where the 1993 Route 100 corridor study and the 1999 Transportation Infastructure, Parking and Circulation Study recommended the installation of curbs and sidewalks.

In addition to the important transportation function of sidewalks, many Waterbury area residents and non-resident workers walk in and around Waterbury for pleasure and fitness. There is a "loop" path/Route through Waterbury Village between the State Complex and the river, down Winooski Street, along River Road in Duxbury, over to Route 2/100, and back into Waterbury, which is often used by State police trainees, residents, and area employees for jogging and walking. This path includes a section of the Cross VT Trail.

Respondents to the 2012 Community Survey commented frequently about the need for sidewalks and other improvements to make Waterbury safer for pedestrians and bicyclists. Improving bicycle and pedestrian facilities was ranked as the most effective action Waterbury could take to promote recreation and recreation-based economic development.

Despite the limited availability of off-road paths, bicycle traffic is relatively heavy in Waterbury, especially during the spring, summer, and fall months. This is especially the case on the

two major state highways running through Waterbury - U.S. Route 2 and VT Route 100. Waterbury's rural roads are being increasingly enjoyed by resident bicyclists, as well as by bicycle touring groups and other visitors. Narrow shoulders, increasing traffic volumes, and congested intersections are hazardous to both bicyclists and motorists. Conflicts between bicyclists and motorists have been reported. Currently, only VT Route 100 north out of the village has shoulders that might be considered suitable for bicycling, although many sections are narrow and in a poor state of repair. Future state re-paving projects, including guard rail replacement, should provide adequate shoulders for safe bicycle riding on both VT Route 100 and U.S. Route 2. There are no bicycle paths or marked bicycle lanes on town and village highways and streets. The creation of these facilities and "share the road" marking and signage should be considered in the future. Bicycle and pedestrian safety programs are promoted in the local primary and middle schools, including the Safe Routes to School program that is promoted by VTrans.

8-4. Transit and Public Transportation

Local Transit. There is no local public transportation system in Waterbury. Local public transportation is limited to taxi services, chartered buses, vans, and car rental services provided by area businesses.

Regional Transit. Green Mountain Transit Association (GMTA), that is part of the Chittenden County Transportation Authority (CCTA), provides daily transit service linking Waterbury and Waterbury Village with Montpelier, Burlington, Stowe, and Morrisville. The Link Express, which offers daily commuter bus service connecting Montpelier and Burlington, makes stops at the Waterbury park and ride where service is coordinated with the smaller GMTA commuter bus services.

All told there are currently four routes that serve Waterbury operated by GMTA and CCTA. These are:

- CCTA/GMTA Montpelier Link Express. Commuter service connecting Montpelier, Waterbury, Richmond, and Burlington.
- GMTA Waterbury Commuter. Commuter service connecting Montpelier, Middlesex, and Waterbury.
- GMTA Route 100 Commuter. Commuter service connecting Morrisville, Stowe, and Waterbury.
- Health Center Community Shuttle. On Wednesdays and Thursdays, this demand response shuttle connects Washington County residents to the Health Center in Plainfield.

In addition, GMTA provides individual medical and daily needs transportation service to those who qualify for Medicaid, Elderly and Disabled funds or both.

Interstate Bus Service. Vermont Transit provides bus service to major cities primarily north and south of Waterbury and to smaller towns and cities along the way. The closest bus stop is in Montpelier.

Rail Service. The New England Central (formerly "Central Vermont") Railway, Inc. owns and maintains the railroad network through Waterbury. The railroad has the potential to provide important freight service to industries in the area and to influence the location of future industries.

Passenger train service is provided by Amtrak. The Vermonter provides daily service to and from New York and Washington, DC, departing the train station in Waterbury Village mid-morning, with the return train arriving in the evening. This service formerly provided direct service north to Montreal. Despite the discontinuance of the Montreal run, rail passenger service to Essex Junction and St. Albans is coordinated with bus connections that continue to provide service to Canada.

Pursue regulatory measures and projects that will ensure better interconnectedness of Waterbury's transportation system, while respecting the equal needs of the various modes including vehicular, pedestrian, and bicycle.

Improve Waterbury's streetscape, and make it more attractive to residents, business owners, and tourists, including a coherent and cohesive wayfinding signage plan.

To enhance the experience of Amtrak riders, and to aid with village revitalization efforts, members of Revitalizing Waterbury, Inc., other local citizens, and village officials spearheaded an effort to restore the Waterbury Train Station. Funded through a combination of and a Vermont Agency of Transportation "Enhancements Grant" of nearly $370,000 matched with private donations and grants, work on the rehabilitation of the station was completed in 2006. The Railroad station includes the Amtrak waiting room that is combined with a community room with information on local history, and the Green Mountain Coffee Roasters café and visitor's center.

Air Transport. The Burlington International Airport, approximately 25 miles west of Waterbury, provides major international airline service, and the Knapp Airport in Berlin, approximately 15 miles east of Waterbury, provides smaller plane services.

8-5. Goals, Objectives and Actions

goal

Overall

1. Provide and maintain safe, efficient, and integrated transportation facilities and circulation.
2. Encourage a high standard of aesthetics and functional quality for the transportation system.
3. The transportation system should be planned and designed to encourage development in designated growth areas.

Multi-Modal

4. Improve and expand alternative, non-automotive means of transport.
5. Promote multi-modal transportation systems that will integrate (and facilitate transfer among) rail, bus, taxi, pedestrian, and bicycle traffic.

objectives

Overall

1. With guidance from the Transportation Infrastructure, Parking, and Circulation Study and the VT Route 100 Access Management Plan (Central Vermont Regional Planning Commission, April 1999 and November 2004), take steps to:
   - ≫ Improve safety along roads, streets, and bridges, at intersections and pedestrian crossings, and for bicycles on roadways; and
   - ≫ Identify and address parking deficiencies.

Multi-Modal

2. Improve pedestrian and bicycle circulation.
3. Support completion and implementation of the Waterbury in Motion master plan for pedestrian and bicycle facilities in the Waterbury area.

actions

Overall

1. Identify and take appropriate steps to correct congestion points such as the Guptil Road-Route 100 intersection, the Route 100-North Main Street intersection, and the Laurel Lane-Route 100 intersection.
2. Develop a comprehensive way-finding signage system for the Village of Waterbury to orient visitors and residents and provide, where appropriate, directional and informational signage for pedestrian crossings, parking, schools, etc.
3. Where possible, widen shoulders to facilitate pedestrian and bicycle traffic along higher-speed roadways.
4. Consider changes to zoning regulations to address issues with parking requirements.
5. Create traffic-calming measures, such as "green" strips, curbs, sidewalks for pedestrians, and shorter turning radii, where appropriate, for example, along VT Route 100 in Waterbury Center and major village residential streets.
6. Improve the use and management of parking resources by clearly identifying public parking, maintaining on-street parking lines, enforcing short-term parking regulations, and developing additional public parking in the downtown area.
7. Consider developing and proposing standards for the construction of private rural roads and the associated stormwater management and erosion control, for incorporation in subdivision or zoning regulations.
8. Encourage tree plantings, green strips, and sidewalks, particularly in designated growth areas (the Village of Waterbury, Colbyville, and Waterbury Center).
9. Complete the Main Street Reconstruction Project, which includes the undergrounding of utilities from the Congregational Church to Park St., replacement of the public water and sewer mains under the street, and the construction of a complete streetscape including installation of new curbs, sidewalks, period street lighting, etc.
10. Minimize the number of curb cuts and encourage shared curb cuts. Evaluate whether changes to the by-laws are needed in this regard.
11. Accept municipal ownership of private roads only if doing so will be of demonstrable net public benefit and that construction meets the standards required in the Town Highway Ordinance.
12. Where appropriate, retain Class 4 roads for use as future recreational paths.

Multi-Modal

13. Urge the state to improve pedestrian access at and around the State Office Complex.

14. Require a minimum width of five feet, and wider where appropriate, for downtown sidewalks.

15. Extend sidewalks and other type of bicycle and pedestrian facilities to under-served areas and areas of new development within and adjacent to the Village of Waterbury.

16. Take steps to improve and expand the municipality's system of alternative and recreational pedestrian/bike paths, including the provision of signage to facilitate its use. In addition, encourage "pedestrian-friendly" new development. Evaluate and propose changes to the by-laws that will give greater effect to this policy.

17. Encourage businesses and other destinations to install permanent bicycle racks. Evaluate and propose changes to the by-laws needed to facilitate the installation of bike racks.

18. Identify and support actions that will increase utilization of Green Mountain Transit Association, Vermont Transit, Amtrak rail service, and taxis, thereby reducing reliance on automobiles.

19. Use and encourage businesses to use, rail freight transport (particularly for bulk commodities such as gravel, salt, and fuels) when cost-effective, thereby reducing reliance on trucks.

9. FACILITIES AND SERVICES

9-1. Education

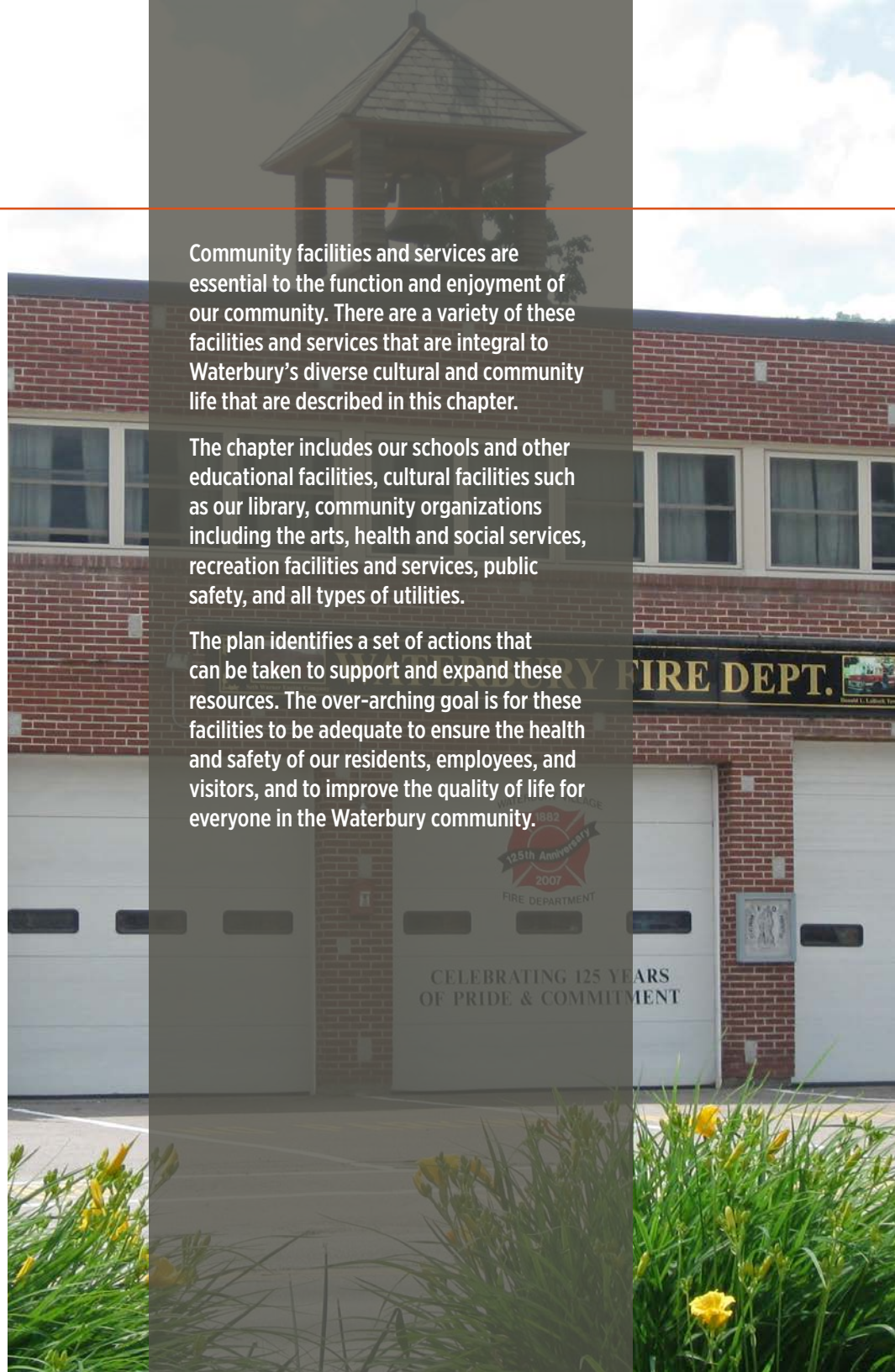
A number of changes to Waterbury's educational system have occurred in recent years, including the creation of the Waterbury-Duxbury Union School District in 1995 and the passage of Act 60 in 1997, which dramatically changed state funding for education.

The Waterbury-Duxbury School District has achieved its primary goal of giving students from both towns safe, nurturing educational settings, with a strong emphasis on academics and achievement. The district, run by a five-person board, has implemented a building-based administrative structure.

Waterbury students currently attend three public schools: the Thatcher Brook Primary School (PK-4), the Crossett Brook Middle School (5-8), and Harwood Union High School (9-12). All are members of the Washington West Supervisory Union.

Thatcher Brook Primary School (PK-4). Thatcher Brook Primary School is located on Stowe Street in Waterbury Village. This 60,000 square foot, three-building complex was built in three stages – in 1898, 1912, and 1936 – and sits on approximately 12 acres. Thatcher Brook facilities support a variety of educational programs and community activities.

The complex provided elementary and secondary education to town and village residents until 1966, when secondary school services were developed at Harwood. With the creation of the Waterbury-Duxbury Union School District, and the subsequent construction of the Crossett Brook Middle School in 1996, grades 5 and 6 and related programs were moved from Thatcher Brook to Crossett Brook. Primary school enrollment at Thatcher Brook expanded to include Duxbury students, with the subsequent closure of the Duxbury Elementary School.



Community facilities and services are essential to the function and enjoyment of our community. There are a variety of these facilities and services that are integral to Waterbury's diverse cultural and community life that are described in this chapter.

The chapter includes our schools and other educational facilities, cultural facilities such as our library, community organizations including the arts, health and social services, recreation facilities and services, public safety, and all types of utilities.

The plan identifies a set of actions that can be taken to support and expand these resources. The over-arching goal is for these facilities to be adequate to ensure the health and safety of our residents, employees, and visitors, and to improve the quality of life for everyone in the Waterbury community.

School enrollment at Thatcher Brook has been fairly stable during the past decade, averaging 427 students. School enrollment for the 2012-13 school year was 447 pre-kindergarten - 4th grade. The capacity of the school is approximately 500 students. Needed renovations at the Thatcher Brook Primary School were documented initially in a 2000 structural engineering report prepared by McFarland & Johnson. The historic buildings remain structurally sound, and the entire school was completely renovated in 2006 including a new main entrance and foyer that provides ADA compliant access to all floors of the building. The renovation included the basement, exterior and interior walls, floors and roof areas, mechanical, safety and heating systems, and the school's recreation, parking, and drop-off areas.

Crossett Brook Middle School. In 1996, following the creation of the school union, Crossett Brook Middle School was built in the Town of Duxbury to serve Waterbury and Duxbury students in grades 5 through 8. The new school occupies 15 acres of land that were formerly part of the Vermont State Hospital Farm. Except for issues related to school sidewalks and pedestrian access, few improvements have been needed since its construction. The Crossett Brook facilities support a variety of educational services and programs and are also used for community events. Some Crossett Brook students continue to participate in athletic programs available through Harwood

School enrollment declined during the first half of the 2000s, but has stabilized between 270 and 290 students in recent years. Enrollment for the 2012-13 school year was 281.

Harwood Union Middle/High School. Waterbury students in grades 9 through 12 attend the regional secondary school, Harwood Union Middle/High School, located in South Duxbury. Waterbury is one of six member communities in the Washington West Supervisory Union. The other communities are Duxbury, Fayston, Moretown, Waitsfield, and Warren. Waterbury contributed 28% of the student body for 2012-13.

Harwood was opened in 1967 to serve 620 students in grades 7 through 12. As a result of a subsequent expansion in the mid-1990s, the school currently has a maximum capacity of approximately 900 students. Enrollment at Harwood has been declining and the school has been operating well below design capacity in recent years. Enrollment for grades 7-12 at HUHS in 2011-12 was 734. There is concern that rapid population change in one or more member communities could place a burden on the Harwood facilities.

There is also concern over the adequacy of Harwood's athletic fields. The school's fields were originally designed to serve four teams. Apart from the construction of a track and hockey field in 1982, no additional field space has been created since 1967. Today the school fields 21 teams. The lack of field space at the school has limited program expansion, and requires that a number of teams be bussed off-campus in order to practice and play games.

Financing Education. Act 68, Vermont's education financing law adopted in 2003, pays for all of a district's education spending. Education is funded by the state lottery, one-third of the purchase and use tax, one-third of the sales and use tax, the general fund, the nonresidential education property tax, and the homestead property tax. While the nonresidential education property tax is the same statewide, the homestead property tax varies by school district based on a district's per pupil spending. Districts that spend more than a specified amount per pupil are subject to an additional tax rate. Homestead taxpayers may be eligible for an income-based adjustment.

Tax Stabilization Fund. In 1997, Waterbury voters established a tax stabilization fund using the equity payment made by the Town of Duxbury when it bought into the Thatcher Brook Primary School

when the Waterbury-Duxbury School District was created. The principal payment of $644,000 was invested perpetually in order to generate interest, dividends, and capital gains.

Adult Education. Adult education opportunities for Waterbury residents are available locally through the Community College of Vermont's Waterbury campus and at nearby schools, including the University of Vermont, several other private colleges in Burlington, and the Vermont Technical College in Randolph. Waterbury's distance learning opportunities through the Vermont Interactive Television (VIT) site, which had been at Stanley Hall, were eliminated after the flooding from Tropical Storm Irene.

A variety of adult basic educational programs are also available through Central Vermont Adult Basic Education, which has offices in Waterbury. These include individualized and group educational services to adults in their homes, at the learning center, and in community settings. Basic education programs serve those who wish to improve their reading, writing, and math skills for use on the job or in daily life, those who are studying for their high school equivalency degree (GED) or adult diploma, and those who want to learn English as a second language. Computer training is also available.

The Adult Basic Education Center also offers a family literacy program, an out-of-school youth program, a teen parenting education program, and a "getting ready to work" program for welfare recipients who are seeking academic and job skills to improve their occupational prospects.

9-2. Cultural Facilities & Services

Library. The Waterbury Public Library is located on North Main Street in the village, sharing the historic former residence of Dr. Henry Janes with the Waterbury Historical Society. It has served town and village residents since 1916, and importantly, lies within walking distance of the Thatcher Brook Primary School and two senior citizen housing developments. The library is governed by an elected Board of Library Commissioners, and funded from municipal appropriations as well as an endowment. The library is staffed by a full-time director, five permanent employees, and scheduled volunteers. The library also is supported by the "Friends of the Library," a local volunteer group.

The library's holdings include more than 21,000 physical books, audio books, videos, and magazines, as well as a growing collection of digital resources. By the end of 2013, the library will offer residents access to nearly a quarter of a million items, through its founding membership in the Catamount Library Network. In recent years the library also added e-books and downloadable audio books to its collection. The library provides free Internet access, weekly story times for children ages 0-6, summer literacy programs for children, general interest programs for all ages, monthly book discussions for adults and home deliveries to day-care centers and housebound residents..

The town-owned library building has had recent improvements to the heating system, insulation added to the attic and basement, and repairs made to the rood and foundation.

An average of 600 people a week visited the library in 2012 and borrowed more than 40,000 items, despite the fact that the library facilities are severely overcrowded. The usable area of the library building is approximately 1,800 square feet, compared to an estimated need of 9,100 square feet, according to nationally recognized library planning guidelines.

The building does not meet state and federal accessibility standards. It has no accessible meeting space: to hold its diverse program offerings, the library often rents space from other community organizations. The building is not able to accommodate the expansion of public computer facilities, children's and teen services, meeting and program space, and

staff workspace needed to provide 21st century library service to a growing community.

Previous planning studies identified the need for expansion and accessibility improvements. Proposals put forth in 1993 and 1999 to expand the historic structure were rejected, as was a 2013 proposal for a new library as part of a municipal civic complex. The need to resolve the library's space crisis is critical.

Community Organizations. Waterbury hosts a variety of cultural and community service organizations – including traditional groups such as the Grange, the Rotary Club, and the Historical Society, and relatively newer organizations that include Revitalizing Waterbury, the Waterbury Activities and Cultural Center, and A River Runs Through It Garden Club. All make significant contributions to the life and culture of the community by organizing and sponsoring local projects, activities, celebrations, and civic events. Collectively they provide invaluable (and cost-effective) services to the community.

The Arts. The practice of and appreciation of the arts: contributes to a stronger sense of community and economic growth; builds bridges between diverse ideals and cultures; creates dialogue and understanding; and educates and stimulates citizens of all ages. Furthermore, a vibrant arts and culture industry is a magnet for tourists, and tourism research repeatedly shows that cultural travelers stay longer and spend more.

Vermont as a state is known for the quality and diversity of its creative practitioners. Waterbury, with its mix of makers, performers, inventors, and innovators bears out that assertion. The community boasts a thriving creative nexus of people engaged with and in the arts who, together, make an essential contribution to: the town's economy; its status as a tourism draw; and its individualistic spirit. The Waterbury creative community is also strongly allied with other economic innovators in the town, including the specialty food and beverage sector; the restaurant sector; and the service economy sector. Continued investment in the creative industries for Waterbury is an investment in our innovative potential and in our future.

For a small community, Waterbury boasts an enviable slate of arts opportunities within its borders. From performing arts organizations for all ages, to galleries showing the work of local practitioners, to makers and retailers in all media, to web designers and creators, Waterbury has a large and distinct arts presence within Central Vermont.

The arts community lacks a common nexus, however, and bringing the arts together in an identifiable, discrete location within the town has long been a goal of the Waterbury Area Arts Coalition and of the community at large. This goal has been given greater form within the Long Term Community Recovery planning process initiated by the Waterbury Select Board and Village Trustees in November 2011, following the devastation of Tropical Storm Irene.

As of the date of this document, the Across Roads Arts Center (Across Roads), a community-based resource and one of the 21 projects that comprise Waterbury's Long Term Community Recovery Plan, is in development. Upon the creation of the Across Roads Center for the Arts, the Waterbury Activities and Cultural Center's mission and priorities were taken on by the newly created group.

The champions of Across Roads intend for the center to offer Waterbury and Central Vermont a centrally located base for arts presentation, professional development and growth of an already-established arts industry; collaboration between the local economy's arts and business sectors; cultural exchange within the community; and opportunities for multi-generational activities. Across Roads, which will contain a performance space; a gallery; teaching space; flexible workspace for artists and other creative individuals; and other amenities, is intended to

increase Waterbury's economic diversity and add to its appeal as a destination for local, regional, and national consumers.

9-3. Health & Social Services

Early Childhood Care and Education Services. Providing children with a sound start now will give them the skills they need to contribute to society later. Quality and affordable early childhood care and education benefits families by preparing children for school while enabling parents to work and provide income. It benefits businesses financial bottom line by attracting, expanding and retaining a quality workforce and creating more reliable, productive employees. Furthermore, early childhood care and education facilities are businesses themselves and their existence expands local and Regional economies directly through the hiring of workers and purchase of goods and services. Research has shown that economic investment in early childhood development programs brings a real (adjusted for inflation) public return of 12% and a real total return, public and private, of 16%.

In 2013, there were 11 registered family childcare providers operating in Waterbury with a total of 27 vacancies. There are also three childcare centers and a pre-school program through the Thatcher Brook Primary School. Only one center currently takes infants less than a year old; another program is limited to after-school services for ages 5 to 13 years.

Licensed and registered day care facilities are available in and around Waterbury; however, the local demand for day care is difficult to measure. According to 2010 U.S. Census data, there were 276 children under age 5 living in Waterbury and each year 55 to 70 children are being born to Waterbury residents. Because Waterbury is also home to several larger Central VT employers, it is likely the demand for childcare in our community is greater than only those services and programs needed by our residents.

With the number of families in which both adults work outside of the home increasing, the demand for child day care has also increased. While the financial challenges of childcare are certainly daunting, the State of Vermont Child Care Subsidy Program, operated by the Agency of Human Services, does provide some financial assistance to low income families. The amount of the subsidy available is based on a formula (tied to the poverty rate) which takes into account both income and family size.

While quality childcare "slots" are extremely scarce, resources do exist for parents, providers and would-be providers. They include:

- The Family Center of Washington County/Child Support Services offers referral services and operates care programs.
- Bright Futures Child Care Information System is a web based resource providing comprehensive information on child care in Vermont, as well as municipal level data on regulated care providers.
- The STep Ahead Recognition System (STARS) is Vermont's rating system for quality improvement efforts in child care, preschool and after-school programs. Through their website, parents can do a provider search to find programs recognized through this system for their quality improvement efforts.
- Vermont Child Care Consumer Line provides counseling regarding child care concerns and access to records of violations.
- The National Association for the Education of Young Children also provides help for families searching for childcare. An Accredited Center search can be done at: http://www.rightchoiceforkids.org/htm/contactus.asp

The Early Education Resource Center of Waterbury, better known as The Children's Room, was established in 1984 in response to a need for a community-based education and support center

for families in a rural area. The Children's Room is located in the Thatcher Brook Primary School and is open during school hours. The parent-child resource center offers parenting information, programs for parents and caregivers and provides a place for parents and caregivers of young children to come together and make connections. The Children's Room offers numerous activities including playgroups, organized arts and crafts, music time, gym time, and literary workshops in conjunction with the local public library. Programs and services are funded through fundraising, room users, foundations, state and federal government programs, private donations, and municipal appropriations.

Health Care Services. Waterbury residents have access to a variety of public and private health care resources. There is an 8,700 square-foot medical facility located at 130 South Main Street, newly renovated after Tropical Storm Irene. Waterbury Medical Associates is a primary care practice with special interests in pediatrics and adult medicine as well as dermatology, gynecology, orthopedics and infectious diseases. They offer a diverse variety of services including preventative care for all ages, management of acute and chronic conditions, immunizations, diabetic education, family planning, sports and camp physicals, minor office surgery, radiologic services, and osteopathic manipulation.

In addition, a branch of Vermont Women's Health with an OB/GYN physician and a midwife is housed at the facility, and rehabilitation and nutrition services from the Central Vermont Medical Center are available by appointment.

Waterbury is home to several other private practices that provide dentistry, physical therapy, chiropractic treatments, therapeutic massage, counseling and therapy, optometry, and prosthetics. A new orthopedic clinic is scheduled to open later in 2013.

Washington County Mental Health Services provides services for adults with mental illnesses, children and adolescents with serious emotional disturbances, and people with developmental disabilities.

Hospitals. The Central Vermont Hospital in Berlin, approximately 16 miles from Waterbury, is the closest full-service hospital, with 24-hour emergency care and a weekend health clinic. Additional, specialized services are available at Fletcher Allen Health Care in Burlington, approximately 25 miles away, and Dartmouth-Hitchcock Medical Center in Hanover, New Hampshire.

Home Health and Hospice. Waterbury is served by the VNA (Visiting Nurse Association), Bayada Home Health Care, Bayada Hospice and Central Vermont Home Health and Hospice (CVHHH), one of the largest home health agencies in Vermont. These agencies provide comprehensive home health care to people in Central Vermont, including nursing, occupational therapy, physical therapy and speech services for individuals recovering from surgery, strokes, accidents, as well as long term care for age and disability related health needs.

In addition, the VNA provides adult day services, CVHHH provides health promotion, prevention services and clinics for children and seniors and both provide services regardless of an individual's ability to pay. Hospice services are provided by all three agencies to meet the needs of individuals for emotional, physical and spiritual end of life care. Hospice volunteer trainings are available on both a periodic and on-going basis.

Social Services. Central Vermont Community Action Council (CVCAC). A variety of social service programs available to low-income Waterbury residents are coordinated through CVCAC, based in Barre. These include child care meals, micro-business development, weatherization and emergency fuel assistance, family support service, farmworker, Head Start, Welfare-to-Work, and Working Wheels programs. The focus of these programs is to offer long-term support to families trying to get out of poverty, while providing short-term assistant to those

facing poverty's most immediate effects. CVCAC is supported in part through municipal funding, using a formula based on population, numbers of residents served, and dollars spent in each community.

Washington County Youth Service Bureau (Boys & Girls Club). The WCYSB is a non-profit social service agency that provides programs for troubled youths and their families, including crisis intervention and family counseling, runaway, substance abuse, teen parent, teen center, and transitional living programs. The agency also runs a 24-hour crisis response service. Programs and services are funded through fundraising, foundations, state and federal government programs, private donations, and municipal appropriations.

Vermont Center for Independent Living (VCIL). An estimated one in five Vermonters has a disability. The Vermont Center for Independent Living, with offices in Montpelier, assists people with significant disabilities to gain more control over their lives and live more independently.

Waterbury Area Food Shelf. The Waterbury Area Food Shelf, located on South Main Street, provides groceries for free, by appointment, to local residents in need.

Senior Services. The demand for services for the elderly, and for family caregivers, has been growing – the result of an aging population. In 2010, 12% of Waterbury's population (more than 600 residents) was 65 years and older. A variety of in-home, transportation, health and respite services are now available, coordinated through the Central Vermont Council on Aging, Central Vermont Home and Hospice, and the Waterbury Area Senior Center.

The Waterbury Senior Citizens' Association (WASCA), founded in 1964, was reorganized in 1990 under a Board of Directors, with the support of community members and local businesses. In 1994 it moved to its present home on Stowe Street, developed as part of the renovation of the Stimson-Graves Building. WASCA supports a variety of programs for local residents, including social events, wellness clinics, advocacy, and tax assistance services. It also serves as a senior congregate meal site, providing lunches on site five days a week, and home deliveries (Meals on Wheels) seven days a week. The center is supported through local fundraisers, hall rentals, volunteer services, private donations and an annual municipal appropriation.

As identified in previous chapters, the senior and elderly population in Waterbury is not only growing, but the demographics and needs are changing. As baby boomers age, they typically remain active and engaged in a variety of activities and tend to seek out opportunities to participate in civic events, learning opportunities and social activities that are multi-age/ multi-generational. It will be important for the community as a whole and agencies serving the target population to identify needs and interests of this new demographic. A viable and healthy community remains flexible enough to provide opportunities and services that meet the needs of its seniors.

9-4. Recreation Facilities & Services

A variety of municipal and state recreation facilities - including playing fields, recreation paths, a swimming pool, an ice hockey rink, state parks, and the Waterbury Reservoir - are available to Waterbury residents. Funds for municipal recreation services and facilities generally come from municipal taxes. User fees also contribute to the maintenance of facilities, including the pool and playing fields.

Recreation facilities and programs are managed by the Waterbury Recreation Committee, a nine-member advisory board comprised of town and village residents appointed by the Selectboard. In addition to maintaining bathroom facilities, parking lots, lights, and fields, the committee is responsible for

developing and maintaining a recreation program for the town and village. This includes summer swimming, camp, and outdoor recreation programs. There are also baseball, softball, and soccer organizations that are independently managed and funded.

A new $2.2 million indoor ice center is located on four acres of village-owned farmland along the Winooski River, at the southern end of the village. The facility offers time for public skating, and a home for local figure and hockey skaters. Ice Center development has been supported largely through the fund-raising efforts of Ice Center of Washington West, Inc. The larger 40-acre site also includes ball fields, a walking path, and parking areas.

Recreation Paths. The concept of a recreation path in Waterbury had been discussed for many years by various groups and citizens, and has been recommended in municipal and community development plans dating from the 1980s. In the summer of 1990, a broad-based citizen group formed to build support and begin planning for a multi-purpose recreation path and trail system in Waterbury. Citizens envisioned a path network, comprised of segments or loops, which would connect key areas and points of interest throughout Waterbury. Residential areas would be linked to other residential areas, commercial areas, schools, or recreation areas. A path meandering along the Winooski River and Thatcher Brook would be an exceptional recreational facility and alternative route to get from the village to Colbyville.

Since that time, a major section of the Waterbury Recreation Path along the Winooski River has been put in place, which links land behind the state complex to the Winooski Street Bridge. This path, with the Duxbury Road, forms a much-used recreational loop that extends into the neighboring countryside. The Waterbury Recreation Path has also been designated as a section of the Cross Vermont Trail, which is currently under development statewide. Other trail networks exist on state-owned lands, in and around Waterbury Center, and up into the Worcester Range. A bike path has also been established extending along Lincoln Street to Laurel Lane, paralleling Route 100 (see Maps 3-1, 3-2).

Undeveloped corridors of land and open spaces between the village and town still remain, and they could provide locations for path segments and connections among key areas. Path easements could be acquired through voluntary donations, site plan and subdivision common land provisions, and the use of existing public lands and rights-of-way. In addition to local taxes, possible funding sources include, but are not limited to, Land and Water Conservation Fund (LWCF) grants, Trail and Greenway grants through the Agency of Natural Resources, and Agency of Transportation enhancement funds, as well as private fundraising, donations, and volunteer efforts.

State Recreation Facilities. The Little River State Park, located within the Mount Mansfield State Forest, 3.5 miles north on Little River Road off of Route 2 in Waterbury, offers 12,000 acres of hiking, camping, boating, fishing, hunting, cross-country skiing, snowmobiling, and swimming. Little River, opened in 1962, is Central Vermont's largest campground. There are campsites, lean-tos, cabins, toilets and hot showers, sewage disposal, firewood, a ball field and play areas, boat rentals, access to the Waterbury Reservoir, and miles of hiking trails. There is also an interpretive "Little River History Hike" which identifies historic sites associated with past settlement in Ricker Basin and Cotton Brook.

Waterbury Center State Park, a quarter of a mile off Route 100 just south of Waterbury Center, is another public recreation area on the shore of the Waterbury Reservoir. The park is located on a 90-acre peninsula on the eastern shores of the reservoir. Facilities include a picnic area, a handicap accessible nature trail, swimming beach, boat ramp, and rest rooms.

The Waterbury Reservoir includes areas for power boating and water skiing, and also a "quiet water" section for paddlers. Park trails are open during the off-season, in winter months when state camping facilities are closed; however, gates at the dam prevent vehicular access into the camping area. While this is an important measure to regulate access and reduce vandalism to the park facilities, it also limits residents' access to interior trails for cross-country skiing and snow shoeing.

A trail system from Loomis Hill into the Hunger Mountain Range is maintained by the Department of Forest Parks and Recreation. Limited, unmaintained trail networks also exist in other state holdings associated with the Putnam State Forest, including that section accessed off the Old Dump Road.

9-5. Cemeteries

The Waterbury Cemetery Commissioners oversee the management and maintenance of Waterbury's cemeteries. Although a formal study has not be conducted, it appears that Hope Cemetery in Waterbury Village and the Waterbury Center Cemetery in Waterbury Center are not in danger of running out of space in the near future.

9-6. Public Safety

Police Protection. The Village Police Department was displaced by the flooding resulting from Tropical Storm Irene and is now located in leased space in the Steele Block at 46 South Main Street.

Local crime rates vary from year to year, but recently have been declining in the village, and increasing slightly in the town – possibly in association with growth in the town's commercial sector which often results in an increase in retail crime. Village crime rates have historically exceeded town, county, and state rates per 1,000 of population. Recently, however, village crime rates have dropped below state and county rates, possibly as the result of the increased effectiveness of local police coverage and community policing.

The Village of Waterbury is patrolled by a police department consisting of two full-time and six part-time officers. In 2012, the police department responded to 1,112 incidents, issued 458 traffic tickets and made 27 arrests. The department also conducts child safety and drug education programs in local schools, and participates in other public service activities.

The department maintains a fleet of cruisers that are replaced on a 5-year schedule established in the capital improvement program. The police department, located next to the municipal offices, is critically short of space. There is interest in the development of a new village police station, possibly combined with new municipal offices, library and historical society.

Outside the village, police protection is provided by the Vermont State Police, based out of Middlesex, and the Washington County Sheriff's Department. There is currently a shortage of state police officers, which limits third shift (nighttime) coverage. The sheriff's department is made up of seven full-time officers.

Fire Protection. Fire protection in Waterbury is provided by the town. Both the Main Street and Maple Street Fire Stations were reconstructed with bond funding in 2011, and were completed just prior to Tropical Storm Irene.

The Fire Department also provides mutual aid assistance to surrounding communities as part of the Capital Fire Mutual Aid System. The department had a roster of 50 members in 2012 and responded to 238 incidents.

Emergency Medical Services. The Waterbury area is served by the Waterbury Ambulance Service, Inc. (WASI), a nonprofit corporation formed in 1971 and staffed by local volunteers.

WASI is certified by the State of Vermont to provide emergency care services on a 24-hour basis to the residents of Waterbury, Waterbury Center, and surrounding communities.

WASI owns two ambulances, which are housed at the Ambulance Station in Waterbury Center. Both are stocked with the latest emergency care equipment and have radio capabilities to contact all local hospitals, fire, police, and municipal offices and their vehicles.

WASI is funded through three sources: an annual family subscription drive; donations and memorials; and insurance receipts for services rendered. An elected, volunteer board of trustees oversees all collections, expenditures, and the operation of the corporation.

Enhanced 911. A state board supervises the operation of Vermont's enhanced 911 system, instituted in the 1990s. This includes monitoring and auditing E-911 databases for street addresses, contact information and responders, the E-911 network, and four public safety answering points (PSAPs) which take calls, and forward them to local dispatchers. The system depends on regular information updates from municipalities to ensure complete coverage. The state has consolidated the PSAPs, and Waterbury is currently served by the PSAP in Williston.

9-7. Sewer & Water Facilities

Sewer Facilities. Waterbury's public sewer facilities serve only lands within village limits. This has resulted in a number of annexations in recent years to extend services to development on lands formerly outside the village. If a merger between the town and village occurs, a new sewer service area will need to be delineated in relation to desired patterns of growth and downtown development. The future extension of lines to presently non-sewered areas will have a significant impact on land use patterns, and so should be considered very carefully. Future sewer needs will be strongly influenced by the land use policies developed in this plan.

The wastewater treatment plant is located northwest of the village on Route 2 and opened in 1980. The plant has a permitted design capacity of 510,000 gallons per day (gpd) and a Biochemical Oxygen Demand (BOD) capacity of 726 pounds per day. As of December 2012, the facility had an average monthly flow of 214,500 gpd. The uncommitted hydraulic reserve capacity is 295,500 gpd. The plant is operating at 42% of its total hydraulic design capacity. With the proposed upgrade for phosphorus removal, there still remains BOD capacity in the plant.

System expansion is usually recommended when a facility reaches 80% of its design capacity. A permit required 20-year evaluation of the wastewater treatment facilities was conducted in 2002 and 2003. The higher than normal BOD loading was considered during the evaluation to plan for necessary facility upgrades or expansion.

Investments in the Waterbury Wastewater Treatment Facility have been made in the recent past to improve its operational efficiency. Operation of the treatment plant was contracted out annually to a private firm. It is now being operated by municipal employees, under a current plan to consolidate the village water and sewer departments. In 2002 voters approved the development of charter amendments to bring authority for water and sewer operations under one board. Responsibility for the wastewater system transferred to the newly approved Board of Water & Sewer Commissioners in May, 2003.

An upgrade to the wastewater plant is currently being undertaken to reduce the phosphorus content of the effluent leaving the plant. The technology being utilized is called ballasted flocculation and uses an iron based material that enhances

settling and removal of the solids in the waste that contain the phosphorus.

Sewer charges are based upon metered water use, which is noted on customers' water bills. Sewer use and rates are regulated in accordance with an adopted village sewer ordinance. The ordinance currently requires all buildings intended for human occupation within the village that abut a street or right-of-way where there is an existing or proposed sewer line to connect to the public system.

There is not now any allocation of reserve capacity by use type, by zoning district, or for such things as affordable housing or pollution abatement. Any future allocation ordinance adopted by the municipality should be consistent with the goals and policies of the municipal plan.

Outside the village, Waterbury residents rely upon on-site waste disposal facilities, subject to regulation by the state. Soil conditions and topography in some areas of the town are not favorable for individual on-site septic tanks and leach fields; however new state rules for on-site systems allow for the placement of systems on slopes up to 20%, and, under proposed rules, on slopes up to 30%. This could have the effect of opening up Waterbury's upland areas to development, unless regulated through other means such as zoning and subdivision.

Community sewage systems allow for clustered or multiple unit developments. Systems of this type, which handle 6,500 or more gallons per day, are regulated by the Vermont Department of Environmental Conservation. Community systems allow a developer to take greater advantage of natural features on the site rather than base a site plan predominantly on septic suitability. Buildings can be sighted closer together, infrastructure costs can be reduced, and important open spaces or natural features can be protected.

Ownership and maintenance responsibilities of a community system reside with the property owners of the development it serves. The town currently accepts no responsibility for system maintenance, repair, or replacement, and does not anticipate accepting any responsibility in the future. In the event of a system failure, the owners/users are required to pay for any needed repairs or replacement.

Water Supply Facilities. Waterbury Village is served by a municipally owned and operated water system with a total capacity of 503,000 gpd, and a reserve capacity (as of September 2013) of 265,000 gpd.

The system has a number of water supply sources, including three drilled wells in Waterbury on Loomis Hill near the Stowe town line, and three sources over the town line in Stowe. The Stowe sources include two stream intakes from the Tyler Brook and Merriam Brook dams, and a drilled well. The village owns and manages the watershed area supplying its surface water sources. Source protection plans have been developed to prevent water supply contamination. There is concern, however, regarding long-term source, plant, and system security. Security improvements are anticipated to reduce the threat of water supply and system contamination.

Source water is transmitted to a filtration plant, built in 1992 at the old town gravel pit site on Barnes Hill. This 13-acre site was deeded by the town to the village for $1.00, in return for which the village agreed to provide water to town customers formerly served by the Waterbury Center Water Works system (formerly known as the Luce System). The water is filtered, chlorinated, fluoridated, and transmitted to a 1.4 million gallon storage reservoir, constructed in 1977 on Blush Hill, just outside village limits.

The village has extended its municipal water service area to include residents of Waterbury Center, who were formerly

served by the privately owned and operated Waterbury Center Water Works (Luce System). Improvements involved connecting users on Maple Street and Guptil Road to a new 12-inch main installed by the Village Water Department, and the installation of new 8-inch and 4-inch water mains to replace Water Works distribution lines in all service areas. Lines were sized to meet current demands and to allow for future expansions.

The rest of the distribution system consists of approximately 25,300 linear feet of 4- to 10-inch ductile iron pipe. Most of these pipes are less than 25 years old. The water main along Main Street is scheduled for replacement in association with the Main Street reconstruction project. Fire hydrants are incorporated within the system. Where pipe diameters supply sufficient flow, there is adequate water supply for fire protection.

The municipal water system is overseen by an elected Board of Water & Sewer Commissioners. The current rate structure includes a minimum charge for each dwelling unit and commercial unit in any building. A family pays the same minimum rate whether it lives in a detached dwelling or an apartment unit. The water rate increases with increased water use to encourage water conservation and to require large users to contribute a larger share of revenue – as needed to offset the costs of additional storage and larger pipes needed to meet higher peak demands. A base charge was also added to assist in repayment of the bond for the water filtration plant and other improvements.

It is the policy of the board that present users should not pay for the development costs of new water sources; new users to the system should pay their share of the cost of developing these new water sources through an allocation or connection fee. This is consistent with notions of both economic efficiency and fairness.

In 2002 voters approved a proposal, as supported by the Board of Water Commissioners, to combining the responsibilities for municipal water and sewer systems under one board. The systems are both critical utilities that are interrelated in many ways. The merger of water and sewer system staff under the direction of the Public Works Director is intended to increase efficiencies in the operation and maintenance of both systems.

There is one private community water systems in town, serving East Wind mobile home park. The system has an approved source protection plan. The remainder of town residents and businesses are served by individually owned wells and springs. The installation of private residential wells is required to meet state isolation distances to prevent contamination. The siting of wells may also affect the subsequent siting of nearby septic systems, which are regulated. Driller well logs are kept on file with the state. Water testing for individual water supplies is available, for a fee, through the Vermont Department of Health and private testing firms.

9-8. Solid Waste Management

Waterbury is one of six members of the Mad River Resource Management Alliance (MRRMA), formed in 1994 through an interlocal agreement. MRRMA is governed by board that consists of an appointed representative from each member municipality. An annual per capita assessment is charged to cover administrative and program costs ($1.75 for each of the past three years).

MRRMA has an adopted solid waste implementation plan, approved by the state. In June 2009, MRRMA updated this 5-year plan, with public input, to conform to the newly revised state solid waste plan.

Hauling, recycling, and landfill services are provided under agreement with Moretown Landfill, Inc., which is owned by

Advanced Disposal. Trash collection services are also provided by other private haulers.

MRRMA is the "host district" for the Moretown Landfill. As a result, local residents have been able to bring their recyclables to the facility at no charge. The Moretown Landfill is currently closed based on state permitting issues with a condition that a complete application be submitted no later than December 3, 2013. If the state permit is obtained for the next cell, then the landfill will re-open along with the associated solid waste services.

Free disposal of appliances, tires, and collected roadside trash is also provided in association with annual MRRMA-sponsored events such as Green Up Day, Household Hazardous Waste Collection Days, and tire collections. MRRMA works with the Association of Vermont Recyclers, and is a member of the Northeast Resource Recovery Association, which helps market some recyclable commodities. MRRMA also sells composting bins.

Depot Beverage operates the Waterbury RTR Center on River Road that is a transfer station for solid waste. The Waterbury RTR Center takes trash, recyclables, appliances, tires and construction debris, and also operates a bottle redemption center.

9-9. Electric Utilities

As noted under the Energy Chapter (Chapter 7) Green Mountain Power Corporation provides electrical power to both Waterbury Town and Waterbury Village. GMPC operates three power substations (Winooski Street, Stowe Road, and Little River) and two hydroelectric facilities in or partly in Waterbury (Little River #22 and the Deforge Hydroelectric Station #1 at Bolton Falls). Half of the dam that serves the Bolton Falls Station is located in Waterbury; the remainder, including the power station and substation, is located in Duxbury.

Little River Dam. Little River #22 is located at the site of the Waterbury Flood Control Dam. With a drainage of 110 square miles, the reservoir normally extends upstream six miles and has a surface area of 885 acres at a pool elevation of 592 feet. Usable capacity for storage of water for power is 1.58 billion cubic feet, at water levels between 500 feet and 592 feet. The reservoir capacity above 592 feet is reserved for flood control purposes only. The drawdown of the reservoir for dam repairs, to 520 feet during the construction phase, will significantly reduce the plant's generating capacity (and associated tax revenues) through 2004.

Initially installed in 1953, the hydro facility has a generating capacity of 5,520 kW, and consists of a submerged concrete intake, two 205-foot long, 54inch diameter steel penstocks, a powerhouse with one generating unit, a tailrace, and a 33kV transmission line. When fully operational, the facility runs seven days a week, 24 hours a day, except during low flows when it only operates on weekday mornings with an average drawdown of 0.2 feet per day. Generation during the summer usually ceases when necessary to preserve pool level at the 590-foot elevation level for recreation purposes.

In 2000 GMP filed a hyrdroelectric application with the Federal Energy Regulatory Commission for the relicensing of the Little River facility. At that time, the application was accepted for filing, but has not been through an environmental assessment (EA). No modifications to the facility or operation are proposed; the project has an average annual generation of 16,223 MWh.

Bolton Falls. The Bolton Falls dam (the Deforge Hydroelectric Station) was built in 1898. It was severely damaged in the 1927 flood, but continued to operate until 1938. In February 1979, the U.S. Dept. of Energy awarded GMP a Low-Head Hydroelectric

Power Demonstration Grant and the Federal Energy Regulatory Commission issued a forty-year license to redevelop and operate the site. GMP constructed a device on the dam to improve oxygenation of the plunge pool and to increase the minimum flow of the Winooski River below the Middlesex Dam, which are intended to improve the Winooski River as a fishery. The Deforge Hydroelectric Station currently has a generating capacity of 8,820 kW.

Transmission & Distribution Lines. There are two major transmission lines in Waterbury, one skirting the southwest corner of town that feeds into the Winooski Street substation, and another running from the Deforge Station to a substation just off Route 100 southwest of Waterbury Center. There are also two principle distribution lines, running north-south through the western half of the town – one paralleling Route 100 from Waterbury Village to the Stowe town line that is a VELCO transmission line, and a second roughly paralleling that to the west. Three-phase power is available for industrial uses. The undergrounding of distribution lines along Main Street through Waterbury Village will be undertaken in association with the Main Street reconstruction project.

9-10. Communications Facilities & Services

Waterbury officials, businesses, and residents communicate with each other through a variety of means, ranging from traditional venues such as newsletters, newspapers, reports, and public meetings to increasingly advanced telecommunications networks that provide worldwide information access.

Newspapers. The *Waterbury Record* is Waterbury's weekly newspaper. The major daily paper serving the Waterbury area is the *Times Argus*, based out of Montpelier. The *Burlington Free Press* is also available locally, but includes little local reporting.

Telecommunications. Telecommunications facilities and services, until very recently, were limited to local and long distance telephone networks and wireless radio and television networks. Waterbury's radio station, WDEV, dates from 1931. At the time WDEV's towers were built on Blush Hill in 1936 they were purportedly the tallest structures in New England. Television was introduced in the 1940s, and dial telephones finally reached Waterbury in 1952.

Telecommunications technologies, and associated services available to Waterbury residents and businesses, are now multiplying at an unprecedented rate. Technology and deregulation have blurred the lines between what were formerly distinct, separately regulated services – phone and cable systems are now used as much for data transfer as for more traditional forms of communication. Wired and wireless networks are being developed that allow for high speed Internet access, voice and data integration, video conferencing, and telecommuting.

However, unlike traditional phone and broadcast services, available for a nominal fee, or the cost of purchasing a radio or television, many of the new technologies and services require a substantial initial capital investment (e.g., for computers, dishes, or wiring), and subsequent monthly payments. There is also a learning curve in the use and application of new technologies. As a result there is a growing information or "digital divide," which affects mostly lower income households and the elderly who are less familiar with new technologies.

The extent of local coverage for wireless, cellular services is also improving – at the cost of siting new telecommunications towers that can mar the landscape if not sited appropriately in relation to their context. Providers are currently actively acquiring sites for towers along I-89 and other major routes to expand available coverage. Municipalities, under the federal Telecommunications Act of 1996, cannot altogether prohibit such facilities, but can regulate their siting and appearance under local land use

regulations. Emissions, including related interference and health considerations, are regulated separately by the Federal Communications Commission (FCC). The Town and Village of Waterbury amended zoning regulations in 1999 to regulate the siting, installation, and removal of telecommunications facilities. The current regulations promote collocation where feasible to limit tower proliferation. These should be reviewed and amended regularly to address the potential impacts of new technologies.

Telephone. FairPoint Communications is the area's incumbent local exchange phone company, although local consumers have the option of selecting from other local – and a variety of long distance – telephone service providers. Traditional telephone companies now offer a variety of calling services (e.g., voice mail, caller ID, call forwarding, call screening, and conference calling) and new line services (e.g., ISDN and DSL services) that support high-speed data transfer, internet access, and voice and data integration.

Internet Services. Waterbury residents and businesses with a computer and modem, or a direct line connection have access to a growing number of local and national internet service providers (ISPs) and to a variety of associated services, including e-mail and file transfer services, web sites, and access to the world wide web. For residents without a computer, the Waterbury library offer public on-line access. Waterbury's municipal web site (www.waterburyvt.com)was established in 2000. The web site currently includes an introduction to Waterbury, a historical tour, and a variety of information about municipal functions including meeting agendas and minutes.

9-11. Goals, Objectives and Actions

goals

1. Provide public utilities, facilities, and services to ensure the public's health and safety, and to improve the quality of life in the Waterbury community.
2. Provide utility services and municipal facilities that support orderly growth and controlled development at a rate and in locations that Waterbury can accommodate.
3. Make new investments in schools, libraries, and recreational, and other cultural facilities, in a manner that will serve the broadest spectrum of community needs and aspirations.
4. Ensure the availability of quality and affordable early childhood care and education.

objectives

1. Use the capital planning process to identify and prioritize investments in facilities and infrastructure to ensure that Waterbury's rate of growth does not exceed the capacity of its infrastructure and facilities.
2. Where new development requires major new investment in public infrastructure and facilities, allocate the incremental investment costs to that new development rather than to existing residents and businesses.
3. Locate utilities, particularly water and sewer lines, and other facilities in a manner that will encourage clustered development and avoid strip development and sprawl.
4. Provide clean, safe, and sufficient water to areas currently served by public water systems.

5. Provide high quality educational facilities and opportunities for Waterbury residents of all ages.

6. Encourage the location of child care facilities in existing settlements, near residential clusters, schools, and along public transportation routes.

7. Provide effective fire protection, police protection, and emergency medical services for Waterbury residents and businesses.

8. Expand and improve Waterbury's public library facilities to better accommodate the increased demands for library services by Waterbury area residents of all ages.

9. Continue to manage Waterbury's solid waste in an efficient, affordable, and environmentally sound manner.

10. Provide a variety of recreational opportunities to Waterbury residents and visitors of all ages.

11. Planning for, and use of, cultural facilities (in particular, schools, libraries, historical societies, and arts centers) should, at all times, be driven by an understanding of the central and multiple uses that these institutions serve in the life of the community. These functions include, among others:

    - Educational programs for children and adults
    - Provision of access to resources for learning such as books, the internet, etc.
    - Child care
    - Artistic activities, performances, readings, recitals, etc.
    - After-school and summer programs (recreational, historical, naturalist, etc.)

actions

Capital Planning

1. The municipality should continue the annual capital planning process in which future infrastructure and facility needs are identified and a fiscally responsible means for acquiring them is set out.

2. The Planning Commission, Development Review Board and other municipal officials will participate in appropriate state and local development reviews to enhance the municipality's ability to manage development in way that minimize impacts on public infrastructure and facilities.

3. The municipality should review the current system of assessing fees on new development and determine whether it is desirable and feasible to impose other special assessments or development impact fees.

4. The Planning Commission should explore possible amendments to Waterbury's land use and development regulations that would require new development to reduce or mitigate any additional burdens it places on municipal facilities, including roads, schools, recreation facilities, sewer, and water systems.

Utilities

5. Construction and operation costs for Waterbury's water system, sewer system, and solid waste costs should continue to be recovered with user fees.

6. Focus growth in designated growth centers by limiting municipal sanitary sewer service to these areas.

7. Adopt a sewer system reserve capacity allocation ordinance which reserves an appropriate amount of capacity for all types of desired future development, including industrial, commercial, and residential development.

8. Prior to any major extension of the sanitary sewer system, the municipality should conduct a study of the costs, impacts, and benefits of the extension.

9. Limit the use of private community sewer systems to those cases where it would further the goals and objectives in this Plan and support a pattern of development that conserves agricultural lands, open space and other natural resources, and fragile environments such as wetlands and steep slopes.

10. Pursue making Waterbury Village a free WiFi zone.

11. Pursue activation of fiber optic cable and the associated telecommunication service in the village to support the economic viability of the downtown area.

Facilities and Services

12. Plan for a new Municipal Office, Library, and Police Station in one or more buildings, with space also dedicated for the Waterbury Historical Society.

13. Create a "master plan" for the development and maintenance of community and cultural facilities. An ad hoc committee should be created to develop such a master plan, to feed it into the municipal planning and capital budgeting processes.

14. Support the creation and maintenance of the Across Roads Center for the Arts, and faciltiate its integration into the aforementioned master plan.

15. Evaluate whether Waterbury's land use and development regulations adequately address fire prevention and protection needs through the encouragement of fire ponds, hydrants, and adequate accessibility of roads and driveways.

16. Continue to expand the town and village recreation paths.

17. Where appropriate, the municipality should work with the State of Vermont to improve recreational opportunities on state-owned land, especially with the improvement of trail uses.

18. Continue to participate in the Mad River Solid Waste Alliance as long as this is the most cost effective solid waste disposal option.

19. Continue to support community-wide recycling, explore programs for composting food and agricultural wastes, and use recycled products when possible.

20. Support a needs assessment by advocacy organizations, supported by local businesses, to evaluate quality early childhood care and education services, the economic impact on the Region, and how employers, public education and providers can work together to reduce the financial burdens on families and improve the salaries of teachers to a livable wage as a minimum.

21. Support the provision of health care services to Waterbury citizens through private and public dental care, medical services (including physical therapy, mental health care, and visiting nurses), and Waterbury Ambulance Service, Inc.

10. LOCAL GOVERNMENT

10-1. Government Structure

The Town and Village of Waterbury are separately incorporated municipalities. The town is enabled under state statute and the village has a charter. Waterbury Village is also part of the town. Village residents are town residents, taxpayers and voters, but town residents outside the village do not pay village taxes, and cannot vote on village matters.

The Town of Waterbury is governed by a five-member Select Board. The village is governed by a three-member Board of Trustees that includes the President of the village. Both boards generally meet twice a month, more often if necessary. All meetings are open to the public, and many are televised on local cable.

Since 1968 Waterbury has had a municipal manager who is responsible for the daily operations of the town and the village. The town and village also share other staff, including the community planner, zoning administrator, and health officer.

The town governs services and facilities that serve all community residents, including highway, fire, recreation, and community development programs. Services and facilities governed by the village include the public water and sewer systems, the municipal building, and the village police department.

Waterbury has a joint planning commission, formed in 1988, and a municipal plan and zoning regulations that cover both the town and village. The zoning regulations are administered by a shared Zoning Administrator, appointed by the Planning Commission, and a separate Development Review Board appointed by the Select Board. The village has also adopted separate wastewater, parking, traffic and utility line ordinances.

The over-arching goal of the local government for the Town and Village of Waterbury is to provide efficient, reliable, and cost effective service to our residents and businesses.

Over the past two decades many municipal departments, boards, commissions, and committees have been merged in order to provide more efficient service and oversight. The long-term goal of completely merging the town and village into one municipality is still desirable and would provide many benefits to the community.

As a result of Tropical Storm Irene there is an opportunity to develop a municipal civic building that will serve the community for many decades to come and will facilitate the provision of valuable government services.

Municipal Civic Building. The town and village have shared municipal offices at 51 South Main Street in a house owned by the village, since 1983. The building was flooded and severely damaged by Tropical Storm Irene on August 28, 2011. Municipal services have been relocated to temporary space in the village fire station.

Initially, the municipal building was considered adequate to house governmental functions. However, office and storage space has been insufficient to meet growing municipal needs. Prior to Irene, all office space was occupied and the vault was filled to capacity. Some materials, such as planning and zoning records and maps, were not kept in the vault due to lack of space. Meeting space in the municipal building was also limited and inadequate. Boards and committees at times competed for meeting space despite efforts to stagger regular meeting schedules. Public input was limited due to space constraints. Local schools, churches, fire stations and the recreation building have provided additional meeting space when needed.

Public input, through Waterbury's Long Term Community Recovery process (which received support from FEMA from November 2011 through May 2012) guided town and village elected officials to recommend a solution to the displacement of government services after Irene. Two large brainstorming sessions were held in November and December 2011 to solicit recovery proposals from the public. In January and February 2012, smaller groups refined the ideas generated in the brainstorming session and recommended the building of a municipal civic building. The public was asked in February 2012 to rank the importance of a municipal building to the community's recovery. Over 400 community members attended the February 2012 meeting. The project was voted as more important than any other project in the community, and was designated a project of "high recovery value" by the town and village elected officials.

The Town and Village of Waterbury plan to construct a new municipal civic building to house the new municipal offices for the town and village government, the Village Police Department, a new municipal public library, and the historical society. The new facility will provide the town and village governments with permanent, accessible, energy-efficient office space. It will offer much-needed library space for books, computers, meeting/study space, and programs and an opportunity to showcase and preserve Waterbury's historical treasures. One of the primary criteria for siting the new municipal civic building is that it be located in the downtown area of the Village of Waterbury.

At the time of this writing, a planning group consisting of Tri-Board (Waterbury Select Board, Village Trustees, and Library Trustees) representatives, a member of the Waterbury Historical Society and six community members has formed to develop a plan.

Merger. The possibility of merging the town and village has been discussed for more than 30 years. The majority of municipal departments, commissions, and committees have been merged and are town-wide with the exception of the Water, Wastewater, and Police Departments that are village only.

Since 1992, there have been four merger votes involving simultaneous town-wide and village-only votes. Three town-wide votes in 1992, 2002, and 2007 failed even though the village approved the merger in 2002 and 2007. In November, 2004 both the town and village voters approved the merger, but the vote was rescinded in January 2005 by the town with a margin of 82 votes. Despite this history, there is still significant support for merger of the town and village.

10-2. Financing Government

Tax Base. Waterbury depends largely on property taxes to fund local government. The grand list for the town and village now

includes taxable real estate only, with no taxable personal property. Waterbury's 2012 Grand List totaled $723,236,600 in 2012, an increase in value of 54% since 2001.

Capital Improvement Program. Municipal budgets have varied significantly from year-to-year, largely as a result of bonding to cover capital improvements. A capital improvement program was established in 1996, funded initially through the issuance of a $600,000 debt, and $0.04 on the tax rate to generate revenues. The intent was to better schedule needed facility improvements and equipment replacements, and reduce or eliminate the need to issue debt for capital purchases and improvements. As a result there have been fewer dramatic increases in budgets and associated tax rates in subsequent years.

Tax Stabilization Fund. In 1997, Waterbury voters approved the establishment of a tax stabilization fund using the equity payment made by the Town of Duxbury when it bought into the Waterbury Elementary School and the Waterbury-Duxbury Union 45 was formed (see Chapter 9). Interest, dividends, and capital gains earned from the initial investment (around $30,000 per year) are used to reduce current year taxes.

Village Reserve Funds. The Village of Waterbury, the Village Water Department, and the Village Sewer Department also maintain reserve funds for capital improvements and to stabilize the village tax rate. These include:

- A capital improvement fund (fire, police, municipal building).
- A tax stabilization fund (funded in part through revenues from the state prison contract when Waterbury housed a correctional facility).
- A water capital reserve fund.
- A water capacity and timber revenue reserve fund (funded in part through fees and timber sales).
- A wastewater debt reduction fund.
- A wastewater capital equipment fund.
- A wastewater sludge abatement reserve.

As noted previously, the village also manages an Urban Development Action Grant (UDAG) revolving loan fund that was created by the repayment of the loan of a UDAG grant to Ben & Jerry's when its plant was built in 1984. The village also has a Community Development Block Grant (CDBG) revolving loan fund that was created from the repayment of the loan of a CDBG grant to Pilgrim Partnership for Green Mountain Coffee Roaster's expansion in 1998.

Town Revolving Loan Fund. The town also has a CDBG revolving loan fund that was created from the repayment of the same loan to Pilgrim Partnership for Green Mountain Coffee Roaster's expansion in 1998. This revolving loan fund has been used to help finance affordable housing and economic development planning and implementation projects.

10-3. Resident Satisfaction

The 2013 Community Survey asked Waterbury residents to review and rate their satisfaction with municipal government:

- 62% of residents surveyed rated their satisfaction with the overall quality of municipal government "good" or "excellent."
- 59% gave a "good" or "excellent" rating to being able to obtain access to information about community issues.
- 68% felt they were afforded ample opportunity to participate in community affairs.

Nevertheless, many felt there was room for improvement in the ways our municipal government provides for citizen's needs:

- Only 49% rated the value of services they received for their tax dollars "good" or "excellent,"and 21% were "unsure" whether they received adequate value.

Continue to pursue efficiencies of purpose and economies of scale throughout town and village government operations.

- 48% gave a "good" or "excellent" rating to government's responsiveness to citizen concerns, but a full 25% of respondents said that they were "unsure" about the response of municipal government to citizen concerns.
- 20% of residents surveyed responded that they were "unsure" about governmental quality, suggesting that there are broader issues with municipal government that need to be addressed.

Some of these issues were outlined in individual comments submitted by survey respondents. Chief among these were recommendations for a merger of the town and village, including the merger of their separate government entities. Respondents also:

- Proposed specific changes to the ways that our municipal government interacts with its citizens.
- Commented on the ways municipal tax revenue was allocated.
- Praised town employees and volunteers.

Addressing the entirety of this section of the survey, one respondent wrote, "Our local government does a superb job with scarce resources. My only fears are that the town will take on more responsibilities than it has now and that we will allow Waterbury to become the provider of services to other communities without asking them to pay their share…."

In sum, then, the 2013 Community Survey revealed taxpayer satisfaction with municipal government proportionate to an evolving community undergoing a great deal of change as it struggled to recover from a natural disaster, implement its Long Term Recovery Plan, and envision the future. Comments may be read in their entirety in Appendix A.

10-4. Goals, Objectives and Actions

goals

1. Increase cooperation and efficiency in the municipal government.
2. Develop a modern, energy efficient centralized municipal civic building to include new municipal offices, library, police station, and facilities for the Waterbury Historical Society.

objectives

Efficiency

1. Continue the consolidation of municipal boards and/or committees to increase cooperation, communication, and efficiency.
2. Continue to reduce the level of tax delinquency.
3. Consolidate and modernize municipal facilities and services.
4. Improve municipal office, storage, and meeting space.

Municipal Civic Building

5. Obtain a viable site for the municipal civic building that is located within or adjacent to downtown Waterbury.
6. Create an affordable plan to finance a municipal civic building with the contribution of available town and village assets.

actions

Efficiency

1. Continue to explore merging town and village governments.
2. Continue to develop a comprehensive information management system to improve the availability and utility of municipal information.
3. Continue to develop other revenue sources as alternatives to the property tax.
4. Continue efforts to increase state payment-in-lieu-of-taxes to offset impacts of the state facilities in Waterbury.

II. LAND USE

11-1. Overview

Given the breadth and depth of this chapter, an overview of its organization is important. The chapter starts by outlining land use trends. Then existing settlement patterns are discussed with separate narratives for the areas of the Village of Waterbury and the portion of the Town of Waterbury that is located outside of the village. This is due in part because the Village of Waterbury is technically a separate municipality lying within the town that provides additional services. The most important village service that related to land use is the municipal wastewater system that facilitates higher density residential, and intensive commercial and industrial development.

The chapter continues with a discussion of the adjacent towns that are "over the line". Existing land use regulations and the permitting process is outlined. This is followed by a discussion of desired patterns of development and the narrative for the required future land use plan. The goals, objectives, and strategies are organized by the geographic land use categories that correspond to those identified in the Future Land Use Plan.

11-2. Land Use Trends

Waterbury is becoming an increasingly desirable place to live, with its spectacular scenery, accessible recreation areas, excellent educational institutions, and growing village vitality. At the crossroads of Interstate 89 and Route 100, Waterbury is a gateway to Central Vermont tourist destinations such as Stowe to the north and the Mad River Valley to the south. The location also provides residents and visitors easy access to Burlington, the state's largest city and Montpelier, the state capital.

The residents of Waterbury have consistently supported the over-arching planning goal to have development maintain the historic settlement pattern of compact village centers surrounded by rural countryside. Intensive development is encouraged primarily within the village areas and strip development along Route 100 and Route 2 is generally discouraged. Economic growth and higher density residential development is encouraged primarily in the Village of Waterbury and Waterbury Center village.

Development within the more rural areas of Waterbury needs to be appropriate and respect the natural, agricultural, and forest resources of these areas. Continued development of the land is inevitable, however it can be arranged on the land and designed in a way that respects the qualities that landowners and the community at large appreciate and value. A significant portion of Waterbury is conserved in state and municipal ownership and additional private parcels have been voluntarily conserved. As our community continues to develop and change over time it will be important to seek the conservation and protection of significant natural and scenic resources where possible.

Figure 28. **Land Use / Land Cover**

	Acreage	% Total
Agriculture/ Open Land	2,855	9.0%
Cemetery	25	0.1%
Commercial	130	0.4%
Forest Land	25,065	78.9%
Government	65	0.2%
Industrial	54	0.2%
Institutional	13	0.0%
Mixed (Res & Comm)	14	0.0%
Outdoor Recreation	154	0.5%
Residential	1,156	3.6%
Roads & Parking Lots	179	0.6%
Schools	13	0.0%
Scrub/Shrub	663	2.1%
Surface Waters	979	3.1%
Wetlands	423	1.3%
Total	31,788	100%

Source: CVRPC GIS LULC Data, 2001.

Figure 29. **Number of Parcels by Use Category, 1991-2001**

	1991	2001	% Change
Residential 1 (< 6 acres)	983	1,207	22.8%
Residential 2 (6+ acres)	129	189	46.5%
Mobile Homes	146	135	-7.5%
Mobile Homes w/Land	54	51	-5.5%
Vacation 1 (< 6 acres)	58	42	-27.6%
Vacation 2 (6+ acres)	34	34	0.0%
Commercial	136	143	5.1%
Commercial Apartments	18	33	83.3%
Industrial	8	7	-12.5%
Utility/Electric	5	4	-20.0%
Utility/Other	2	0	-100.0%
Farm	4	3	-25.0%
Woodland	18	14	-22.2%
Other	48	2	-95.8%
Miscellaneous	227	175	-22.9%
Total	1,870	2,039	9.0%

Source: Waterbury Grand List Summaries

Waterbury has an area of approximately 49.6 square miles (31,788 acres) of land, as calculated from current geographic information system (GIS) coverages Nearly 80% of Waterbury is forested. Less than 15% of the land remains as farmland, shrub land, or other undeveloped open space. Only 5.7% of Waterbury's total land area has been physically developed. Waterbury's pattern of development is generally typical of compact settlements surrounded by rural, less densely populated countryside with some areas of lower density suburban residential development (see Map 5-1). The Land Use / Land Classification Map 5-1 was created using interpretation of aerial photography, specifically the "orthophotos" done by the State of Vermont. This data is very useful but the acreages and corresponding percentages are approximate.

There are two distinct settlement areas – Waterbury Village (including Colbyville) and Waterbury Center – which are characterized by concentrated residential development and mixed neighborhood commercial establishments and services. There is also, however, increasing development activity in

outlying areas and along Waterbury's major transportation corridors. Residences are both scattered and concentrated in areas along Blush Hill, Gregg Hill, North Hill, Barnes Hill, Loomis Hill, Perry Hill, and Kneeland Flats. Meanwhile, businesses continue to seek locations along Route 100 toward Stowe and to a lesser degree along Route 2 toward Bolton.

Parcel Trends. Between 2001 and 2013, 137 new parcels were added to the grand list through the subdivision of land, an increase of 6.7%. (Table 11.2). Residential properties are by far the predominant category of listed uses in Waterbury. The number of residences on both less than and more than 6 acres of land has continued to increase over the past 12 years. This appears to be due in part to the continued conversion of Seasonal 1 and 2 dwellings to year-round use. The increase in the number of single-family dwellings on large lots (6 acres or more) increased predominantly from the subdivision of farm and forestland outside the village for residential use. The decline in the number of mobile homes is due from a combination of the replacement of mobile homes by new houses and the destruction of 11 mobile homes in Whalley Park as a result of flooding by Tropical Storm Irene. The increase in the number of commercial apartments may be attributed in part to the creation of affordable housing units in the Seminary Building in Waterbury Center. The number of commercial and industrial parcels and the proportion remains largely unchanged since 2001.

11-3. Existing Settlement Patterns - Village

Waterbury Village currently occupies approximately 1,200 acres, or 1.9 square miles, is an incorporated municipality, which has annexed land from the town over time. The Winooski River, steep slopes and Interstate 89 bound the village to the east, south and west. To the north, the village extends under the interstate overpass, along the Thatcher Brook and along Route 100 to Ben & Jerry's Ice Cream Factory and the golf course, the Country Club of Vermont, located off Guptil Road. All properties within the village are served by municipal water and sewer.

Many of Waterbury's historic, civic, institutional and employment resources are located within the village, including municipal offices, the elementary school, the post office, several churches, the village police station, a public library and museum, a fire station, public parks, the State Office Complex, Ben & Jerry's Ice Cream and Green Mountain Coffee Roasters. It is also home to just over 1,750 Waterbury residents living in 900 housing units.

Primarily located at the confluence of the Thatcher Brook and the Winooski River, early European settlers found the flat floodplain areas conducive to development yet major flood events throughout history have caused significant property damage. Today a large portion of the village that includes 109 structures is located with the 2013 FEMA NFIP special flood hazard area with a 1% chance of experiencing an annual flood (This area is more commonly referred to as the 100-year floodplain.).

The majority of the village's historic resources are also located in or near the floodplain. There are three distinct historic districts listed on the National Register of Historic Places within the village: Waterbury Village Historic District, Mill Village Historic District and Colbyville Historic District. Each contains an impressive collection of historically and architecturally distinctive structures. These areas are discussed further in the subsequent sections.

Historic Downtown. Primarily located at the intersection of Main Street (Route 2) and Stowe Street (former Route 100), Waterbury's historic downtown is characterized by several brick commercial blocks which date back to the late 1800s. The intersection is considered the traditional core of the village and town as a whole, with further retail, commercial and residential uses radiating outward along primary and secondary roads. It contains a high concentration of mixed commercial activity and

contributes significantly to the village's historic and architectural character. Historic structures house a mix of uses, and are built up to the sidewalk to create a clearly defined pedestrian streetscape.

The historic downtown is located within the Waterbury Village Historic District, a primarily linear district located on two major axes, Main Street (Route 2) and Stowe Street, and on several secondary streets including Winooski Street, Randall Street, and Union Street. In a recent communication from the US Department of the Interior which oversees the National Register of Historic Places "a review of the conditions on the ground demonstrates that the buildings further along [South] Main Street do not differ in character, age, integrity from those within the listed district. It appears that a more appropriate boundary would continue south on South Main Street to Healy Court."

Prior to the construction of Interstate 89, Waterbury Village was Waterbury's core business district. The interstate and the opening of the interchange (Exit 10) in 1967, drastically changed traffic patterns and contributed to the economic decline of Main Street and Stowe Street businesses. As traffic volumes increased, attention–and new businesses–shifted northward along Route 100 toward Stowe.

During the 1990s the interest in Waterbury's Village led to the creation of the nonprofit corporation, Revitalizing Waterbury, Inc., and a number of ongoing downtown revitalization efforts. One accomplishment of downtown revitalization to date was the restoration of the Stimson-Graves Building on Stowe Street in 1993. In 2000, Waterbury began looking at options for state downtown designation under the Vermont Downtown Program. The purpose of the Vermont Designated Downtown Program is to bring resources to preserve and revitalize historic downtowns and create strong communities. This is realized through technical and financial assistance for the promotion of businesses and building repair and restoration.

In 2006, Waterbury's downtown district was approved as a Designated Downtown and shortly thereafter the Village Trustees approved the creation of the Downtown Design Review (DDR) Overlay Zoning District which follows the same boundary.[1] The DDR District encompasses the properties along both sides of North and South Main Street from the train trestle to the northwest to almost Batchelder Street to the southeast, and into a portion of Pilgrim Industrial Park to the north. The Designated Downtown and the DDR does not include any properties currently within the State Office Complex.

The purpose of the DDR is "to protect and enhance architectural and historic resources within the district, to maintain and enhance property values, encourage a consistently high standard of design in new construction and renovations to support a pleasant, pedestrian-oriented village center, and strengthen the community's economic vitality and the downtown district's historic function as a center for commerce, industry, government, and housing." The DDR is made up of 2 sub districts: the Historic / Commercial Sub-district and the Mixed Use Sub-district. Under the current regulations residential uses are prohibited in the Mixed Use District.

In 2006, Revitalizing Waterbury (RW) purchased and rehabilitated the Victorian Italianate Central Vermont Railway Train Station. Located on Rusty Parker Park the historic train station underwent extensive renovations and today serves not only as an Amtrak Train Station but also the Green Mountain Coffee Roasters Café and Visitors' Center. RW has also been integral to the overall beautification of the downtown area, promoting downtown businesses, and planning for future economic development and infrastructure in the downtown area. One recent loss of an historic structure in the village was the removal of the Freight House/Station Lumber, an 1850s railroad warehousing and shipping depot, more recently used as

1 See Designated Downtown Map 5-3

a lumber yard. The property is under private ownership and the local permit processes required the applicant meet one of three criteria for the demolition approval.

Following the widespread flooding from Tropical Storm Irene in August 2011, the downtown business community suffered significantly. While many of the brick commercial blocks did not sustain direct flood damage a percentage of their patron base was and still is displaced. The State Office Complex sustained flood damage and as a result re-located over 1,300 employees to other offices around the state. That loss of day-time population continues to negatively impact local businesses.

Residential Neighborhoods. Waterbury Village includes a number of residential neighborhoods; these include historic Randall Street, Winooski Street, Union Street, Hill Street & High Street and Butler-Intervale-Prospect Streets. The Anderson Fields recreation area is located within the later neighborhood and the Thatcher Brook Primary School is located within the Stowe Street - High Street area of the village. The Hillcrest-Grandview-Elmwood neighborhood (locally known as Wissel Mountain) is one of the more contemporary neighborhoods built in the mid- to late-1900s. It is located behind the Thatcher Brook Primary School. These neighborhoods are primarily single-family homes with some two-family homes and accessory apartments. This may be attributed to the fact the underlying zoning for most of these neighborhoods do not allow for multi-family housing.

There are a number of historic residences lining Main Street, many of which have been converted to multi-family, office or other commercial uses. Upper story apartments above commercial storefronts and a group home are also located within the downtown area. Additional residential neighborhoods within the village are located within the Mill Village area and several residential subdivisions are located on or off of lower Blush Hill.

Other Commercial Hubs. Other commercial areas located in the village include:

- Waterbury Square, the shopping plaza at the corner of South Main Street and Park Row.
- The area along North Main Street northwest of the I-89 interchange.
- The area along South Main Street at the corner of Demeritt Place.
- The area at the end of Foundry Street and Bidwell Lane.

The first three have developed in a more auto-oriented fashion with single story buildings set back from the road and prominent parking areas. These areas provide a range of products and services to both the traveling public and neighborhood residents. Under the current zoning these areas allow for a variety of residential and commercial uses.

The latter area, Foundry Street and Bidwell Lane, is an historic commercial/industrial cluster and incorporated into the fabric of the downtown area, is located next to the New England Central (formerly Central Vermont) rail line. It is comprised of several buildings, most of which are currently occupied with a mix of commercial uses including retail and business offices. One exception is the currently unoccupied Stone Shed, a 1901 granite shed that according to the National Register of Historic Places is a 'valuable vestige of the granite cutting industry'. Based upon results from the VHB Pioneer, 2009 Waterbury Downtown Study, the Stone Shed "has excellent potential for re-use" with very limited potential for residential use. Study participants expressed interest in converting the building into a community theater space. This area is currently within the Industrial Zoning District and within the Mixed Use Sub-District of the Downtown Design Review where limited public and semi-public uses are allowed.

Industrial. Originally historical industrial uses were located close to, or even integrated within existing settled areas yet in more recent history industrial uses have been segregated into specific

zones. Over the past few decades a large area within the village on the other side of the railroad tracks south of Hill Street has become home to two industrial parks, Pilgrim Park and Grenier Industrial Park.

Pilgrim Park, currently comprised of four buildings, houses Green Mountain Coffee Roasters' large manufacturing facility and several other industrial and commercial entities. One of the largest undeveloped parcel (16.5 acres) within the village which is not is the floodplain is located within this industrial zoned area.

A design workshop was held in April, 2002, with professional planners, architects, business leaders, community leaders and land owners to develop potential development schemes for the undeveloped area. The conceptual scheme illustrated a high density, mixed-use development scenario for one of the key remaining parcels within the village. This area has been highlighted in a project of the Vermont Forum on Sprawl and the Vermont Business Roundtable to exemplify potential "smart growth" approaches to industrial lands in proximity to downtowns.

Similarly, based upon the analysis of the CVRPC Northwest Growth Study which the Town and Village of Waterbury conducted in 2006: "Waterbury has a somewhat of a dearth of developable commercial and residential sites within the village (in part due to floodplain issues) but a fair amount of viable land left in the Industrial zone. At some point, the town may want to consider switching some Industrial District land to a Downtown Mixed Use type of zone."

During the Downtown Designation process, these recommendations were realized in part. A portion of Pilgrim Industrial Park and other smaller industrially zoned parcels are located within the Mixed Use Sub-District of the Downtown Design Review Overlay District where some additional commercial uses are allowable. Yet, the majority of the undeveloped Pilgrim Park tract is not within the mixed used sub-district, but is solely within the Industrial Zoning District where residential uses are prohibited.

In 2010, a connector road from Pilgrim Park to the other industrial park, Grenier Industrial Park, was constructed as recommended in the VHB 2009 Waterbury Downtown Study. The Study "recognized the need to create a secondary access road from Main Street to Pilgrim Park" and that "with expansions at Green Mountain Coffee Roasters, the volume and intensity of truck traffic in Downtown Waterbury has increased …"

The other industrial park is Grenier Industrial Park where several commercial and industrial businesses are located. Future industrial expansion is fairly limited at this location due to existing development and geographic site constraints. Both of these areas are potentially served by the New England Central rail line.

State Office Complex. In addition to public buildings located along Main and Stowe Street, Waterbury Village is home to the Waterbury State Office Complex, which is located on the grounds formerly occupied entirely by the Waterbury State Hospital. Encompassing 47 acres, this historic complex incorporated a variety of government facilities, including the state mental hospital, a women's prison, the community college, the state emergency response center, laboratories, and offices for a number of state agencies and departments, including the Vermont Agency of Natural Resources. The complex served as Waterbury's primary employment center, and housed the largest concentration of workers (approximately 1,500) and parking, in the downtown.

Following the flood in August 2011, the complex sustained flood damage and workers were re-located to other offices outside of Waterbury. The majority of the campus is located within the

floodplain. To date some state functions have returned to the complex, but to a limited capacity. The state is preparing to revive the State Office Complex through an extensive redevelopment plan.

The plan proposes to demolish approximately 20 buildings, renovate and flood-proof the historic core building and build a new 86,000 square foot office building in the rear of the historic structure. While some of the original state departments will not return, the Agency of Human Services will be consolidated on the campus and approximate 70% of the previous work force will return by late 2015 or early 2016.

The State Office Complex is also in the process of divesting some of the campus buildings by subdivision. Currently, a day-care center and a housing non-profit are in the process of acquiring these newly-made available properties. The municipality is also in the process of investigating the option to purchase one of these properties on which to rebuild a new municipal complex. At least two other existing buildings on the campus currently do not have any occupancy or use plans.

Currently, the majority of the State Office Complex property is located within the Village Mixed Residential Zoning District and to assist in the revival of the State Office Complex an Interim Campus Overlay District was created to facilitate the divestment process and the construction of the new office building. While the underlying districts allows for some commercial uses, there is significant interest among residents to allow for a variety of commercial uses of the State Office Complex as an effective step to manage future commercial development (Waterbury Survey Results, dated February 24, 2013). Tropical Storm Irene and its impacts on the State Office Complex highlights the need to anticipate changes of use for the historic campus.

Parks, Recreation, Open Space and Farmland. Many recreation opportunities are available within the village along with a couple of formal parks. Rusty Parker Park is the village's historic green and serves the community as a popular gathering place, including weekly farmers markets in the summer months.

The park, which is bounded by the train station building to the north and South Main Street to the south, has a rectilinear design which displays the characteristics of a traditional New England town green with diagonal paths and central gazebo. In addition to the gazebo, the park boasts an amphitheater, a Veterans Memorial, and a patio and memorial clock constructed in recent years by the Rotary Club.

The lawn in front of the historic State Office Complex on South Main Street also has the characteristics of a formal park. Lined with mature trees around the perimeter, the open lawn is a valuable historical element of the old State Hospital building and on occasion it hosts community events. Currently, these parks are located within the Village Mixed Residential Zoning District.

In 2012, the Pomegranate Center (a community-building organization), in collaboration with Tully's (a subsidiary of Green Mountain Coffee Roasters), offered assistance to construct a new community park and engagement center within the village. Through a public engagement process, a site in Pilgrim Industrial Park was chosen to build an outdoor gathering space.

Dacscomb Rowe Recreation Fields and Anderson Fields are both within walking distance of downtown. Dac Rowe is located within the floodplain at the confluence of the Winooski River and Thatcher Brook and provides the community with baseball, softball, and soccer fields. The fields also serve floodplain functions, allowing the river access to its floodplain in flood events. Anderson Fields hosts tennis courts, a Little League field, and an outdoor swimming pool and is located behind the post office within the Bulter-Intervale neighborhood. Currently these are within the Village Residential Zoning District. The Ice Center of Washington West is also a popular recreation destination.

The facility offers competitive ice hockey, figure skating, and public skating. The 40-acre property is owned by the village and majority of the site is within the floodplain. This site also provides access to the increasingly popular Perry Hill mountain bike trails to the north. This site is currently zoned for industrial uses.

The 60+/- acre cornfield behind the State Office Complex and Randall Street, and next to the Winooski River serves multiple functions: agriculture, recreation, open space and floodplain. The Cross Vermont Trail (a multi-purpose recreation trail which crosses the width of Vermont) follows the edge of the field and connects Winooski Street to the complex. This field is currently zoned as Conservation. The floodplain functions of this area will be improved upon as part of the complex's redevelopment proposal. Historic fill at the south end of the field will be removed allowing for increased floodplain connectivity. An additional area used for agricultural-like activities is the land currently dedicated to community gardens behind the library.

A five-acre parcel at the top of Hill Street Extension and Armory Avenue is an additional parcel owned by the town. That includes the Old Armory building that is used for equipment storage, and overflow parking for Thatcher Brook Primary School.

Mill Village. Located within Waterbury Village, Mill Village is a historic residential and commercial neighborhood or hamlet at the north end of Stowe Street on the north side of the interstate overpass. This historic district is listed on the National Register of Historic Places. The interstate overpass presents a physical boundary between downtown and this neighborhood; the village's municipal boundary further contributes to this areas defined location. Historically a few manufacturing mills were operational along the banks of the Thatcher Brook in this area, yet today only one mill building remains. This serves as the neighborhood's one commercial property, both in practice and allowable under the zoning regulations.

Residential development in this area is a mix of historic homes, which line Stowe Street and Lincoln Street and more contemporary residential development on East Street and Clover Lane. One of the last remaining large undeveloped parcels in the village is located in this neighborhood at the foot of Perry Hill Road and was recently permitted for a 26-lot Planned Unit Development Subdivision. Sidewalks along Stowe Street provide pedestrian access to downtown. The neighborhood also hosts the local Park and Ride lot, located on Lincoln Street where commuters may catch the Link Express bus which runs between Burlington and Montpelier.

Colbyville. This historic settlement north of Mill Village, on Route 100, is primarily centered around the Crossroad and Laurel Lane Intersection. Colbyville was first settled in 1788 and has historically supported commercial and industrial activity. Two falls (the upper and the lower) in the Thatcher Brook provided power for several mills and manufacturing operations through the 1800's. Historical records suggest that the Colby mills were probably the first large mills in Waterbury. At the current site of the Mobil Station stood a schoolhouse. In the late forties, the Colby Mansion was the Colby Private Hospital for the elderly; it is now renovated and used an office building.

While a collection of historic buildings define this historic district, as listed on the State and National Register of Historic Places, in recent years the area has evolved into more auto-oriented development in part to serve the traveling public as they exit the interstate and head northward along Route 100. Current uses within this area include gas stations, two hotels (one of which is about to under go a major renovation and expansion), a 35,000 square foot grocery store, a microbrewery and the Ben & Jerry's Ice Cream Factory. A collection of retail and commercial uses are also located within this area. Most of Colbyville lies within the expanded village, and is served by municipal water and sewer.

Based upon results from the CVRPC Northwest Growth Study: The Town and Village of Waterbury, buildout results indicated that "somewhere between 70,000 and 400,000 square feet of commercial/industrial development could occur" in the Colbyville area. Residents have expressed concern about increased traffic congestion in this area, especially at the VT Route 100/Crossroad/Laurel Ln. intersection, and also cite the lack of pedestrian amenities. In 2006 a Bike and Pedestrian Master Plan was completed for the Colbyville area yet to date few recommendations have been implemented.

11-4. Existing Settlement Patterns - Town

The Town of Waterbury, like the village is an incorporated municipality and comprises 49.6 square miles, including the 1.9 square mile area of the Village of Waterbury . The majority of the town is located to the north and the west of the village. Waterbury Center is an unincorporated village within the town and many town residents reside in Waterbury Center. Limited parts of the town are served by the village water system but are not served by village wastewater that is only currently available within the limits of the Village of Waterbury.

Route 2. Along Route 2 northwest of the village is a mix of commercial and residential uses sandwiched between I-89 on one side and the Winooski River on the other. The entrance to the Mount Mansfield State Forest and Little River State Park is accessed off of Route 2 in this vicinity. Once open farmland, residential development in this area increased in the past four to five decades. Many homes in this area sustained significant flood damages following the 2011 flooding, and with the 2013 FEMA flood rate insurance rate maps now in effect, more properties are now within the regulated floodplain.

Limited commercial and industrial uses are also located along Route 2, as well as Waterbury's sewage treatment plant. The only other industrial zoned land outside the village is located here where there is some development potential. This area has a limited amount of service by municipal water. When asking residents where more commercial and industrial development should occur, Route 2 ranked highly. (2013 Survey)

Route 100. The Route 100 corridor is a 5.6-mile stretch along the state highway from Route 2 (Main Street) in Waterbury Village to the Stowe town line. Route 100 is a major feature of Waterbury as it is the primary access to the Stowe resort area and for many visitors it is their only experience of Waterbury. Many historically significant and architecturally distinctive structures are located along Route 100, particularly in Colbyville and Waterbury Center village. Several scenic views, including distant mountain peaks and broad expanses of open space, can be experienced while traveling along Route 100. The Shutesville Hill area in northern Waterbury has been identified as a significant wildlife crossing between habitat blocks to the east and west.

The Route 100 corridor in both Waterbury and Stowe has state and federal designation as the Green Mountain Byway. This designation recognizes the area's intrinsic values of scenic quality, and resources in the areas of culture, history, recreation, and wildlife.

Yet, Route 100 is being transformed from a rural, residential transportation route to a growing commercial strip. In 1996 Waterbury revised the zoning regulations for the Route 100 area to help promote better access management and protection of open space with commercial development. Yet, the CVRPC analysis indicates that the "current zoning may be reinforcing low density commercial sprawl." When asking residents where more commercial development should occur, Route 100 ranked as the lowest. (2013 Survey)

Several residential areas are accessed from various points along Route 100, and residents frequently find making left-hand turns

onto Route 100 to be difficult and frustrating. As traffic volumes on Route 100 increase, so too will the pressure and degree of hazard of these intersections.

Waterbury Center Village. Waterbury Center is an unincorporated village within the town and is primary defined at the area along Route 100 clustered around the Waterbury Center Community Church, which is listed on the National Register for Historic Places. Waterbury Center is also listed as an historic district. Located approximately three miles north of downtown, Waterbury Center is characterized by a concentration of mixed uses dominated by Cold Hollow Cider Mill, one of Vermont's major tourist attractions. Businesses are primary located on Route 100 and two medium-density residential neighborhoods (Sunset Drive and Lakeview Terrace) are located on cul-de-sacs and are primary composed of single family homes.

Adjacent to the Route 100 area of Waterbury Center, is the area that surrounds the triangular park or green; it is one of Waterbury's earliest settlements. Defined by the traditional triangular green, at the intersection of Guptil Road, Maple Street and Howard Avenue, the village area includes the Waterbury Grange, post office, Maple Street Fire Station, and the Hope Davey Park recreation fields. Residential development is clustered at higher densities directly around the triangular common and radiate out at lowering densities.

Up until recently a general store located on the green served this neighborhood, yet it was recently converted to an apartment. Nearby is the Green Mountain Seminary, listed on the National Register of Historic Places, which once served as one of the town's graded school. In 2002, the seminary building was redeveloped into 14 units of affordable housing and two market rate apartments by the Central Vermont Community Land Trust and Housing Vermont. The restored Seminary Building also houses the Seminary Arts Center, and includes a reconstructed town Little League field on the site.

This area has potential for further residential and commercial development and is served by the village water system. Limitations on development include the following: the area is not served by the village wastewater system, and there are no pedestrian accommodations such as sidewalks or crosswalks. Obtaining village center designation through the State of Vermont would assist in accomplishing appropriate and dense residential and commercial development in Waterbury Center. This designation could assist in obtaining funding for needed infrastructure that would support future development in the village.

Based upon 2013 survey results residents would prefer to encourage more commercial development in this area versus along Route 100. Under the current zoning the area around the triangular green is split between three different zoning districts, which allow some minimal commercial uses. The zoning for this area should continue to be examined.

Rural Land and Residential Development. Historically, the outlying areas of town were farm and forest land. These areas also host a great percentage of natural resources including wildlife habitat and wildlife corridors, streams and wetlands. Today much of this area is characterized by moderate to low density residential development along town roads, interspersed by agricultural land, open fields and woodlands.

The working landscape is a very important aspect of the rural areas of Waterbury. This area contains nearly all of the town's active farmland, including two active dairy farms, sugaring operations, fruit orchards, Christmas tree plantations, and vegetable and flower farms. In addition to contributing to the economic prosperity of the town and village, these areas also provide scenic and cultural quality to the environment. There are actively managed woodlots and forested parcels that provide forest products such as saw logs, pulpwood, and firewood. Many parcels are in the state's Current Use Taxation program that

requires active management for agricultural and forestry uses in exchange for a reduced value for property tax purposes.

Based upon past trends and anecdotal information, the subdivision of open land for large lot (2+ acre) residential development is, and will continue to be, increasingly common. The majority of new residential development is accessed from existing town highways or off private dead end roads. The Central Vermont Regional Planning Commission (CVRPC) analysis indicated that this outlying area holds the greatest development potential yet when surveyed, Waterbury residents had the least support for encouraging more residential development in areas outside village areas (2013 Survey).

Upland Forests and Ridgelines. By the end of the 19th century much of Waterbury had been cleared for timber and farms, yet by the end of the 20th century, much has been reforested. Currently, Approximately 79% of the town is currently forested land and only about 10% remains open. The majority of the forests are located at or above 1,200 feet in elevation as the land slopes upward toward the Worcester Range to the east or within the state's Mount Mansfield State Forest to the west. Waterbury's forests support a variety of ecological functions and recreational activities. The undeveloped forested mountainsides and ridgelines also contribute to the natural beauty of Waterbury.

Much of this land is currently within the Conservation Zoning District (minimum lot size, 10 acres) or Low Density Zoning District (minimum lot size 5 acres). These areas are desirable locations for homeowners as they provide house sites with stunning views and a rural atmosphere. In 2006, the town adopted the Ridgeline, Hillside, Steep Slope Overlay Zoning District which applies to land above 1,200 feet in elevation. The Overlay District requires applicants to present habitat studies, erosion control plans and visual analysis's to help protect natural resources for the areas that are above 1,500 feet in elevation.

As stated in the CVRPC study "a high percentage of existing and potential growth lies in the town's lowest density zones" and in recent years increased development such as land subdivisions and the construction of single family homes has contributed to forest fragmentation. The study goes on to state "very low density growth in these areas is likely to continue, absent any policy change. The town's considerable developable acreage remote from public roads will no doubt receive some of this growth as the cost of private road construction becomes less of an obstacle to an increasingly affluent population."

Conservation and Recreation Land. A large portion of land within Waterbury is conserved by the State of Vermont and is open to the public for recreation. Additional conserved land is within private ownership and the town holds a small portion of conserved land in park and open space use.

The State of Vermont owns and manages 13,024 acres of forestland in Waterbury, which amounts to about 43% of Waterbury's total acreage. The portion of the Mount Mansfield State Forest that is in Waterbury totals about 12,435 acres. The forest surrounds Waterbury's largest body of water, the Waterbury Reservoir. Two state parks are located on the shores of the reservoir within Mount Mansfield State Forest: Little River State Park and Waterbury Center State Park. Little River State Park, accessed from Route 2 via Little River Road, hosts a camp ground and a network of multi-purpose recreations trails. Waterbury Center State Park is accessed off Route 100 in Waterbury Center and serves primarily as a day-use park with swimming and boating. A boat launch at the end of Blush Hill provides an additional public access to the reservoir.

The Waterbury portion of Putnam State Forest is in two parcels and totals 589 acres (reference Maps 2-1 and 4-1). The larger block is located adjacent to the Ice Center and includes an increasingly popular mountain bike trail network. The town and representatives from area bike clubs are in the process of

a planning study to explore connecting this trail system with another large trail system to the north in Little River State Park and the mountain bike ride centers in Stowe.

The Department of Forests, Parks and Recreation has developed a forest management plan to manage its resources in Waterbury. The Department divides the forest into blocks that follow major geographic boundaries, defined by watershed areas and drainage divides, and a management plan has been written for each. Mount Mansfield State Forest is divided into four blocks: Blush Hill, Cotton Brook, Ricker, and Woodward Hill. Putnam State Forest is divided into the Burt Hollow and Perry Hill blocks. The plan for each block includes an inventory, goals, and implementation strategies. There are generally four aspects to state forestland management that the Department evaluates on an ongoing basis, including: promotion of recreation, protection of wildlife habitat, sound forest management and protection of natural and cultural features. The state makes a payment in lieu of taxes to the town for its holdings.

The town and village own three large parcels that are located outside the Village of Waterbury and are held for conservation, water supply protection, and recreation purposes. They include the Waterworks property just over the town line into Stowe, the Sweet Rd. well field, and Hope Davy Park.

Private conserved land is located in the northern area of Waterbury near the town line bordering with Stowe. Typically the conservation easements are held by either the Vermont Land Trust or the Stowe Land Trust. An additional 71 parcels with a total value of $22,061,400 are enrolled in the state's Current Use Program.

11-5. Over the Line

The impacts of development are not confined by municipal boundaries. Waterbury should be aware of how its land use and development policies may affect areas in neighboring communities over town and village lines. Conversely, Waterbury should also pay close attention to the land use and development policies of adjacent communities to ensure that Waterbury is not subjected to unforeseen, adverse impacts from incompatible policies. Joint meetings with representatives from the adjacent towns may be beneficial to coordinate planning efforts, public infrastructure projects, such as transportation and utilities, and conservation projects.

Bolton. Just over the Waterbury line, Bolton, which is bordered by the Winooski River to the south and the Mount Mansfield State Forest to the north, is zoned Agricultural/Rural I and Rural II. The purpose of these districts is to maintain Bolton's rural character by providing for agricultural activities and low density residential development. Mobile home parks and limited commercial development, including garden centers or nurseries, day care centers, bed and breakfasts, convenience stores, and commercial golf courses, are allowed along Route 2. Bolton Valley's water supply source protection area lies partially in Waterbury, within the Mount Mansfield State Forest. The Bolton Town Plan also recommends an agricultural overlay district that has yet to be implemented in its zoning.

Stowe. As Route 100 leaves Waterbury's Route 100 District, it crosses into Stowe's RR2 District (Rural Residential-2 acres). The purpose of Stowe's RR2 District is to allow higher density residential development closer to available municipal services while maintaining the quality of the neighborhoods. In addition to a variety of residential uses, it allows for municipal and public facilities, commercial kennels or veterinary hospitals, public and private recreation facilities, resort and ski PUDs, gravel pits, and commercial research library and/or computer software service facilities. The zoning regulations for Route 100 in Waterbury should be reviewed and coordinated to the extent possible with the Stowe regulations to provide a reasonable level of

consistency for development along Route 100 in the Shutesville Hill area near the town line.

Waterbury and Stowe are experiencing similar patterns of low-density residential development along other roads that cross the town line. Across from northeast section of Waterbury, where the village's water supply is located in Stowe, the area is comprised of a 5-acre residential district and public lands. The Stowe Town Plan is currently being updated, which may result in zoning changes in these areas.

Duxbury. Duxbury lies across the Winooski River from Waterbury, connected by Route 100/Route 2 and the Winooski River bridge. Most of Duxbury's border to Waterbury, on the western side of the Winooski River, is zoned Rural Agricultural District II. Currently, this area is primarily residential, although a large proportion is either in agriculture or undeveloped, and it provides a very scenic view from Waterbury's side of the Winooski. The towns share school facilities, including the Crossett Brook Middle School located in Duxbury, and similar interests in protecting the Winooski River corridor and sensitive upland areas of the Worcester Range. Duxbury has zoned the former State Farm parcel for high-density, mixed-use development, which could affect development and traffic patterns on Routes 100 and 2 leading into Waterbury.

Moretown. The area across the Winooski, south from the Smith Store Bridge, is one of two Moretown commercial districts. This district, if fully developed, could result in additional traffic along Routes 2 and 100. Development in this area should also be sensitive to the fact that it serves as a gateway into downtown Waterbury.

Middlesex. Middlesex meets Waterbury's eastern boundary high in the Worcester Mountain Range. This area is entirely forested; however, residential development and logging activity appears to be increasing on both sides of the range. The Middlesex side of the range is zoned for conservation, which allows for limited, low-density residential (10 acres/dwelling) development.

11-6. Land Use Regulations and Permitting Process

Zoning regulations for the town and village were first enacted in Waterbury at town/village meeting in March 1980, and were combined into one set of bylaws in 1994. They have since been updated on a regular basis, with the most recent changes and additions:

- 1993 – Planned Unit Development Regulations
- 1996 - Revised Route 100 Zoning District Regulations
- 2000 - Telecommunications Facility Regulations
- 2006 – Ridgeline, Hillside, Steep Slope Regulations and Overlay District
- 2006 - Downtown Design Review Regulations and Overlay District
- March 2011 - Updated Flood Hazard Regulations
- May 2012 - Interim Flood Hazard Regulations and Overlay District (expiration December 2013) – flood hazard regulations are a requirement of the National Flood Insurance Program.
- February 2013 - Interim Campus Regulations and Overlay District (expiration February 2015)
- April 2013 - Subdivision Regulations (and Waiver Provision) – at the time of adoption the town passed an accompanying ordinance to assert the determination to remain a one-acre town for the purposes of Act 250 Review for commercial and industrial development.

The zoning regulations include nine town zoning districts with 2 overlay districts and eleven village zoning districts with 4 overlay districts (Table 11.5?).

Village zoning districts reflect the pattern of more concentrated, mixed-use development that exists within the village. Town

Figure 30. **Existing Zoning Districts**

Zoning District	Acreage	% Total
Village		
Downtown Commercial	23	0.07%
Village Commercial	69	0.22%
Village Neighborhood Commercial	7	0.02%
Village Mixed Residential	115	0.36%
Village Medium Residential	47	0.15%
Village Residential	337	1.05%
Mill	0.6	0.00%
Industrial	123	0.38%
Route 100	29	0.09%
Recreation	358	1.12%
Conservation	86	0.27%
Town		
Town Commercial	111	0.35%
Town Neighborhood Commercial	67	0.21%
Town Mixed Residential	280	0.87%
Medium Density Residential	3120	9.73%
Low Density Residential	4425	13.8%
Route 100	1041	3.25%
Industrial	137	0.43%
Conservation	8376	26.12%
State Forest	13312	41.52%

Source: Waterbury Zoning Coverage, CVRPC 2001

zoning districts, on the other hand, generally provide for much lower densities of development, with minimum lot sizes that range from one to 10 acres. Single family dwellings are a permitted use in all but the Industrial zoning district. The Route 100 district currently extends along both sides of Route 100 from Waterbury Village to the Stowe town line, interrupted only by the Town Commercial district, located in Waterbury Center. A variety of commercial uses, as well as single and multi-family dwellings, are allowed in this district.

A full-time Community Planner and a part-time Zoning Administrator serve the village and town in planning and permitting functions. In 2011, the municipality created a Development Review Board to replace the review functions once split between the Planning Commission and the Zoning Boards of Adjustment. The zoning regulations include provisions for several types of reviews, including site plan and conditional use reviews by the Development Review Board.

11-7. Desired Patterns of Development

One of the overarching goals of Vermont's Municipal and Regional Planning and Development law is "to plan development so as to maintain the historic settlement pattern of compact village and urban centers separated by rural countryside." [VSA24 §4302(c)(1)]. State policy developed by both the Agency of Natural Resources and the Agency of Commerce and Community Development encourages future growth within existing or new "growth centers". A "growth center" as defined by the state, is designed for and characterized by:

- A mixture of uses.
- A density that is higher than that found in other parts of the community.
- A circulation system that is conducive to pedestrian and other non-vehicular travel and that supports public transit.

- A design that includes public spaces which promote social interaction.
- A distinct organization around central places or focal points.
- A pattern and scale of development that reflects traditional patterns of compact villages and urban areas separated by open countryside and appropriate to the growth center's purpose."

The state has identified four types of growth centers: downtowns and the residential neighborhoods that serve them, traditional town centers, new or emerging growth centers, and existing and proposed industrial parks.

In November, 2000 the Waterbury Planning Commission completed a community assessment tool developed by the Vermont Forum on Sprawl (VFOS) called the Vermont Smart Growth Scorecard. This assessment evaluates the impact of sprawl within communities. As defined by the VFOS, sprawl is characterized by low density development outside compact urban and village centers, along highways and in rural countryside.

Results of the Smart Growth Scorecard demonstrated that the assets of Waterbury Village, with a mix of uses (commercial, residential, industrial and institutional) contribute to the town's "smart growth" development patterns. However, the town's current growth pattern, which is dominated by low density, scattered development, suggests that sprawl is becoming a problem in Waterbury, particularly along the Route 100 corridor.

In 2013 this planning assessment tool was updated by the Vermont Natural Resources Council. The Resilient Communities Scorecard can be used to help communities address topic such as scattered development and energy usage.

The Vermont Natural Resources Council website describes Smart Growth as "a pattern of land development that uses land efficiently, reinforces community vitality and protects natural resources. Smart Growth is about promoting development that is good for the economy, community and the environment. Key benefits of smart growth include the creation of diverse housing options; protection of farm and forest land; diverse transportation options and less dependence on the automobile; greater social interaction with neighbors; lower cost for public services resulting in reduced taxes; and a higher quality of life."

In 2009, in partnership with Revitalizing Waterbury and the Village and Town of Waterbury, VanasseHangenBrustlin Consultants prepared the 2009 Waterbury Downtown Study. The Study involved two public workshops and culminated in a final report which presented information on the following topics: Transportation Enhancements (for the Demeritt Place connector road), Adaptive Reuse Evaluation (for the Stone Shed), Tax Increment Financing District Assessment and a Downtown Master Plan. The most relevant recommendations from this study which influences land use include:

- Zoning strategies to prohibit or seriously limit non-retail uses on the ground floor within the core retail district of Stowe Street and Main Street.
- Continued work to develop recreation paths and connections including river access, especially on the State Office Complex property and extending to and connecting areas outside the village to the village core.

In the fall and winter of 2011, following the devastating impacts of Tropical Storm Irene in August 2011 FEMA helped coordinate an extensive public input process under the Long-term Community Recovery (LTCR) program to identify projects and initiatives to promote the rebuilding and revitalization of the community. The need for funding an Assistant Municipal Planner to increase the capacity of the municipality's Planning Department was identified as one of the LTCR projects.

In early 2013 the Planning Commission solicited assistance from the consulting firm, Place Sense, in preparing a community

survey to gather input on the municipal plan update process. The survey asked a variety of questions regarding development, natural resources and services. What follows is an overview of survey results relative to desires patterns of development in Waterbury.

- Residential. The majority of respondents supported the development of high-density housing at the State Office Complex property as an effective step to manage future residential development. Respondents also supported allowing more multifamily family housing in a larger portion of the village.
- Commercial. The priorities that were identified for the most effective steps Waterbury could take to manage future commercial development are to allow a variety of commercial uses of the State Office Complex property, and attract new small businesses to Waterbury. In order to encourage more commercial development, the majority of respondents support promoting this type of development in Waterbury Village and along U.S. Route 2 west of the village.
- Industrial. The priority identified for managing future industrial development is to accommodate growth in existing industrial areas. The majority of respondents support encouraging more industrial development along Route 2 west of the village.
- Natural and Historic Resources. Respondents identified the following three most important resources to protect: wildlife travel corridors, historic buildings and scenic views. While floodplains did not rank in the top three, the majority of respondents believe that development in the floodplain should be regulated more strictly.

11-8. Future Land Use Plan

The over-arching goal of the Land Use Plan is to guide growth and development by reinforcing Waterbury's traditional pattern of concentrated settlement surrounded by rural countryside. This can be achieved by directing growth into areas most appropriate for development. The objective is not to prevent growth but rather to encourage "infill" development within currently developed areas and to support additional development in areas identified as "Growth Centers." This will allow the outlying areas to retain their general rural quality and functions while accommodating an appropriate quantity, quality and lower density of residential development. The overall approach of the Land Use Plan is to concentrate the higher density, intense uses – commercial, industrial, and high density residential - in two growth centers.

Land Use Areas. Five land use areas are identified on the Land Use Maps (see Maps 5-2A, 5-2B). Growth and development in the future can be healthy for our community as long as it is appropriate for the given land use area. Future development should be limited to densities and uses that are in keeping with the identity of these areas and should be of a scale that is consistent with community goals. The land use areas as shown on the Land Use Maps are described below.

Mixed Use Commercial/Industrial Growth Centers. The current land uses in the mixed-use area reflect the fact that Waterbury is a regional employment center with a wide variety of uses ranging from industrial, commercial, retail and residential uses. The Mixed Use Growth Centers include portions of Waterbury Village, Waterbury Center and a section of Route 2. In the Mixed Use Growth Centers new development should be compatible with existing uses, adhere to smart growth planning principles and respect the integrity of historic structures. Sub areas within the growth centers include:

- Commercial and Industrial. Allowable uses are more flexible, including limited residential, and new proposals are reviewed based upon performance/impact standards rather than strict definitions. Large scale development contributes to the implementation of pedestrian facilities or other community facilities.

- Commercial and Residential. The true mixed-use zone allows for a variety of uses to accommodate for the changing ways entrepreneurs and craftspeople are managing small business.

The recommended strategies for the Growth Centers are included in the Goals, Objectives, and Actions at the end of this chapter.

Village Residential. These areas are located within Waterbury Village and Waterbury Center. They are characterized as almost exclusively residential areas with a combination of one-, two, and multi-family dwellings in Waterbury Village, and primarily one-family dwellings in Waterbury Center. In Waterbury Village lot sizes are typically small, generally ranging from one-quarter to one acre in size, while in Waterbury Center lots range from one-quarter to five acre and larger. These areas are supported by public sewer in Waterbury Village and on-site systems in Waterbury Center.

These Village Residential Areas are in the Growth Centers Overlays and higher density and in-fill residential development is desirable. Recommended strategy:

- Consider amending the Zoning Regulations to allow multi-family housing units in this entire area and greater density for single and duplex units.

Route 100 Corridor. The land uses in the Route 100 Corridor are currently a mix of scattered commercial and residential uses punctuated by Waterbury Center Village. Future land uses and the associated development should be clustered to preserve and enhance views and vistas, protect open space, and encourage land-based and agricultural businesses. Recommended strategies:

- Review and amend the current zoning regulations to encourage the appropriate clustering of development and the preservation of open space in conjunction with the development.
- Work with landowners and citizen groups to voluntarily conserve scenic and sensitive natural areas along Route 100.
- Work closely with the Vermont Agency of Transportation to limit and combine access points on Route 100 for proposed and existing development.
- Create a "master plan" of the Route 100 area with landowner involvement that would include an inventory of the existing natural and scenic lands, designation of expanded and proposed development nodes, and preferred development scenarios for growth nodes.

Rural Residential/Agriculture. The current land uses within the area are predominantly scattered low density residential development, with some viable agricultural uses. Future land uses should protect natural resources, preserve and promote land based agricultural and horticultural businesses, and encourage cluster and conservation planning principles for new residential development. Recommended strategies:

- Provide incentives and education to promote site-sensitive lot configurations including clustering through planned unit developments.
- Identify important agricultural/forestry/natural resource lands through the LESA/FLESA program or creation of a town open space plan, to help set priorities for non-regulatory action such as promoting land use taxation where appropriate, active management of the working landscape for forestry and agriculture, and land conservation through the voluntary purchase or donation of development rights and conservation easements.
- Consider instituting a town policy limiting curb cuts on town roads and encouraging curb cuts that serve multiple lots.

Agricultural/Forestry/Conservation. The current character of this area is upland forests and ridgelines, conservation and recreation land, and some agricultural lands at the moderate to lower elevations. While some residential development is located within this area, the majority of the land is in large private parcels with

Improve identification and management of growth centers; thoroughly examine development and zoning regulations to ensure that they are consistent with community needs and updated standards.

significant areas of forest land in state ownership. Future land uses of private land should promote land conservation, sound forest and agricultural management, and appropriate recreation activities and limited residential development. Recommended strategies:

- Class 4 roads serving these areas should either be continued as Class 4 or downgraded to legal trails where feasible, and should generally not be upgraded to Class 3 standards.
- Residential and all other development should be clustered on the most suitable sites that minimize impact to the values of the area listed above.
- Appropriate uses such as forestry, agriculture, hunting, other passive recreation activities, and wildlife habitat conservation should be encouraged through incentive programs, land conservation as part of planned unit developments, purchase of development rights and conservation easements, and education.
- Utilize zoning and subdivision regulations to continue limiting development on slopes exceeding 25%, on lands above 1500 (plus or minus) feet in elevation, and all prominent ridgelines and hilltops.
- Reduce the impact of development in upland areas and steep slopes by developing siting standards and permissible uses for ridgeline areas and hillsides.
- Explore conservation and regulatory techniques, such as the transfer of development rights (TDR), and work with conservation entities, such as land trusts, in order to keep important lands open while providing the land owner with fair and equitable compensation.

11-9. Goals, Objectives and Actions

Also see recommended strategies listed in text under Future Land Use Plan.

goals

General

1. Guide future growth and development by reinforcing Waterbury's traditional pattern of concentrated settlements surrounded by rural countryside.

Growth Centers

2. Examine and revise the boundaries of the currently mapped Growth Centers to determine areas for new higher-density residential, commercial, and industrial development, including infill.

3. Ensure that new development and re-development is compatible with existing uses, adheres to smart growth planning principles, respects the integrity of historic structures, and enhances existing development.

Route 100 Corridor

4. In the Route 100 corridor, future land uses should accommodate clusters of development while preserving and enhancing views and vistas, protecting open space, and encouraging land-based and agricultural and horticultural businesses.

Agricultural and Rural Residential Areas

5. In the Agricultural and Rural Residential area, uses and any associated development should protect natural resources, preserve and promote land based and agricultural/horticultural/forestry businesses and uses, and encourage cluster and conservation planning principles for new residential development.

Conservation and Forestry Areas

6. The conservation and forestry area should primarily be devoted to forestry, agricultural, passive recreation, and other land conserving uses. Most of this area should remain undeveloped, or developed for compatible residential use.

objectives

General

1. Ensure that new development is compatible with and does have an undue adverse impact on Waterbury's public services and infrastructure, transportation safety and mobility, and natural and scenic resources.

2. Ensure that planning and permitting processes are applied fairly, consistently and in a timely manner.

3. Ensure that the Zoning and Subdivision Regulations promote the goals and all other aspects of this plan.

Growth Centers

4. Promote a variety of mixed uses and higher density development.

5. Retain and develop civic buildings and uses within the Growth Centers.

6. Maintain and develop a public water and sewer system consistent with the goals, objectives, and actions identified in Chapter 9.

7. Ensure that financial incentives are available for development within the Growth Centers.

8. Encourage and facilitate multi-modal transportation in the Growth Centers, including the provision and maintenance of adequate pedestrian and bike facilities.

9. Explore and encourage the use of shared and innovative on-site septic systems in the area of Waterbury Center as a way to facilitate higher density is encouraged.

10. Maintain and enhance all existing Historic Districts.

Route 100 Corridor

11. Pursue access management strategies for reducing turning movements along Route 100, improving overall circulation patterns, and reducing traffic congestion.

12. Pursue funding for improvements to Route 100 in Waterbury Center, in order to improve vehicular and pedestrian safety and mobility and to enhance commerce and tourism.

13. Evaluate whether development regulations in the Route 100 District are addressing the goals of the Plan and amend as necessary.

Agricultural and Rural Residential Areas

14. Cluster development to the extent possible to minimize the impact on significant natural resources and scenic lands.

15. Curb-cuts and strip development along town roads will be effectively controlled by encouraging single curb cuts serving multiple residences wherever possible.

16. The overall density of new development will be limited in order not to overburden the capacity of the existing road network or place undue burden on the town's ability to provide road maintenance and other public services.

17. The regulatory framework should be conducive to thriving yet compatible home occupations in this area.

Conservation and Forestry Areas

18. Development in areas with prominent landscape features such as ridgelines, hilltops, and steep slopes should be minimally visible as viewed from public roads.

actions

General

1. Review and amend as necessary the zoning and subdivision regulations to implement the goals and objectives of this plan.
2. Identify areas that are suitable for public uses, including public buildings, park and recreation areas, green paths, streets, and other facilities.
3. Develop administrative and board procedures that ensure that development review and all other zoning and planning processes are transparent and open to the public.
4. Investigate and consider developing an Official Map.
5. Develop and adopt official Rules of Procedure for the Planning Commission and Development Review Board.
6. Review and update the Special Flood Hazard Area regulations utilizing the most recent data and consider the impacts of climate change in making land use decisions.

Growth Centers

7. Expand the Waterbury Village Historic District to include additional significant contributing structures.
8. Enroll Waterbury Center in the State of Vermont's Designated Village Center Program in order to access planning and financial incentives.
9. Consider requiring large commercial or industrial development to contribute to an infrastructure fund or require developers to build pedestrian (or other) community facilities and amenities.