TOWN AND VILLAGE OF WATERBURY

MUNICIPAL PLAN

October/November, 2008

The Select Board for the Town of Waterbury approved this Municipal Plan on October 29, 2008, and the Trustees for the Village of Waterbury approved this Plan on November 3, 2008. This 2008 Municipal Plan is the same as the 2003 Municipal Plan.

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PREFACE

One of the Planning Commission's central (and statutory) responsibilities is to develop a municipal plan. The Plan addresses the critical questions facing the Town and Village: How should we make use of our land and shared resources? What do we mean when we speak of economic development and what kinds of development are appropriate? What kinds of settlement patterns do we prefer? The Plan emerges through an open process of citizen outreach and consultation with the many organizations – governmental, business, volunteer, and others – that serve our community. It gives voice to the aspirations of our community, presents a vision for our long-term future, and offers a strategy for making that vision real. But, in the end, the value of that vision derives from the manner in which it is used to inform decision-making in the town – by businesses, individuals, and governing bodies.

The Waterbury Municipal Plan touches on the many diverse aspects of the Waterbury community, from history, demography, and economy to housing, transportation, and resources. It provides a conceptual framework for planning, and a full array of factual information and analysis to provide background and support for the goals and action steps the Plan lays out. In evaluating whether or not development projects conform with the Municipal Plan it is important to focus on the goals, objectives, and actions rather than isolated statements in the background text.

Even though the Plan is typically updated, revised, and re-approved by our legislative bodies every five years, its planning horizon is much longer – 20 years at least – and its compass much broader. The Plan is not, however, a crystal ball foretelling the future, but instead something more of a chart that both guides us and changes with us, helps us shape the future and preserve our past, and gives fuller expression of our shared hopes.

The involvement of the community has been critical to the development of this plan. Through public forums and workshops, the 2001 Community Survey, the 2002 Community Fair, and informal meetings among the Planning Commissioners and various community organizations, an integrated set of planning priorities was identified. They are described in detail in the Goals, Objectives, and Actions in the various chapters of the Plan, but can be broadly summarized in the following four points:

- Sustaining and improving the quality of community life in Waterbury is critical to the future of the community. The provision and improvement of various municipal services and facilities are crucial to this goal. Among these services and facilities are the sewer and water systems, transportation systems, public safety services and facilities, schools, the public library, and parks and recreation programs and facilities. Various community organizations provide many vital programs and facilities as well, such as the senior center, the summer concert series, and other cultural programs and festivities. The need for additional community facilities, such as a community center with meeting space and programs, especially for teens, is great.
- Economic health through a diversity of well-paid employment opportunities and successful local businesses of all sizes is also important to the future of the Waterbury community. Waterbury continues to be a thriving regional employment center with the total number of jobs equal to approximately 75% of the total Town and Village population. Continued downtown revitalization is crucial to retaining the large numbers of employers and their

employees in the core area of the Village. It is very important to provide adequate financial and organizational support for the efforts to promote downtown revitalization. Such efforts include seeking Downtown Designation through the State, active use of revolving loan funds, rehabilitation of our historic buildings that provide important commercial and residential space, and promoting new "in-fill" development.

- A diversity of housing options, including affordable housing, is essential to making sure people of all income levels can live and prosper in Waterbury. We are fortunate to have many types of housing, although affordability and availability are two major concerns. As property values and taxes increase, it will be very important to maintain our existing housing stock, and to provide opportunities for additional housing, especially for people with limited incomes.
- The conservation and preservation of valuable open space, recreational lands, and rural areas in Waterbury is highly valued by the community. We are blessed with many large tracts of public and privately owned open space: the State Forests, municipal lands, productive farms and forested lands, and scenic areas and wildlife habitat, among others. As the community pursues strategies to conserve some key areas, development of some of these lands may be inevitable; nevertheless, the development should be located and designed in ways that minimize the negative impacts on the environmental, scenic, and economic value of these open space resources.

The quality and value of this Municipal Plan will be measured by how well the visions and actions contained in the Plan are implemented during the coming years. Many aspects of its implementation will depend on successful public/private partnerships and cooperative efforts involving many members of the community. We need to build on our successes and move forward with enthusiasm and creativity to attain the community's goals laid out in the Plan.

CHAPTER 1. INTRODUCTION

Located in the northwest corner of Washington County, Waterbury enjoys a desirable physical location as well as great scenic beauty. Interstate 89 passes through Waterbury, providing easy access to Burlington and Montpelier. Route 100 leads north to Stowe and south to the Mad River Valley. The Winooski River Valley, the Green Mountains, and surrounding hills offer a spectacular year-round setting.

Waterbury wants to attract new businesses, industries, and residents to the community, at a rate that can be 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 will continue to promote and support growth, in appropriate locations, which is nonpolluting and in harmony with our historic and scenic character.

1.1 About This Document

The *2003 Waterbury Municipal Plan* represents both the Town and the Village of Waterbury. Although they are separate municipalities, the two are socially, economically, and politically intertwined. Village residents are also town residents, but not all town residents are village residents. Information for Waterbury Village is presented here separately where appropriate and available. Throughout this document, references made to "Waterbury" include both the town and village; references to the "village" refer to only the incorporated area of Waterbury Village.

If the town and village should merge while this plan is in effect, the plan's intent and scope will remain unchanged: the village will continue to be identified as a distinct component of the town, which merits more focused attention.

The goals, objectives, actions, and other implementation strategies expressed in this plan are based upon an inventory and analysis of available information, and input received from Waterbury residents and local officials. **"Goal statements"** describe in general terms the desired condition or outcome Waterbury wants to achieve in the future. They set direction. **"Objective statements"** are intended to provide steps, or benchmarks, toward achieving a particular goal. They are intended to help track or measure relative success. **"Action statements"** are a combination of recommendations, policy statements, and specific strategies to guide Waterbury residents, local officials, developers, and others toward achieving the goals, values, and vision that are set forth in this plan.

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. It helps lay the ground rules for future growth and development. Planning can save money by recommending more efficient use of land, infrastructure, and community facilities and services. Planning 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. Planning can protect property values. Incompatible uses can be avoided and the quality of life can be greatly enhanced. The environment can be protected and important 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. Change is inevitable – it is the purpose of the plan to harness forces of change and channel them in a direction that favors Waterbury as a place to live, work, and play.

The 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

The Waterbury Planning Commission is the local body responsible for preparing a plan for the municipality. This plan is an update of the *1996 Town and Village of Waterbury Municipal Plan.* Technical assistance was provided by the Waterbury Community Planner, the consulting firm of Burnt Rock, Inc., and the University of Vermont's Center for Rural Studies.

It is most important that the plan reflect the goals of Waterbury residents. For this reason, input has been sought through planning commission work sessions and contacts, a public survey, public forums, and more formal public hearings that precede plan adoption. It is the intent of the Waterbury Planning Commission to provide ongoing opportunities for residents to actively shape their community's future.

2001 Community Survey

The Planning Commission, with the assistance of UVM's Center for Rural Studies, mailed out in 2001 a three-page questionnaire to a random sample of about 24% of Waterbury's registered voters. 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 2001 survey incorporated questions from a previous (1990) public survey as well as new questions provided by the planning commission. Survey data were gleaned from returns that reflected a 56% response rate. Relevant survey results are highlighted in the plan. More detailed descriptions of survey methodology and findings are presented in the Center's *Waterbury Planning Commission 2001 Community Survey: Frequencies and Report.*

2001 Survey Highlights:

- 83% of respondents agreed that development should be subject to some form of local regulation.
- 79% agreed that Waterbury should direct more resources to downtown revitalization.
- 68% of respondents (81% Village residents, 62% town residents) supported the merger of the Town and Village of Waterbury.
- 59% identified natural resource protection as an important community objective.

Town Forums

As part of the plan update, the Waterbury Planning Commission hosted an initial public workshop, held on June 7, 2000, to discuss the update process and help define a vision for the community. The input received was used in the development of the community survey and updated plan.

A very successful "Waterbury Community Fair," sponsored by the Waterbury Planning Commission, Selectboard, and Trustees, was held on March 3, 2002 at the Thatcher Brook Elementary School. Over thirty local organizations participated, including groups representing Waterbury's natural, historic, cultural and recreation resources; housing, transportation and economic development interests; education and local government. Each group was provided with an information table and room for displays. The Planning Commission used the opportunity to present an initial draft of proposed goals and objectives to include in the updated municipal plan. More than 400 area residents attended, and were given opportunities to share their ideas about Waterbury's future through a "Wishing Wall" display and a more formal feedback form. A total of fifty-three forms were received – some representative comments are presented below.

What is your Vision for Waterbury's Future?

- A hometown to be proud of.
- Attractive, pedestrian friendly town with quality services, where residents don't have to leave to shop and receive services.
- An attractive community of caring citizens with small shops, a depot project completed, as well as an expanded library.
- I'd like to see Waterbury be a great place to raise a family.
- Active, economically viable community–not however a suburb of Williston and Burlington. Not interested in national chains.
- Revitalization continues, sprawl is discouraged. An emphasis is placed on open space and conserving natural resources.
- I support infrastructure and centers that create more of a community feeling. I worry, however, about increasing property taxes. My home was barely affordable when I bought it a year ago, and my property taxes have already gone up considerably. A more welcoming community center won't benefit me if I can't afford to live here.
- It would be great to have a nice downtown with good looking store fronts and a better playground.
- Maintain the serene nature of the community. Protect traditional character. Growth in good taste. Keep taxes stable as possible. Keep it affordable for seniors.
- Keep the village as a hub with small-town feeling. Expand job opportunities in outlying areas.
- What I would like – minimal residential growth, enough industry to meet local needs financially, then stop. Maintain open areas. What I expect – just the opposite.
- An affordable community that offers retail, social, and academic opportunities for residents and visitors.
- Services without taxes going through the roof.
- Hopefully the Town Plan will strike a good balance between necessary growth and retaining the positive historical town character.

CHAPTER 2. HISTORIC DEVELOPMENT & 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 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. 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.

Ezra Butler, who later became a Vermont governor, called a meeting in March of 1790 to incorporate the township. According to the town charter, Waterbury contained 23,040 acres (in 1850 and 1851, tracts of land from Middlesex and Bolton were added, increasing the acreage to 32,768). That year residents built the first school and, by 1791 Waterbury's population, as counted in the first U.S. Census, had reached 93 people. In later years, Waterbury was to send two more of its residents to Montpelier as governor – Paul Dillingham and his son, William Dillingham.

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. 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 1830-1870, 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. The village, supported by the railroad, continued to attract businesses and housing. By 1880, Waterbury's population was over 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. 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. Many of Waterbury's most historic commercial and residential structures date from this period.

In the early 1890s, the state constructed the Vermont State Hospital in Waterbury Village to treat individuals with mental disabilities. Over the years, the hospital's capacity grew to approximately 1,400. Most of original hospital buildings have since been converted to state office buildings, and the grounds are now referred to as the Waterbury State Office Complex. In 1903, a poor farm was established on Blush Hill to support the area's indigent population. 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.

Civic interests also expanded in the first decades of the1900s, 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 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.

Perhaps the most devasting 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 in 1938 as a flood control project by 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.

20th Century Revitalization

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 town invested in its schools, public parks, police and fire services. A new public swimming pool was dedicated in the 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 – for development. As the regional economy improved so too did local tourism and economic development. Cold Hollow Cider, 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.

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, as reported in the last municipal plan, 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 threat of losing the Stimpson-Graves Building, one of the community's most historic Stowe Street structures, prompted renewed interest in the downtown, and downtown revitalization efforts. The Stimpson-Graves Buildings has been restored, the CVR Rail Station is being refurbished, and the Waterbury is now considering its options to apply for "Downtown Designation" or "Village Designation" under the state's downtown development program (as discussed in Chapter 4).

Waterbury Village in recent decades has also annexed land from the town several times. 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.

The last decades of the twentieth 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.

2.2 Waterbury's Historic Resources

Evidence of Waterbury's past can be found throughout the town and village in the form of its historic sites and structures. From a cultural perspective, Waterbury's 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 & Structures

The Vermont Division for Historic Preservation, to date, 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 (see Maps 1-1, 1-2, 1-3). These sites are currently listed on the *State Register of Historic Sites and Structures* maintained by the Division.

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

Historic Districts. Of particular note is Waterbury Village's **Historic Downtown District**, also listed since 1976 on the *National Register of Historic Places*, which 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. Such historic sites and features increase the area's recreational value, and broaden visitors' experiences in Waterbury.

Outbuildings & 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 cemeteriesthat 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, the resting place of many of Waterbury's earliest and most prominent residents, and the Maple Street Cemetery, 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 found beyond the old dump in 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.

Historic Preservation Efforts

> Over **87%** of respondents to the Planning Commission's 2001 Community Survey (up from 71% in 1990) agreed that Waterbury should continue to preserve and promote its historic resources.

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, including the restoration of the Stimpson-Graves Building on Stowe Street and the proposed restoration of the Central Vermont Railroad Station, have become associated with larger efforts to revitalize and improve downtown Waterbury. 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. Additional funding for downtown redevelopment could be obtained through formal Downtown Designation or Village Designation under the Vermont Downtown Program. Regarding Downtown Designation, a number of planning options, as outlined in a 2001 technical report to the Planning Commission – including the creation of a downtown design review or historic district – could be pursued as required for Downtown Designation. A final *Downtown Design Review District Report*, including a summary of historic, visual, and land use surveys of the downtown, draft bylaw language and proposed design guidelines, was issued by the Planning Commission in March, 2001. To date, however, this approach has not yet been accepted by local officials. In 2002 the State Legislature passed amendments to the Downtown Development Act that created a second option, in lieu of the pre-existing option of Downtown Designation, called Village Designation. Village Designation has a reduced set of requirements that are easier to attain for eligibility. Village Designation also provides more limited benefits that can still be significant in helping encourage downtown revitalization and development. Various options for attaining Downtown Designation or Village Designation are now being considered.

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, non-profit 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.

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 by 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
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 (through 1952)
1896 Mount Mansfield Electric Railroad initiated between Waterbury and 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 Vincent's Pharmacy 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
1924 Winooski Street Bridge constructed
1927 Opera House built on Stowe Street (Rialto), destroyed by fire in 1980s
Major flood; lives lost, significant property damage, roads and bridges washed out
1928 Cement road (Route 2) laid between Waterbury and Montpelier
1929 Cement road (Route 100) laid between Waterbury and Stowe
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
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 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
1989 First town planner hired

1990s

1991 Revitalizing Waterbury formed to save the Stimson and Graves Building
1992 Earl Towne Water Treatment Facility is dedicated
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

2.3 Goals, Objectives and Actions

Goal 1

The protection, maintenance, and continued functional use of Waterbury's historic structures, sites, and areas.

Objectives

1.1 To increase area residents' and visitors' awareness and appreciation of Waterbury's history and architecture.

1.2 To promote incentives for the repair, preservation, and maintenance of Waterbury's historic structures and areas.

1.3 To salvage and protect Waterbury's historic archives and artifacts

Actions

1. Explore the possibility of Waterbury becoming a "Certified Local Government".

2. 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.

3. 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 publications highlighting Waterbury's unique features.

4. 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 settlements.

5. Ensure the preservation of the historic features and grounds of the State Office Complex, including the main horseshoe-shaped lawn, in Waterbury Village.

6. 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.

7. Utilize Vermont Barn Grant program, explore, and incorporate creative, adaptive reuses of such structures.

Goal 2

Increased civic pride and the enhancement of art and cultural activities in Waterbury.

Objective

2.1 To improve, encourage, and support the development of cultural activities and facilities in Waterbury.

Actions

1. Work with the Waterbury Area Cultural Committee (WACC) and the Vermont Council on the Arts to conduct a "cultural assessment" in Waterbury to identify the community's desires and existing resources for cultural resources and activities

2. Explore the feasibility of developing a new or adapting an existing structure to expand the library and museum functions.

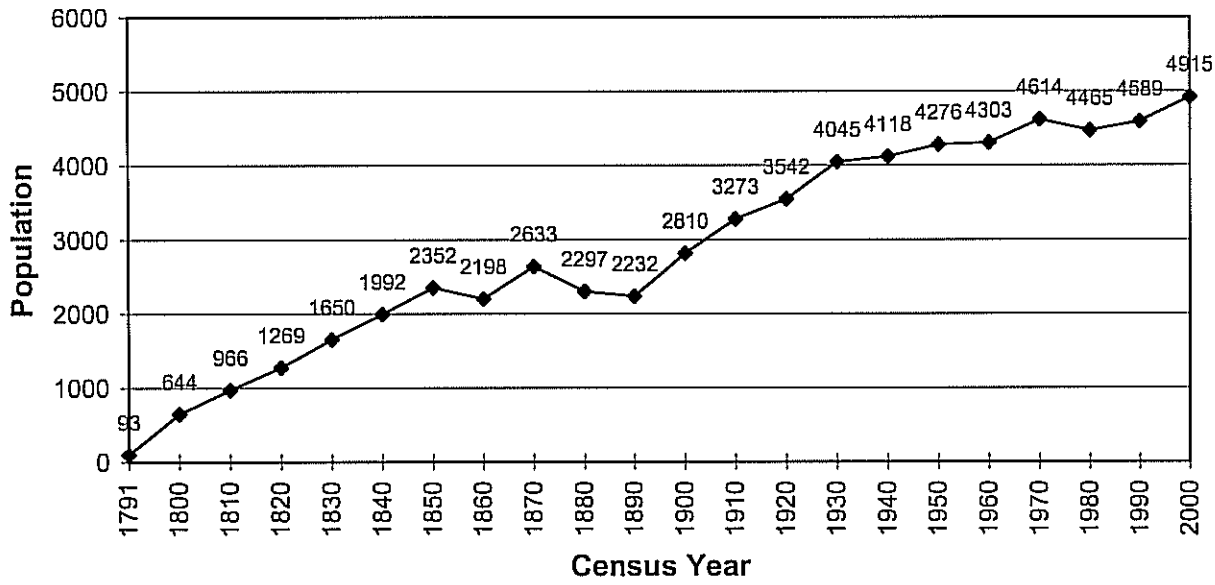
3. Explore the possibility of a developing a new or adapting an existing structure to host cultural activities, civic events, and public meetings.

CHAPTER 3. DEMOGRAPHICS

3.1 Population Trends

Waterbury's[1] population, with the exception of a few notable decades, has continued to grow since the first U.S. Census was taken in 1791. Historic population trends are highlighted in Figure 3.1. (All historic and current population figures are from the U.S. Census.) 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.

Figure 3.1 Population Trends



In 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. During that same decade, the town's population outside the village increased by over 45%, and the non-village population surpassed that of the village for the first time. Growth in the town's non-village population continued to offset a general decline in village population through the 1980s. Vital statistics (birth and death records) for this period indicate that this increase was due largely to a natural increase in population (where births exceeded deaths) rather than people moving into town.

Waterbury's population, as of the 2000 U.S Census, numbered 4,915. During the 1990s, the non-village population continued to grow, and the population of Waterbury Village appeared to stabilize. By 2000, the village population numbered 1,706, representing 35% of the Waterbury's total population (Table 3.1).

1 References made to "Waterbury" are intended to include both the Town and Village.

Waterbury's growth rate during this decade (7.1%) slightly exceeded the county rate, but not that of most neighboring communities. Waterbury's population currently ranks 5th highest in the county, behind Montpelier, Barre City, Barre Town, and Northfield.

Table 3.1 Population Change 1960-2000

	U.S Census Population					% Change	
	1960	1970	1980	1990	2000	1960-90	1990-00
Waterbury	4,303	4,614	4,465	4,589	4915	6.6%	7.1%
Village	2,984	2,840	1,892	1,702	1706	-42.8%	0.2%
Non-village	1,319	1,774	2,573	2,887	3209	143.3%	11.2%
Stowe	1,901	2,388	2,991	3,433	4,339	80.6%	26.4%
Moretown	788	904	1,221	1,415	1,653	79.6%	16.8%
Middlesex	770	857	1,235	1,514	1,729	96.6%	14.2%
Duxbury	546	621	877	976	1,289	78.8%	32.1%
Bolton	237	427	715	971	971	309.7%	0%
Area Total	8,545	9,811	11,504	12,898	14,896	50.9%	15.5%
Washington Co.	42,860	47,659	52,393	54,928	58,039	28.2%	5.6%
State	389,896	444,330	511,456	562,758	608,827	56.2%	8.2%

Source: U.S. Census.

Group Quarters (Non-household Population)

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 persons, representing roughly one quarter of Waterbury's total population. Changes in the treatment of the mentally ill, 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 (Table 3.2). The intent is to continue to reduce local bed numbers, as more off-site capacity is developed elsewhere in the state.

TABLE 3.2 POPULATION TRENDS: WATERBURY STATE HOSPITAL

	1960	1970	1980	1990	2000
Population	1,154	955	243	114	52
% Change	NA	-17.2	-74.6	-53.1	-54.4

Source: Vermont Department of Health.

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, was designed specifically to meet the needs of female inmates. Under current agreements with the state, the combined population of the state hospital and correctional facility is not to exceed 100 residents without further compensation to the town.

Waterbury Village also has two residential care homes – the Kirby House and the Squier House – which 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.

3.2 Population Characteristics

Density

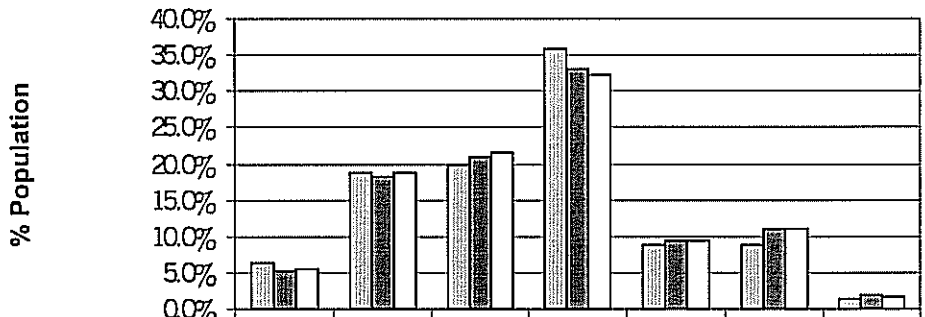
Given that Waterbury's total land area is fixed (at approximately 48.0 square miles), the overall population density varies only in relation to total population. In 2000, Waterbury Town and Village had a combined population density of 102.4 persons per square mile, up from 95.6 persons per square mile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

1990. Despite continued growth in the non-village population – and recent annexations by Waterbury Village – Waterbury's 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 3.2 illustrates the distribution of different age groups in Waterbury, Washington County, and Vermont, based on preliminary 2000 U.S. Census data. Age distributions in Waterbury are generally similar to county and state age distributions, with slightly higher percentages of the population included in the 0-4 year and 35-54 year age groups, and slightly fewer in elderly (65 and over) age groups.

Fig. 3.2 Age Distribution Comparisons 2000



	0 to 4	5 to 17	18 to 34	35 to 54	55 to 64	65 to 84	85+
Waterbury	6.3%	18.8%	19.8%	36.0%	8.9%	8.9%	1.4%
Washington Co.	5.4%	18.1%	21.0%	33.2%	9.4%	10.9%	1.9%
Vermont	5.6%	18.6%	21.5%	32.1%	9.3%	11.1%	1.6%

Age Group

Overall, Waterbury's population has aged slightly since 1990. The percentage of elderly (65 years and over) decreased from 11% in 1990 to 10.3% in 2000; however, the percentage of population between the ages of 35 and 54 years increased significantly, from 29% in 1990 to 36% in 2000. This 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. Waterbury's "dependent" population (under 18 and over 64 years of age) represented 35.4% of the total population in 1990; this remained unchanged in 2000, but may be expected to change significantly over the next 20 years.

Fig. 3.3A Age Distribution 1990

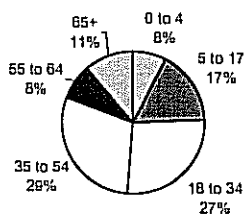
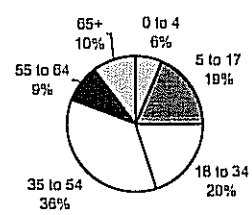
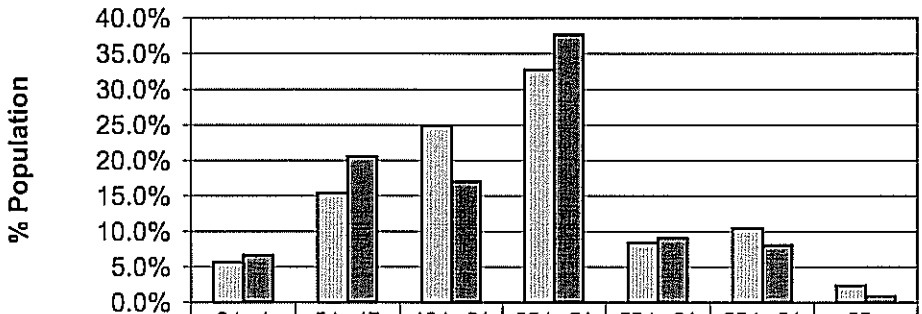


Fig. 3.3B Age Distribution 2000



The median of age of Waterbury Village residents in 2000 was 36.8 years – slightly less than the median age of the non-village population, at 37.7 years. As expected, the village had a higher percentage elderly residents, but also a much higher percentage of residents in the 18 to 34 year age bracket. These age distributions reflect in part the wider variety of housing available in the village.

Fig. 3.4 Age Distribution Comparison 2000
Village/Non-Village



	0 to 4	5 to 17	18 to 34	35 to 54	55 to 64	65 to 84	85+
Village	5.6%	15.4%	24.9%	32.8%	8.4%	10.5%	2.4%
Nonvillage	6.7%	20.6%	17.0%	37.6%	9.1%	8.1%	0.9%

Age Group

Income & 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 (Table 3.3). According to the 1990 U.S. Census, Waterbury's 1989 per capita income (PCI) was $15,500, up from $5,569 in 1979. When adjusted for inflation, this represents an increase in comparable income of 57.5%. Of particular note, however, are the relatively high percentages of elderly who live below the poverty line (10.0%), and in the village, of dependent children who live below the poverty line (9.1%).

Table 3.3 Income & Poverty Levels, 1989

	Income			% Below Poverty Level			
	Per Capita	Median Family	Median Household	Total	Families	Children (<18 yrs)	Elderly (65+ yrs)
Waterbury	$15,500	$39,087	$33,871	5.6%	3.3%	4.1%	10.0%
Waterbury Village	$13,462	$35,417	$26,294	7.7%	4.3%	9.1%	8.0%
Washington County	$13,547	$35,396	$29,623	8.3%	5.9%	9.9%	11.9%
Vermont	$13,527	$34,780	$29,792	9.9%	6.9%	11.5%	12.4%

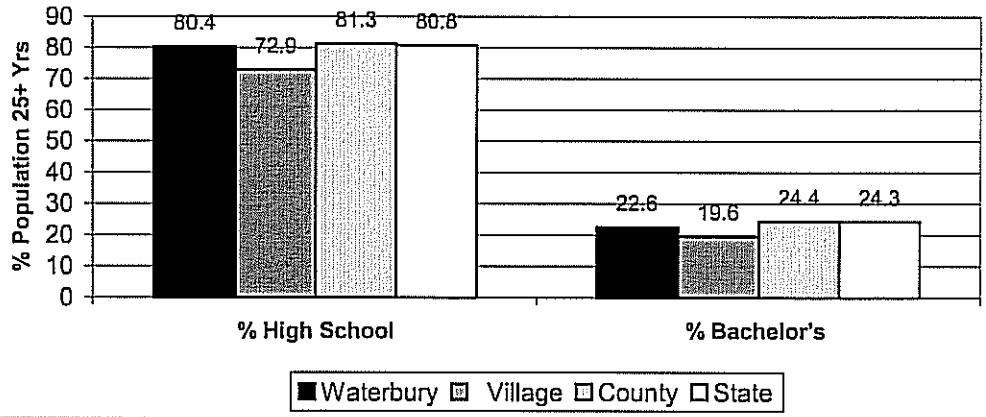
Source: 1990 U.S. Census.
Note: "Family Income" refers to the total income earned by family (related) household members 15 years and over; "Household Income" includes the total income of all persons (related or unrelated) 15 years and older in a household.

More recent U.S. Census data, which will include 1999 income and poverty information, are not available as of this writing. Median adjusted gross incomes (MAGI) as reported by the state (from annual tax returns) provide a very rough estimate of household income. Waterbury's 1998 MAGI of $27,337 ranked 6th highest in the county, and exceeded the state median of $24,650 by 10.9%. That same year, an estimated 2.4% of Waterbury residents received welfare (Aid to Needy Family with Children), and 5.3% received food stamps. Assistance rates were less than those for the county (3.3% ANFC, 7.6% food stamps) and state (3.4% ANFC, 8.0% food stamps) suggesting that local poverty rates were also lower.

Education Levels

Waterbury residents are generally as well schooled as county and state residents (Figure 3.5) though, as of 1990, slightly fewer village residents had completed high school and college. 2000 Census data are not yet available, but will provide some indication of the relative education levels of the local population and workforce.

Fig. 3.5 Educational Attainment, 1990



3.3 Population Projections

Given a 2000 Census population of 4,915, it is evident that current state and regional population projections, based on 1990 census data, underestimated the actual population growth experienced by Waterbury through the year 2000 (Table 3.4). According to regional estimates, Waterbury was not expected to reach this population level for another ten years. State estimates predicted a population decline, based on past population declines, including the significant declines in numbers of residents at the State Hospital. At the current rate of growth (32 persons per year), Waterbury's population will exceed 5,200 by 2010.

TABLE 3.4 CURRENT POPULATION PROJECTIONS

	1990	1995	2000	2005	2010	2015
CVRPC Projections, 1990-2010						
High	4589	4679	4769	4859	4949	NA
Low	4589	4597	4605	4613	4621	NA
Vermont Health Care Authority Projections, 1990-2015						
Median	4589		4339	4158	3989	3778

Sources: Central Vermont Regional Planning Commission, 1996; Vermont Health Care Authority, 1993.

This is supported by preliminary population projections through 2020 (Table 3.5), based on initial 2000 census data, which were prepared by Economic & Policy Resources, Inc., for the Central Vermont Regional Planning Commission. These projections suggest that Waterbury's total population will exceed 5,000 by the year 2005, and 5,500 in 2020, representing a 20-year increase of roughly 13.5%. These and subsequent population projections should be considered in any related municipal capacity studies and growth management programs.

Table 3.5 Preliminary Population Projections 2000-2020							
	U.S Census Population					Change	
	2000	2005	2010	2015	2020	2000-20	CAA[a]
Waterbury	4915	5041	5172	5350	5579	664	0.6%
Moretown	1,653	1768	1892	2047	2301	648	1.7%
Middlesex[b]	1,729	NA	NA	NA	NA	NA	NA
Duxbury	1,289	1379	1475	1621	1820	531	1.7%
Washington Co.	58,039	59671	61407	63506	66269	8230	0.7%
CVRPC Region	63,276	65089	67296	69814	73080	9804	0.7%

Source: *Economic and Demographic Forecast, Central Vermont Planning Region 2000 to 2020.* Economic & Policy Resources Inc., Nov 2001. [a] CAA = compounded annual average rate of growth; [b] combined with Worcester, not available for town.

CHAPTER 4. LOCAL ECONOMY

4.1 Overview

The Town and Village of Waterbury[1] have long supported an economic climate in which local residents have access to meaningful employment at a livable wage within the community. In addition, the community's strategic location along important transportation corridors and its proximity to larger urban centers and resort destinations have supported Waterbury's function as a regional center for commerce, government, and manufacturing. This section addresses economic trends and conditions, and provides background regarding the community's ongoing economic development efforts.

4.2 Economic Trends

Covered employment[2] in Waterbury increased by 31% between 1990 and 2000, reflecting the creation of 910 new jobs. The represents an average annual rate of job growth of over 3%, considerably higher than the 1.5% average annual increase experienced by both Washington County and the state during the same period. The total number of reporting units, or employers, also increased in Waterbury, from 212 reporting units in 1990 to 259 reporting units in 2000. This indicates that a potentially significant portion of the job growth is attributable to new businesses.

Much of the job growth during the 1990s occurred in the manufacturing, transportation, wholesale, retail, and government sectors. Government, which accounts for over 45% of Waterbury's total covered employment, experienced significant job growth, most of which occurred between 1995 and 2000 and involved increases in both state government and education. Manufacturing, which accounts for over 13% of total employment in 2000, also saw a sharp increase, although the rate of growth was slower than in the 1980s. Employment in the wholesale and retail industries, however, continued to increase at a relatively sharp pace. Wholesale trade showed the sharpest increase from 1990, posting a rate of increase of nearly 200% (207 new jobs) over the ten year period. Total job growth is shown in Table 4.1 (source: Vt. Dept. of Employment and Training).

Table 4.1 Employment by Sector
Waterbury, VT

Industry Sector	1990	1995	2000	1990-2000
Agriculture, Forestry & Fishing	n/a	13	25	n/a
Construction	175	138	157	-10.29%
Manufacturing	386	405	515	33.42%
Transportation & Public Utilities	n/a	32	64	n/a
Wholesale Trade	104	262	311	199.04%
Retail Trade	334	463	490	46.71%
Finance, Insurance & Real Estate	57	44	33	-42.11%
Services	413	449	524	26.88%
Government	1,470	1,477	1,755	19.39%
Total Covered Employment	2,939	3,270	3,849	30.96%

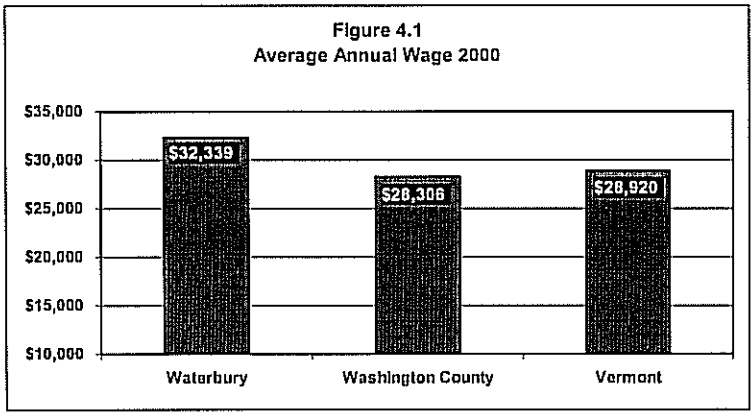
The increase in manufacturing and wholesale employment is particularly desirable as these two sectors generally offer the highest annual average wages. This, coupled with the large number of state

[1]Employment and economic data were not available for Waterbury Village; consequently, all figures presented in this chapter represent both Town and Village combined.

[2]Covered employment includes only that which is covered by unemployment insurance and does not include self-employed persons.

government employees working in Waterbury, explains why average annual wages are higher in Waterbury than the average wage in either the county or state. Average annual wages for the town, county and state for the year 2000 are compared in Figure 4.1 (source: Vt. Dept. of Employment and Training).

Figure 4.1
Average Annual Wage 2000

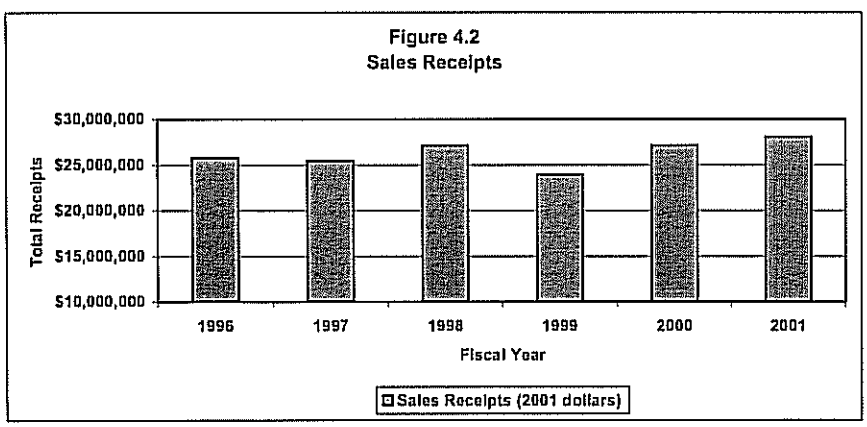


There has been heightened concern in Vermont in recent years regarding the ability of full-time workers to earn an income sufficient to meet a family's basic needs. Commonly referred to as a "livable wage," extensive research by the Vermont Peace & Justice Center has identified a 1998 annual income of $31,935 ($15.35/hour) for a family of four outside of Chittenden County as a "livable wage." The average annual wage for a single person for the same year was estimated at $17,831 ($8.57/hour).

As figure 4.1 shows, the average annual wage in Waterbury in 2000 was higher than the average for the county or state, although the town's 1998 average wage – $27,551– was lower than the livable wage for a family of four. As noted above, much of the job growth in the past decade has been in industries with relatively high average annual wages, such as wholesale trade ($40,382), manufacturing ($48,042) and government ($33,600). High job growth has also occurred in the retail sector ($16,835), however, which typically offers lower wage scales and fewer benefits. Focusing economic development activities on the creation of well-paying jobs can maintain, and increase, Waterbury's higher than average annual wage and better ensure that local residents have access to a livable wage.

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 4.2 shows total sales receipts reported by Waterbury businesses for each fiscal year between 1996 and 2001 (source: Vt. Dept. of Taxes). Taxable receipts include all retail sales subject to the Vermont sales tax, excluding groceries, medicine and, as of fiscal year 2001, apparel with a purchase price less than $100.

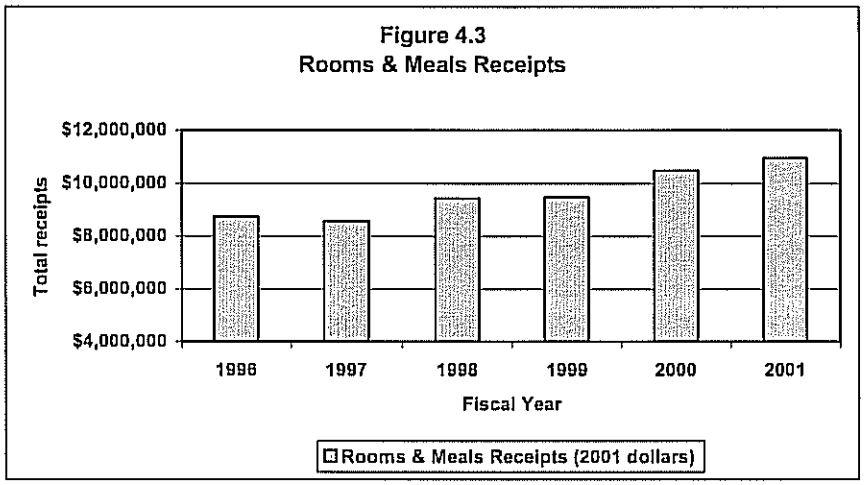
Figure 4.2
Sales Receipts



Total annual retail sales, adjusted for inflation, have grown by 8.9% since 1996 – an average increase of 1.5% annually. In addition, in 1996 retail sales in Waterbury accounted for 8.6% of total retail sales in the county. In 2001, Waterbury's share of the county total increased to 9.4%, indicating a slight strengthening of the town's retail sector relative to the county's.

Figure 4.3 shows total rooms and meals receipts reported by Waterbury businesses since 1996 (source: Vt. Dept. of Taxes). The increase in rooms and meals receipts has been greater than growth in retail sales, increasing by 25.1% during the six-year period for an average annual increase of 4.2%. The share of the county total captured by Waterbury businesses has also grown, from 11.5% in 1996 to 13.1% in 2001. Growth in rooms and meals receipts may, in part, be attributable to expansion of the tourism industry in neighboring Stowe. Greater diversity of restaurants in Waterbury Village, which reflect the village's growing popularity as an entertainment destination, may also have contributed to the increase.

Figure 4.3
Rooms & Meals Receipts



4.3 Downtown Development

Since its early history, Waterbury Village has served as the commercial center of the community. It is a classic example of a 19th century New England village, built to a pedestrian scale, with a mixture of uses and services within walking distance and the buildings close to the street

The construction of Interstate 89, and more specifically Exit 10, altered traffic patterns through Waterbury. The reduction in downtown through-traffic contributed to a period of economic downturn in the historic village. Visitors travelling to Stowe or in search of Ben & Jerry's typically exit I-89 and head north on Route 100. Those coming from the south to go the Mad River Valley get off at Exit 11 in Middlesex and do not go through Waterbury. Despite the effects of the interstate, Waterbury Village's function as the primary community center has improved over the past decade.

In addition to several residential neighborhoods, the village's downtown is home to the community's largest concentration of commercial, business, manufacturing, civic, and cultural facilities. The term "downtown" generally refers to an area encompassing a significant concentration of commercial and employment activity unlike any other area in the community. It is typically distinguished by a mixture of uses including retail, services, office, and residential, as it is in Waterbury. Cultural and civic activities are also a strong component of downtown.

Although the geographic area of a downtown is not always easy to define, the Planning Commission in 2000 recommended a downtown development district in order to focus economic development efforts. These efforts are designed to build upon past downtown revitalization initiatives begun in the 1980s and early 1990s through a partnership of town and village governments, local residents and village businesses. The organization Revitalizing Waterbury was formed to focus attention on the vitality of the downtown, and promote a program of downtown revitalization and development.

The first significant result of these efforts was the purchase and renovation of the Stimson & Graves building in 1993. The Stimson & Graves building, which physically anchors a key position at the intersection of Stowe and Main Streets, is now occupied by a senior center, street-level retail space and

upper-story affordable housing. That project is widely credited with encouraging additional public and private redevelopment, resulting in a more vibrant downtown than existed ten years ago.

Ongoing downtown development efforts include:

- the renovation of the village train station for use as a transportation center (the station provides a key regional stop for Amtrak passenger train service), and as a mixed-use information and commercial center;
- the reconstruction of Main Street, which will include the installation of street trees and new sidewalks, on-street parking and the burial of utility lines; and
- the designation of the delineated downtown under Downtown or Village Designation in accordance with the Vermont Downtown Development Act (24 V.S.A. Chapter 76A).

Downtown development efforts are widely supported by Waterbury residents, as indicated by the 79.2% of respondents to the 2001 community survey who agreed that more resources should be directed toward downtown revitalization. The Downtown Development Act, passed in 1998, establishes a process for designating downtown development districts, and provides access to a variety of benefits and incentives to encourage reinvestment in traditional community centers, including:

- state tax credits for the rehabilitation of historic buildings;
- a sprinkler system rebate program;
- reallocation of sales tax on construction materials;
- employee training tax credit;
- a downtown transportation and related capital improvement fund; and
- access to funding from a state infrastructure bank.

To receive Downtown or Village designation, a community must meet several eligibility requirements. An eligible town must demonstrate a commitment to planning, have in place the organizational capacity to carry out a downtown development program, and have committed the resources necessary to see that program through. Waterbury is well positioned to meet these requirements as part of a larger economic and community development program.

4.4 Industrial Development

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. This area, which includes Pilgrim Industrial Park off Park Row and Grenier Industrial Park off Demeritt Place, is adjacent to the New England Central Rail corridor and has historically been integrated into the surrounding village. Among the recent manufacturing facilities located in this area is Green Mountain Coffee Roasters facility, which was constructed in Pilgrim Park in 1992 and was expanded twice with the assistance of community development block grant funds.

Pilgrim Park, which also benefited from community development funds to improve access to the property, offers significant development potential. With the recent integration of the defunct Anderson Concrete plant into Pilgrim Park, an opportunity exists to better integrate the industrial area with the historic business district through a mix of uses and a pedestrian-friendly development pattern. Given the high wages paid by the manufacturing industry, and community support for additional light industrial development (71.4% of the 2001 survey respondents felt that light industry should be encouraged in Waterbury), the full and efficient use of existing industrial parks should be supported.

4.5 Home-Based Businesses

Home occupations and other home businesses are an important and traditional part of the New England economy, and it is estimated that a growing number of Waterbury residents are working from home.

Until additional 2000 U.S. Census information is released, it is difficult to quantify the number of local residents working from home. In 1990, the last year for which accurate data are available, 11.2% of Waterbury residents identified their primary residence as their principal place of employment. Of 2001 survey respondents, 13% reported working at home.

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. In addition, 80.3% of 2001 survey respondents indicated that the Town should encourage home-based businesses.

There may come a point, however, when a home occupation becomes so successful that it takes on 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.

4.6 Economic Development

Economic development is the process of creating prosperity by mobilizing human, physical, natural, and capital resources to produce marketable goods and services. Respondents to the 2001 survey support revitalization of the downtown (79.2%), and feel as though the Town should encourage light industry (71.4%), personal and professional services (82.6%), tourism related businesses (77.9%) and small-scale high technology enterprises (77.4%).

Waterbury's economic development efforts have met with enviable results over the past decade. The downtown has undergone significant revitalization and is healthier today than 10 years ago. In addition, 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. Presently, community efforts to foster economic development include the following:

- The Waterbury Community Development Committee, whose members are volunteers appointed by the Boards of Selectmen and Trustees, was created to improve the economic climate and the quality of life in Waterbury. With the support of town staff, this group was instrumental in obtaining a variety of community development grants over the past decade to assist with the development of Pilgrim Park, the expansions of Green Mountain Coffee Roasters, and construction of the Ice Center of Washington West. The Community Development Committee advises the Village Trustees on the administration of the Waterbury Village Revolving Loan Fund, and advises the Trustees and Selectboard on the use of a second revolving loan fund. Both funds are administered as loan programs to attract new businesses to the village and/or to assist existing village businesses with expansion.

- Revitalizing Waterbury was formed in February 1991 to promote public/private reinvestment in and the promotion of Waterbury's downtown. As discussed above, Revitalizing Waterbury played a critical role in the purchase and renovation of the Stimson & Graves building at the corner of Stowe and Main Streets, which has been credited with encouraging additional public and private redevelopment in the downtown area over the past 10 years. In the event that the Waterbury downtown secures designation as a Downtown Development District, it is anticipated that Revitalizing Waterbury would provide the necessary organizational capacity to carry out a downtown development program.

- The Waterbury Tourism Council is a group dedicated to promoting Waterbury as a vacation and meeting destination. The group maintains the tourist information booth on Route 100.

In addition to organizations directly involved in business promotion, those groups working to foster appreciation of Waterbury's cultural resources are also helping to maintain a healthy social and economic climate (see Chapter 2). The preservation and promotion of Waterbury's historic resources are expected to play an important part of the revitalization and promotion of the downtown. Such a focus on historic preservation could also be applied in other areas of Waterbury, such as Colbyville and Waterbury Center, to increase Waterbury's appeal and further stimulate economic activity.

Finally, 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 results of the 2001 survey indicate that Waterbury residents value the community's high quality of life, and that a distinction should be made between economic development that enhances community life and that which might degrade it. For example, while 84.1% of the respondents indicated that "small scale" commercial development should be encouraged, 75.2% disagreed that "large-scale " commercial development should be encouraged. Economic development strategies should be integrated with strategies for the preservation of natural and cultural resources, protection of the physical and visual quality of the community, and programs that combine economic development with support for historic and cultural resources.

4.7 Goals, Objectives and Actions

Goal 1

The cultivation of a vibrant economy, one that supplies jobs at livable wages while maintaining harmony with the area's natural and historic resources.

Objectives

1.1 To encourage, in appropriate locations, the development of new commercial and industrial uses and the prosperity of existing uses.

1.2 To enhance the economic resurgence and ongoing revitalization of Waterbury Village's downtown area.

1.3 To preserve Waterbury's existing natural and historic resources as a means of ensuring future economic growth.

Actions

A. Commercial and Industrial Growth

1. Design public services, facilities, and utilities that will allow for commercial and industrial growth in areas designated for growth.

2. Develop relationships with organizations, such as the Central Vermont Economic Development Corporation and the Central Vermont Chamber of Commerce, to promote Waterbury's location as a desirable site for relocating businesses.

3. Create and maintain innovative promotional materials, such as the municipal website, to attract new businesses and support existing businesses.

4. Streamline the local permitting process, while still fulfilling planning and regulatory goals, in order to minimize the regulatory burden on businesses and residents.

B. Downtown Growth

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

2. Establish and seek funding for a broad-based downtown organization that will oversee a downtown development program.

3. Request Downtown or Village Designation from the State of Vermont as part of Waterbury's downtown development program.

4. Take advantage of the Village of Waterbury's revolving loan funds to nurture start-up businesses and encourage existing businesses in the downtown area.

5. Transform the railroad station into a multi-media informational center that promotes Waterbury tourism, retail shops, restaurants, and other businesses in downtown Waterbury and the surrounding area.

6. Enhance the appearance, function and commercial viability of the downtown area by improving parking, sidewalks, storm drains, and streets; move electrical and telephone lines underground.

C. Overall Economic Base

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

2. Encourage state officials to compensate Waterbury for the full cost of municipal services consumed by the State Office Complex.

CHAPTER 5. HOUSING

5.1 Household Trends

Many factors and relationships determine the need for housing in Waterbury, not all of which are predictable or easy to quantify. Current and projected population growth, job creation, and related income levels are major factors. As Waterbury's population increases and ages, its housing needs change, and as income levels change, so does the demand for different types of housing.

Households

The number of households in Waterbury has increased – the result of an increasing population and decreasing household sizes. Waterbury's total households, as recorded in the 2000 U.S. Census, numbered 2,011, representing 8.5% of all households in Washington County. Village households, numbering 793, accounted for 39.4% of the town total. Household growth exceeded that for the county, but not that of the surrounding area. Only Bolton had a slower rate of household growth.

Table 5.1 Comparative Change in Household Numbers 1990-2000

	1990	2000	% Change
Waterbury	1754	2011	14.7
Village	721	793	10.0
Non-Village	1033	1218	17.9
Stowe	1526	1905	24.8
Moretown	540	650	20.4
Middlesex	547	663	21.2
Duxbury	363	498	37.2
Bolton	367	412	12.3
Area Total	5097	6139	20.4
Washington Co.	20926	23659	13.1
State	210633	240634	14.2

Source: U.S. Census.

Household Trends

Following national trends, Waterbury's household sizes have been decreasing for several decades (Table 5.2). Village households on average are smaller than non-village households – in 2000 village households averaged 2.09 persons. This is due in part to the higher percentage of non-family households in Waterbury Village (Table 5.3).

Table 5.2 Persons Per Household 1960-2000

	1960	1970	1980	1990	2000
Waterbury	4.60	4.20	2.97	2.62	2.42
Washington Co.	3.48	3.37	2.81	2.62	2.36
Vermont	3.50	3.39	2.83	2.64	2.46

Source: U.S. Census.

This trend is expected to continue. Decreasing household sizes result from families having fewer children, an increase in the number of elderly households (including "empty nesters"), and a relative increase in the number of "nontraditional" households – including single parent households, couples without children, and non-family households. In 2000, 34% of Waterbury households were non-family

households; 48% of village households were classified as such. Smaller household sizes suggest that additional, more diverse types of housing will be needed to accommodate changing living arrangements.

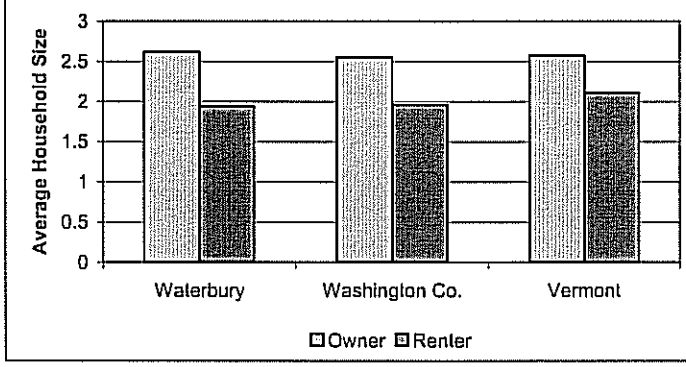
Table 5.3 Household Types, 2000

	Households	% Married w/ Children	% Single w/ Children	% Married no Children	% Non-family	% 65+ years
Waterbury	2,011	24.8	8.2	29.4	34.3	19.3
Waterbury Village	793	16.6	9.0	22.5	48.4	21.3
Washington Co.	23,659	22.2	8.8	28.4	36.4	22.1
Vermont	240,634	23.2	8.5	29.3	34.4	22.5

Source: U.S. Census

Household size also varies by tenure. As shown in the accompanying figure, renter households typically are smaller than owner households.

Fig. 5.1 Occupancy by Tenure, 2000



5.2 Housing Supply

In 2000, according to initial census data, Waterbury had 2,106 housing units (including seasonal units), representing 7.6% of the total housing supply in Washington County (Table 5.4). Following a period of rapid growth in the 1980s, housing development in the region slowed significantly during the recession in the first half of the 1990s, contributing to the current housing shortage. Waterbury continued to experience a slower rate of housing growth than many of its neighboring communities; however, the town remains one of the area's main housing suppliers. The majority of the town's housing growth during this period occurred outside of the village. Of the 150 new units identified in the 2000 Census, 130 (87%) were constructed outside of Waterbury Village.

Table 5.4 Comparative Change in Housing Units 1980-2000

				% Change	
	1980	1990	2000	1980-90	1990-00
Waterbury	1,658	1,956	2,106	18.0	7.7
Village	NA	803	823	NA	2.5
Non-Village	NA	1,153	1,283	NA	11.3
Stowe	1823	2,830	2,728	55.2	-3.6%
Moretown	544	639	727	17.5	13.8
Middlesex	484	611	719	24.8	19.0
Duxbury	403	456	569	9.7	28.7
Bolton	359	543	412	51.3	-24.1
Area Total	5,271	7,035	7,261	33.5	3.2
Washington Co.	22,113	25,328	27,664	14.5	9.1
State	223,154	271,216	294,382	21.5	8.5

Source: U.S. Census (2000 Initial release; 2000 data for Bolton and Stowe are suspect).

Housing Characteristics

There has been no comprehensive update of the 1990 Central Vermont Regional Planning Commission housing survey referenced in the last municipal plan, which looked at local housing types and conditions. A 1999 market study of Waterbury, conducted for the Central Vermont Community Land Trust by Allen & Cable, estimated that there were approximately 559 rental units in Waterbury, representing 28% of the total; and that 1% were vacant. These estimates are confirmed by recent U.S. Census data (Table 5.5).

Table 5.5 Housing Characteristics, 2000

	Total Units	Rental (%)	Seasonal (%)	Vacancy Rates (%)	
				Owner	Renter
Waterbury	2,106	28.6	2.8	0.6	1.3
Village	823	50.4	1.2	1.6	1.7
Washington Co.	27,644	26.9	11.2	1.0	3.5
State	294,382	24.1	14.6	1.4	4.2

Source: 2000 U.S. Census (initial release).

As noted in this report, much of the town's rental housing stock is in aging and often historic structures in need of rehabilitation. More recent U.S. census data are not yet available, but in 1990, 67% of Waterbury's housing stock was 20 or more years old; and 39% was more than 50 years old (the median year of construction being 1962). Less than 2% lacked complete plumbing and kitchen facilities. Waterbury's older housing stock, including the majority of its historic residences, is concentrated in Waterbury Village: in 1990, 68% of the village's housing was over 50 years old (the median year of construction being 1939). Waterbury residents, since the mid-1980s, have consistently favored the development of a housing renovation program in Waterbury. Town and village officials are currently considering the use of existing revolving loan funds for this purpose.

Table 5.6 Vacation/Seasonal Units, 1990-99

	Vacation Units		% Change 1990-99	% Total 1999
	1990	1999		
Waterbury	73	81	11.0	3.9
Stowe	1,167	1,171	0.3	39.0
Moretown	47	89	89.4	12.1
Middlesex	49	48	-2.0	7.3
Duxbury	76	91	19.7	16.4
Bolton	157	139	-11.5	19.0
Washington Co.	3,242	3,426	5.7	12.4
State	45,092	47,294	4.9	16.2

Source: VT Dept. of Health, 1999 Population & Housing Estimates

Between 1990 and 1999, Waterbury saw vacation and seasonal home development level off, after an increase of approximately 24% during the 1980s (Table 5.6). At present, vacation homes make up less than 4% of Waterbury's total housing stock – much less than its more resort-oriented neighbors.

Most new residential development has been housing for year-round residents. This reflects current market demand and the continued conversion of seasonal to year-round residences.

Table 5.7 Housing for Special Needs, 2000				
	Units	Elderly	Accessible	Deep Subsidy
Butler Apts	12	12	1	12
Stimpson-Graves	14	14	2	0
Wells House Apts	12	12	6	12
Total	38	38	9	24
Source: Directory of Affordable Housing in Vermont, Oct 2000.				

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 decade, subsidized housing for the elderly increased by 14 units with the rehabilitation of the Stimpson-Graves Building. In addition, there are two community care homes (down from 3 in 1990). The Kirby House and the Squire House have the combined capacity to house an additional 57 residents, including seniors and adult mental health patients. The Kirby House also provides limited respite and emergency housing. Subsidized units experience very short vacancy between renters, and waiting lists are common.

Given the documented shortage locally of affordable housing for low-and moderate-income individuals and families, the Central Community Land Trust, in partnership with Housing Vermont and the town, has undertaken the reconstruction of the Green Mountain Seminary Building in Waterbury Center. This $2.7 million reconstruction addresses both the need for affordable housing and the renovation of one of the town's most historic properties. Funded in part through a $346,700 Community Development Block Grant, the project is consistent with the goal of Waterbury's *1997 Community Development Plan* to provide "decent and affordable housing for Waterbury residents, in a variety of types, in locations which support existing neighborhoods and which maintain Waterbury's rural and scenic character." Completed in June 2002, the building housees 16 units of affordable rental housing, including 8 one-bedroom apartments, and 8 two-bedroom apartments, and the Waterbury Center Branch of the Public Library.

Local mobile home parks also provide relatively affordable housing for many Waterbury residents, who own homes on leased lots. The town's five parks are all privately owned. No new parks have been developed in Waterbury since 1984 (Table 5.8). There are currently 125 park lots, representing 19.6% of the county total, with no vacancies. Current rents in Waterbury tend to be lower than county and state medians ($255 and $225 respectively, in 2000).

Table 5.8 Mobile Home Parks in Waterbury				
Park	Year Developed	Lots	Monthly Rent	Vacancies
East Wind	1958	28	$268	0
Eldredge	1968	5	$100	0
Kneeland Flats	1967	67	$219	0
Whalley Park	1960	11	$180	0
Thatcher Pines	1984	14	NA	0
Source: VT Dept. of Housing & Community Affairs, 2000 data.				

5.3 Projected Housing Demand

As noted, over the past decade the number of households in Waterbury increased by an average of 26 per year. If this is any indication of housing demand over the next ten years, 260 or more housing units will be needed by the year 2010. Existing unmet housing needs, an aging population, decreasing household sizes, and changes in the number of special needs households may result in even greater demand for local housing over the next 10 years.

The *1998 Housing Demand Analysis for Washington County* (Planning Decisions, Inc., 1999) projected that the demand for rental housing at the county level will decrease through 2003 as the number of households in prime renting age (under 34 years) declines; however this may be offset somewhat by a growing demand for apartments for the "young elderly" (those between 55 and 64).

Table 5.9 Potential Low-Moderate Income[1] Housing Demand through 2003 for Washington County

Housing Type	Potential Demand (Households)
Rental	4,095
First Homes	460
Mobile Homes	2,161
Assisted Living	50
Transitional	26
Emergency	46

Source: 1998 Housing Demand Analysis for Washington County, Vermont, Planning Decisions, Inc. April 1999.
[1] <120% of HUD median income for county by household size.

The demand for first homes is also expected to decline through 2003 with the decrease in younger households. The demand for mobile homes has been slow since 1990, but is projected to pick up modestly over the same period as a result of increased demand from early retirees (over 55 years of age).

The report also identified the need for 50 or more assisted living units in the county – regular, one floor apartments with access to additional services, the majority of which would require subsidies. An additional 300 elderly households were expected to need in-home care to allow them to remain in their homes. Gaps in available emergency shelter housing and in transitional housing for families on welfare and people with AIDS or HIV were also identified.

It can be expected that a portion of existing and near-term need will need to be met locally. Waterbury's total "fair share" of the county's potential housing need should be evaluated in relation to its current housing stock, and a further assessment of local housing needs following the release of more detailed 2000 U.S. census data.

The Job-Housing Balance

Economic growth, covered in Chapter 4, is another factor in housing growth. Job creation associated with economic development often increases the local demand for housing. In a tight housing market, it becomes difficult for businesses to attract new employees. The creation of good paying jobs supports the development of higher end housing; while low wage or seasonal employment may affect local affordable and rental housing markets. If the area's economy declines, demand for higher-priced housing generally declines, and the demand for rental units may increase. Given the link between housing and jobs, housing considerations should be included in all local and regional economic development strategies.

5.4 Housing Affordability

Current vacancy rates (less than 2%) suggest a very tight housing market locally which, without new construction, may result in increases in the cost of both rental and market-rate housing. The 1999 Allen & Cable market study of the Waterbury area, commissioned by the Central Vermont Community Land Trust, documented a rental vacancy rate of less than 1%. In addition, realtors interviewed reported that the market for single family homes is currently very strong, with demand outweighing supply, particularly for homes under $100,000. The consultant concluded that "this demand is difficult to supply, as land prices do not support development in this range."

Defining and quantifying Waterbury's role in the provision of affordable housing also requires an inter-regional perspective, as it is believed that some portion of Waterbury's housing climate is influenced by

the lack of low-cost housing in Stowe. The Mad River Valley has also been experiencing significant increases in housing prices in relation to Waterbury.

Household Income

Under current federal and state definitions of "affordability," households with incomes at or below the county median income should pay no more than 30 percent of their gross income on housing costs. Housing costs for rental units include rent and utilities (heat, hot water, electricity, water and sewer charges, and trash removal). For homeowners it includes principal and interest on mortgage payments, property taxes, and property insurance, but not utilities.

According to U.S. Census data, in 1989 housing costs exceeded 30% of household income for18% of Waterbury homeowners, and 30% of renters. More recent (1999) census data are not yet available; however income tax data may be used to roughly estimate household income. The median adjusted gross income for Waterbury in 1999 was $28,197. Housing costs may also be evaluated in relation to the local average annual wage, which for Waterbury in 1999 was reported at $29,132. In the attached analysis (Table 5.10), these figures are doubled, assuming two incomes or wage earners per household. The U.S. Department of Housing and Urban Development (HUD) also defines annual income limits for federal and state housing programs based on an estimated median family income by county. For FY1999, Washington County's median family income was estimated at $42,700 (this was increased to $45,800 for FY2001). The current Vermont Housing Finance Agency (VHFA) income limit for homeownership programs in Washington County is higher, at $54,900.

Housing Costs

The 1999 Allen & Cable market study reported an average fair market rent, for a two-bedroom apartment at $606 per month. This is consistent with the 1999 HUD estimated fair market rent for Washington County of $603. The average assessed value of a single family dwelling on less than 6 acres (R1) in 1999, as determined from the grand list, was $106,851 (the 5th highest in the county). The average sale price of an R1 home that same year, as determined from transfer data, was $118,258.

For consistency purposes, the attached affordability analyses uses 1999 data. However, more recent transfer data suggest that housing costs have increased substantially in recent years – as of October, the average 2001 sale price of an R1 residence in Waterbury was $140,383. This exceeds the current VHFA purchase price limit of $120,000 for existing homes in Washington County, under their homeownership programs. It also exceeds the current county limit for FHA-insured mortgages of $132,000.

Town listers have confirmed that the Waterbury real estate market has seen a dramatic increase in property values over the last two years. Their equalization study of residential sales in 2000 indicates an increase in market value of up to 40% over existing assessments. A town-wide reappraisal was completed in 2001, and resulted in an average 35% increase in the value of most properties in town (2001 Waterbury Town Report).

Relative Affordability

The accompanying affordability gap analysis (Table 5.10) provides a rough estimate of relative housing affordability for different income levels, based on available data and noted assumptions. 1999 data, though not in all cases the most recent, are used for consistency. This analysis suggests that, as of 1999, average housing costs were relatively affordable in relation to median or average income and wages – only households with low or very low incomes would have trouble finding affordable fair market housing.

This may explain why affordable housing was not identified by 2001 survey respondents as a major issue facing the Waterbury community. At the same time, a clear majority (69%) continued to support the provision of affordable housing in Waterbury for people of low and moderate income, and even more (76%) supported the development of such housing for seniors and handicapped persons.

Given the rapid increase in housing prices in Waterbury surrounding communities area over the last two years, housing may be less affordable today if wages and incomes have not kept pace. Housing affordability should be examined in more detail when additional U.S. Census and income data are available.

Table 5.10 Housing Affordability Analysis, 1999

Household Income Estimates	Income	Monthly Gross Inc [/12]	Monthly Costs [x.30]	Monthly Payment [x.80]	Mortgage Amount [@7%]	Price w/ 5% Down [/.95]	R1 Gap [@$118,258]	Rent Gap [@$606]
HUD County								
Median	$45,800	$3,817	$1145	$916	$137,744	$144,994	$26,736	$539
Low (80%)	$36,640	$3,053	$916	$733	$110,195	$115,995	**($2,263)**	$310
Very Low (50%)	$22,900	$1,908	$572	$458	$68,872	$72,497	**($45,760)**	**($34)**
MAGI (x2)								
Median	$56,394	$4,700	$1,410	$1,128	$169,606	$178,532	$60,274	$804
Low (80%)	$45,115	$3,760	$1,128	$902	$135,684	$142,825	$24,567	$522
Very Low (50%)	$28,197	$2,350	$705	$564	$84,803	$89,266	**($28,992)**	$99
Avg Wage (x2)								
Average	$58,264	$4,855	$1,457	$1,165	$175,230	$184,453	$66,194	$851
Low (80%)	$46,611	$3,884	$1,165	$932	$140,184	$147,562	$29,304	$559
Very Low (50%)	$29,132	$2,428	$728	$583	$87,615	$92,226	**($26,032)**	$122

Notes:

1) Housing is defined as "affordable" when households with incomes at or below median income pay no more than 30% of their gross income on household expenses.
2) Median county income reported is for a family of four on 1/27/99 [US Dept. of Housing and Urban Development].
3) Median adjusted gross income as reported for Waterbury for 1999; doubled to estimate household from 2 wage earners [VT Tax Dept].
4) Average annual wage reported for Waterbury for 1999; doubled to estimate household income from 2 wage earners [VDET].
5) Mortgage amount assumes financing for 30 years at a fixed rate of 7%.
6) The average sale prices of an R1 property in Waterbury in 1999, determined from property transfer data, was $118,258 [VT Tax Dept].
7) The average rental price of 2-bedroom apartments in 1999 was $606 [Allen & Cable Study].

5.5 Goals, Objectives and Actions

Goal 1

Safe, decent, and attainable housing for all current and future Waterbury residents.

Objectives

1.1 Encourage the development of a wide variety of housing types, such as single-family detached, duplex, and multi-family, that will accommodate the range of needs and desires of Waterbury residents.
1.2 Encourage development of affordable housing near employment and service areas to meet needs of Waterbury's elderly, physically disabled, young families, and low and moderate income groups.
1.3 Ensure that all new housing is of quality construction and is consistent with the character of the community.
1.4 Establish a program to assist with the renovation of rental housing in order to bring buildings into compliance with building and safety codes.

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

Goal 2

New housing in locations that maintain the integrity of neighborhoods, respect the natural environment, and minimize the need for infrastructure improvements.

Objectives

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

Actions

1. Explore the expansion and creation of areas allowing mixed uses.
2. 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.
3. Explore increasing density to Planned Residential and Planned Unit Developments to encourage preservation and to reduce infrastructure and housing costs.

CHAPTER 6. NATURAL RESOURCES

6.1 Topography & Drainage

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, to 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 & 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. In recent years, however, modern construction technology and the advent of four-wheel-drive vehicles have made steeper lands more easily accessible for 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 Table 6.1

Table 6.1

Development Constraints Associated with Steep Slopes

Slope	Recommended Management
0-3%	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.

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 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 town. Because higher elevation land often serves as the background to the town'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 be reviewed for potential environmental and visual impacts. This is not to say that development should not occur if it is visible; however, some visual impacts are more disruptive than others, particularly in terms of bulk, lighting, and context with surrounding areas on the hillside. In Waterbury, land along the Worcester Mountain Range is particularly vulnerable to both adverse environmental and visual impacts associated with development on steep slopes and along higher elevations.

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 (Map 2-3).

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.

The Waterbury Reservoir has a watershed area of nearly 60,000 acres, normally covering 840 acres, and has a maximum depth of 100 feet. It one of the area's most important scenic and recreational resources. The reservoir's water level was lowered in 2000 for a major dam repair project that is to be completed by 2004, at a projected cost of over $32 million. 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 ponds found in Waterbury include those 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 review, but this raised questions of municipal liability so they are no longer required in the reviews.

Management. 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.

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.

Table 6.2 Local Water Quality Classifications	
Surface Water	Management Class
Thatcher Brook	Class A (headwaters, water supply source) Class C (1.5 miles upstream from mouth) Class B (remainder)
Little River	Class B
Winooski River	Waste Management Zone (treatment plant)
Waterbury Reservoir	Class B
Source: VT Water Resources Board.	

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 seventeen 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.

As of this writing, the state is initiating enhanced basin planning and stormwater management programs as necessitated in part to meet the requirements of the federal Clean Water Act. The primary program which governs and monitors water quality is the discharge permit program (NPDES[3]). The Agency's Department of Environmental Conservation evaluates applications for discharge permits to determine whether the proposed runoff from a project (nonpoint source), or discharge from a municipal waste water treatment facility (point source), will comply with water quality standards. This permitting process is also undergoing state review to better address federal requirements, particularly with regard to impaired waters that do not meet water state quality standards.

Shorelands & Streambanks

Naturally vegetated shorelines and streambanks contribute to water quality, shoreland protection, and the overall health of a stream or lake by:

- providing bank support and stabilization,
- helping to prevent bank undercutting and collapse,
- providing food and shelter for fish and 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,
- slowing surface water runoff,
- increasing wildlife diversity, and
- reducing flood and ice damage to the stream channel and adjacent lands and structures.

[3]National Pollution Discharge Elimination System

Activities that can or are likely to harm bank vegetation should be avoided. Buffer areas 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 vary from 50 feet along streams to 100 feet around lakes and larger ponds. These 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.

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. Table 6.3 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 percent 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-existing small lots, where it would be difficult to meet desired buffer widths.

Table 6.3 Recommended Minimum Buffer Widths

Slope of Adjacent Land	Seasonal (Intermittent) Streams, Permanent Streams (< 10 feet in average channel width)	Lakes, Ponds, Rivers, and Streams (> than 10 feet in average channel width)
00-10%	25 feet	50 feet
11-20%	45 feet	70 feet
21–30%	65 feet	90 feet
31–40%	85 feet	110 feet
40+%	Additional 20 feet for each 10%	Additional 20 feet for each 10%

Source: VT Fish & Widlife Dept. *How to Include Fish and Wildlife Resources in Town and Regional Planning.*

Flood Plains

A significant proportion of Waterbury Village and some areas of the town lie in the Winooski River and Thatcher Brook flood plains (Map 2-3). Major floods occurred in the Winooski River valley in November 1927, March 1936, and September 1938. The 1927 flood was caused by a combination of heavy rain and saturated soils and resulted in a tremendous loss of life and property.

Flood control reservoirs on three tributaries to the Winooski River now 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, but little damage has been reported since the completion of these flood control projects.

Land uses and public investments in Waterbury's flood plain 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. 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.

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. 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.

Wetland Functions

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, and
- contribute to open space and scenic beauty.

Class One 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 One wetlands have been identified in Waterbury.

Class Two 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 "Vermont Significant Wetland Inventory Maps" for each town (Map 2.3).

Class Three 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 One wetlands, and a 50-foot buffer zone around all Class Two wetlands. The rules also establish conditional uses allowed within regulated wetlands and associated buffer zones. The town does not currently regulate wetlands, but is required to forward local permit applications that may impact mapped wetlands to the Vermont Wetlands Office. 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.

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. Recent drought conditions have dropped water tables, affecting some area groundwater supplies – particularly for shallow, dug wells. Well log data are maintained by the state.

Since 1985, the delineation of public **Source Protection Areas** (SPAs) has been required by the state 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 below 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.

Table 6.4 Waterbury Public Water System Source Protection Areas

WSID#	Water System Name	System Type	Source #s	Approved SPP
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: VT Dept. of Environmental Conservation, 2/02

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 emergencies. A source protection plan 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.

6.3 Soils & Development Suitability

Waterbury's soils are largely derived from glacial till. Details regarding the distribution of soil types, their characteristics and 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.

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 (see Map 2-6). 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% – may open up additional upland areas to development.

6.4 Mineral, Sand & Gravel Resources

Bedrock materials most frequently found in Waterbury are schist, gneiss, quartzite, phyllite, greenstone, amphibolite, serpentinite, talc-carbonate, 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. That pit is leased to the town and used for road maintenance, and by the owner for private (non-commercial) purposes.

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, their 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.

6.5 Agricultural Resources

Waterbury has three active dairy farms, in addition to several sheep, Christmas tree, maple sugaring, small-scale fruit and vegetable, and part-time beef operations. While the economic impact of agriculture is minor compared with historic trends, the contribution of farming to the community's scenic landscape and sense of place is profound.

Prime agricultural lands, which are usually well-drained and level to moderately sloped, tend to also 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.

This sentiment was echoed by the 85.6% of the respondents to the 2001 Town Plan survey who agreed that Waterbury should take specific efforts to protect its prime agricultural lands (54% *strongly* agreed). Less than 4% disagreed and 10.6% had no opinion or did not answer the question. This reflects a slight increase in local support for preserving agricultural lands since the previous community survey was conducted in 1989. The percentage of survey respondents who indicated that farming is a business activity that should be encouraged in Waterbury was slightly lower – 72.8% – although 18.3% of the respondents either had no opinion or did not answer that question.

As in the past, 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 (see Map 2-1). 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). 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.

Development around active farms has the potential to impair their long-term viability. New developments may increase the speculative and assessed value of adjoining farmland, thereby increasing

land costs and jeopardizing the economical viability of local farms. Residents of surrounding development may also consider farming activities a nuisance, and urge their abatement. As a result, Vermont has adopted a "right-to-farm" law limiting nuisance complaints, a "current use" taxation program to provide property tax relief on enrolled land, and limits on municipal authority to regulate farming practices. Land development allowed around active farming operations should either complement, or otherwise not interfere, with farming operations.

6.6 Forest Resources

The total acreage of Waterbury's forestland is estimated to exceed 25,000 acres (nearly 80% of the town). This includes woodland associated with existing residential uses. Of this, 13,312 acres are held by the state as state forest or state parkland. These lands are managed for timber production, recreation and wildlife habitat.

Of the forestland in private ownership, 3,476 acres are currently enrolled in the state's current use program, which enables owners of productive forest or agricultural land to be taxed at the land's use, rather than market, value. The amount of land enrolled in this program has declined from 4,732 acres enrolled in the program in 1990. Enrolled lands are managed according to an approved forest management plan. The state also requires permits for cuts on any forestland involving 40 acres or more.

Waterbury's forest resources contribute to the community's economy and quality of life and should be protected from incompatible uses. They provide raw material for lumber industries, wood products and fuel for heat. They also help maintain water quality in streams and rivers, provide habitat for a variety of wildlife, and serve as an important recreational resource for hikers, hunters, cross-country skiers, snow-mobilers and nature enthusiasts. Finally, Waterbury's wooded hillsides and ridgelines are widely appreciated for their contribution to the area's panoramic vistas.

Recent development patterns in surrounding communities, and changes in Vermont's on-site septic rules, suggest that Waterbury's privately held, forested upland areas may be at increased risk from clearing, subdivision and land fragmentation, and incompatible types of development.

6.7 Wildlife Habitat

Generally, fish, wildlife, and recreational resources are a major component of the area's tourist-related interests and income. In addition to local residents and visitors who actively hunt, hike, fish, and camp in Waterbury, there are even larger numbers of people who are involved in or take pleasure from passive wildlife observation, or from the knowledge that we share our community with diversity of species. According to the 2001 community survey, over 86% of respondents indicated that the town should take specific efforts to protect wildlife habitat. Less than 2% of respondents disagreed with this sentiment.

Increasingly suburban patterns of development usually result in landscapes characterized by small, remnant patches of woodlands. 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 (Deer Wintering Areas)

Deeryards 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. Areas along the north side of I-89 near the Little River and by Perry Hill appear to be significant deer wintering ranges. Barnes Hill also appears to host significant deer habitat. According to the Vermont Fish and Wildlife Department, wintering areas do not change significantly between years and 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 Loomis Hill and Perry Hill areas of the Worcester Mountain range, including Hunger and Owls Head Mountains, 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.

To ensure the survival of the black bear (and other species with similar habitat needs), Waterbury's remote forestlands should be protected from intense human habitation. 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.

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 VT Department of Fish & 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.

Other Wildlife

Evidence of other wildlife species indicates that Waterbury appears to have a healthy moose population and is also home to fox and bobcat. Moose have been sighted in the Loomis Hill, Kneeland Flats, Perry Hill, and Shutesville Hill areas. Increasing moose populations, and habitat and travel corridor fragmentation, may also result in increased vehicular collisions along major roads.

Endangered & Unique Habitats

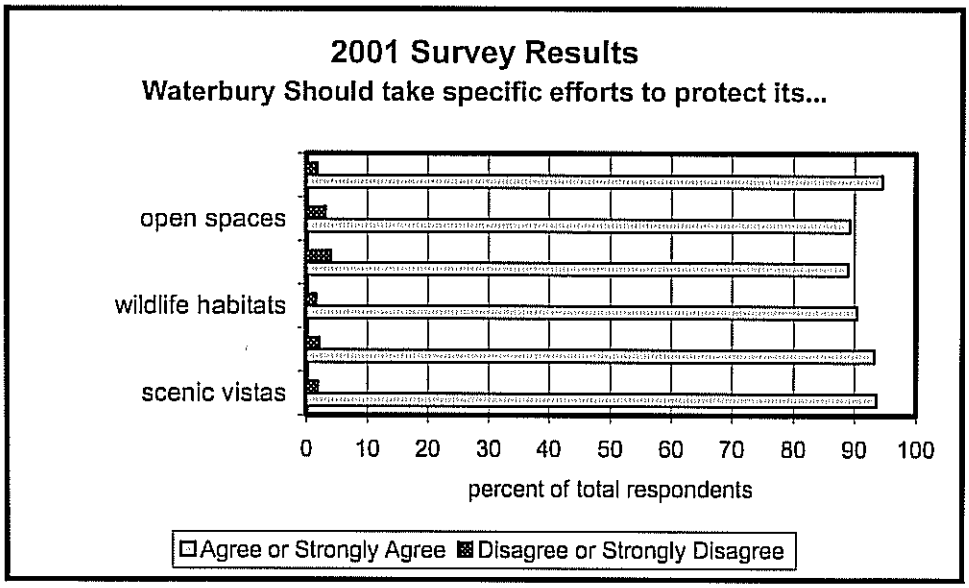
Rare plants and animals can provide insight into Waterbury's distant past and serve as an indicator of environmental quality. Some species provide compounds for medicines and agricultural or industrial products, while others may simply add an uncommon beauty to the landscape

In terms of unique habitats, according to the Nongame and Natural Heritage Program (NNHP), the only documented significant natural community is located near the "Middlesex Notch Acidic/Circumneutral Cliff" (Map 9). It is apparently "among the best example of this natural community type in the state and/or county." The NNHP has not conducted a systematic survey of Waterbury and cautions that the information may not be complete.

6.8 Open Lands & Scenic Resources

Open land – whether it's farmland, forestland, wetland, ledge, 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, public support for protecting Waterbury's open spaces and natural and scenic resources is overwhelming. Nearly 90% of respondents agreed that the town should take specific efforts to protect all of the resources identified on the survey. Fewer than 5% of all respondents disagreed that such actions should be taken.



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.

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.

The higher points in Waterbury are visually prominent. Development and the removal of vegetation will be more noticeable at these elevations and on prominent hills and ridgelines than at lower elevations. Waterbury should assess the importance of these areas, evaluate the effects development could have on them, and take steps to ensure that development occurs responsibly, in context with its environment.

6.9 Goals, Objectives and Actions

Goal 1

Protect Waterbury's finite and renewable natural resources, and promote sound stewardship of public and private lands.

Objectives

1.1 Protect the ecological health and stability of surface and ground waters as development occurs.

1.2 Protect the economic and ecological viability of Waterbury's forest and agricultural resources.

1.3 Protect Waterbury's wildlife resources and discourage the fragmentation of large forest blocks.

1.4 Reduce loss of soil due to erosion and development.

1.5 Protect and enhance Waterbury's visual character and aesthetic resources.

1.6 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.

Actions

Encourage the re-established Waterbury Conservation Commission to work with the Planning Commission and undertake the following activities.

A. Water Resources

1. Regulate or prohibit road salt storage areas in the 100-year flood hazard area, 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. Continue to enforce Waterbury's Sewage Ordinance to regulate septic system siting and design.

B. Wetlands

1. Inventory wetlands to identify their location, function, and relative importance to the ecology of the area.

2. Protect wetlands by maintaining an undisturbed buffer strip of natural vegetation around the wetland edge and by minimizing runoff and direct discharge

3. Notify the Agency of Natural Resources Wetlands Office if a proposed project may impact significant wetlands in Waterbury.

C. Shorelands & Streambanks

1. Review Waterbury's land use and development regulations to ensure that development along stream banks and shorelines is controlled to prevent point and non-point pollution, minimize negative aesthetic impacts, and to protect riparian habitats. Incorporate adequate setback distances and vegetative buffer strip standards for streambanks into development review regulations. Consider techniques for stream crossings, such as bridges and culverts, in order to minimize streambank disturbance.

2. Evaluate erosion of Waterbury's lake shores and streambanks in order to prioritize and correct existing problems.

D. Steep Slopes / Hillsides

1. Development should be limited 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.

2. Review development of ridgelines and hillsides for its visual impacts, and delineate an overlay district to reduce the impact of development on ridgelines and steep slopes.

3. Work in partnership with neighboring communities to protect the Worcester Mountain Range.

E. AGRICULTURAL and FOREST RESOURCES

1. Support the continuation and development of agricultural and forestry operations in Waterbury.

2. Inventory and map Waterbury's prime agricultural soils in order to better understand how land use decisions may impact agricultural potential.

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

4. Encourage participation in the Vermont Current Use Taxation Program

5. Encourage the clustering of development to maintain the integrity of large forest blocks and agricultural resources through the site plan review process.

6. Work with local and state land trusts to encourage land acquisitions and conservation easements to preserve Waterbury's agricultural and forestry lands in perpetuity.

7. Consider the establishment of a Waterbury conservation fund.

E. Wildlife Resources

1. Maintain buffer areas between development and deer wintering areas to ensure the habitat's ability to protect deer and other wildlife species, particularly during harsh weather conditions.

2. Maintain and continue to inventory and map Waterbury's wildlife habitats, including deer wintering areas, bear habitat, and rare and endangered plants and animals, to better assist in land use decision-making and development reviews.

3. Encourage development of a local Keeping Track organization in Waterbury to involve young people in the process of wildlife inventory.

4. Reduce negative impacts and conflict between domestic animals and wildlife by enforcing animal control laws and minimizing development near wildlife habitats.

5. Protect large tracts of undeveloped land and safeguard and maintain wildlife corridors between these tracts.

G. Open Lands and Scenic Resources

1. Minimize the adverse impacts that development within the Route 100 Corridor may have on natural, scenic, and historic features. Encourage the conservation of open space and scenic resources along the corridor.

2. Consider the potential visual impacts of development on scenic vistas.

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

H. Mineral Resources

1. 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.

CHAPTER 7. ENERGY

7.1 Overview

Waterbury's economic and social well being depends upon the availability of reliable, affordable, and sustainable energy sources. Every individual, home, office, and business relies on some sort of fuel or energy for transportation, heating, and the operation of machinery and appliances. International events have reminded the nation that too heavy a reliance on any one energy source or type can leave the population vulnerable to market changes and shortages.

Factors influencing the cost and availability of energy are largely beyond the control of this community. Changing technologies and evolving national and state energy policies – which include electric industry restructuring, demand-side management, and the promotion of cleaner, more efficient and renewable energy sources – all have an effect on local energy supplies. There are, however, several things Waterbury can do to influence its energy future, particularly with respect to energy conservation, the energy efficiency of proposed development, and the diversity of energy sources.

7.2 Energy Demand

Statewide Trends

There is little information available on local energy use but, given available data, local use likely reflects state and national trends. According to information provided in *Fueling Vermont's Future,* the state's 1998 comprehensive energy plan, overall energy use continues to escalate statewide. This is largely due to growth in fuel consumption for transportation, which has increased dramatically with increases in numbers of cars and vehicle miles traveled. Commercial and industrial energy use has seen the most significant increases, reflecting recent periods of strong economic growth. Residential use, on the other hand, has increased more slowly, in part due to more energy-efficient residential construction and appliances.

Table 7.1 Vermont Energy Use by Sector (TBTUs)

Sector	1980	1990	1994	% Change 1980-90	% Change 1990-94
Transportation	33.91	42.10	50.75	24.2%	20.5%
Residential	31.52	31.53	34.63	0.0%	9.8%
Commercial	10.36	11.99	15.24	15.7%	27.1%
Industrial	11.69	12.42	14.16	6.2%	14.0%
Total	87.48	98.04	114.7	12.1%	17.0%

Source: VT Dept. of Public Service, *Fueling Vermont's Future*, 1998. TBTU =Thousand BTUs.

Energy use varies by sector. Road transportation accounted for 43% of Vermont's total energy use, and space heating another 28%. Water heating (9%), process heat for industrial purposes (8%), and other miscellaneous uses (lighting, air conditioning, appliances, etc.) made up the rest. Principal uses by sector are provided in Table 7.2.

Table 7.2 Principal Energy Uses by Sector in Vermont

Sector	First	Second	Third
Residential	Transportation	Space Heating	Water Heating
Commercial	Transportation	Space Heating	Lighting
Industrial	Process Heat	Transportation	Motors

Source: VT Dept. of Public Service, *Fueling Vermont's Future*, 1998.

Energy use also varies by source. Petroleum is by far the predominant fuel consumed in Vermont, and its use is expected to grow. Total electrical energy use has also risen steadily, despite efficiency gains. Propane (LPG) use is also increasing, while wood, primarily for home heating, has fluctuated over the years.

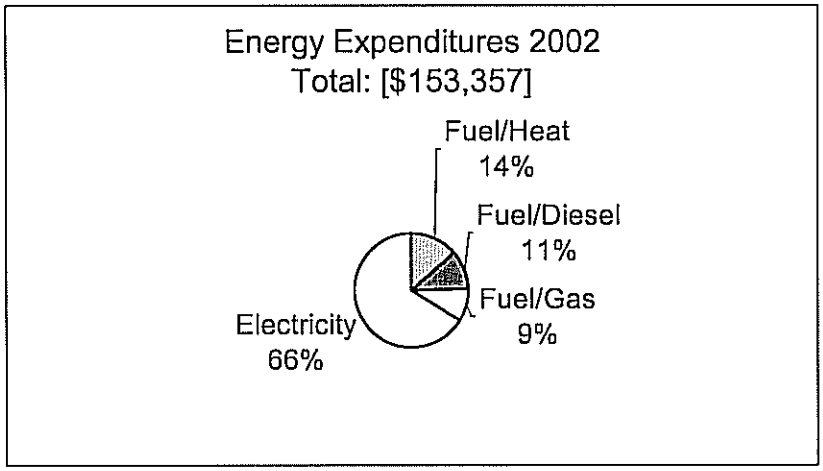
Total energy use statewide is expected to increase 54% between 1990 (base year) and 2015. This increase will continue, driven largely by growth in transportation energy use, itself resulting from increased cars and trucks on the road, increased miles traveled, and dispersed patterns of development. Future energy expenditures are also expected to rise more quickly, at 1.7% per year or 54% between 1990 and 2015, due to rising energy prices and increasing consumption levels.

Local Use

Municipal energy expenditures, and available census data regarding home heating and vehicle use, give some indication of local energy use. At present, no information concerning local commercial and industrial energy use is readily available.

Municipal Expenditures. In 2002, the Town and Village of Waterbury expended over $153,000 on energy for municipal purposes, including electricity, gasoline and diesel fuel, and heating fuel. The operation of municipal water and wastewater systems accounted for $83,358 or 54% of this total School energy expenditures were not reported separately.

Transportation-related expenditures made up 20% of total municipal energy expenditures – most of which supplied the highway department. Space heating (heating fuel) expenditures comprised another 14% of the total. Electicity expenditures made up 66% of the total energy costwith 68% of the this total municipal



electricity cost attributed to water and sewer system operation.

1990 Census data for occupied village residences, which tend to be older and less energy efficient, indicated that a relatively higher percentage were heated with fuel oil (58%), but fewer (<5.0%) were heated with wood. The proportion heated with gas (27.2%) or electricity (9.2%) reflected town-wide use.

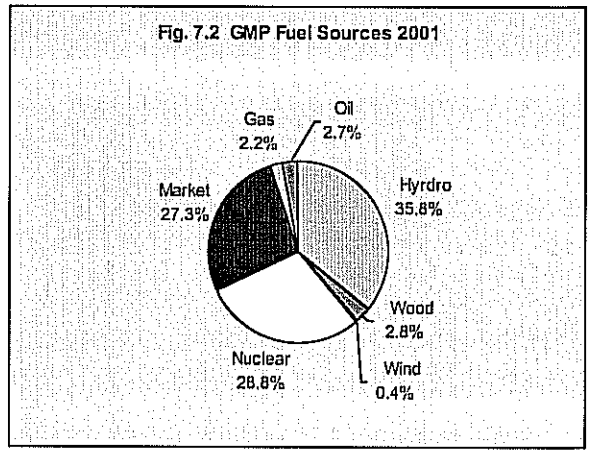
2000 US Census data regarding home heating fuels were not available as of this writing. Information provided in the *Vermont Residential Fuel Wood Assessment Report 1997-98,* issued in 2000 by the Department of Public Service, suggests that oil remains the primary fuel for residential space heating in 56% of Vermont households, while in 31% wood is still used for primary or supplemental heat. Solar energy is a principal heating source in less than one percent of homes.

As is the case in Waterbury, the use of electric, oil, and wood heat for space heating is decreasing statewide in relation to the use of propane and natural gas. This may reflect new home construction, which is incorporating cleaner, more energy efficient fuels and heating systems, and more passive solar design techniques. Many homes built in 1960s and 1970s relied on inefficient electric heat, a practice that is generally no longer allowed under new 1998 state energy standards for residential construction. These standards apply to all new homes, and to additions of over 500 square feet. Electricity, however, remains the primary source for heating water.

Transportation. The twentieth century has been marked by the American society's increasing reliance upon the automobile as the primary mode of transportation, and Waterbury residents are no exception. This has strong implications for fuel demand and the impact of transportation on the environment. Greater fuel consumption is resulting in increased fuels emissions, including greenhouse gases, which affect climate and air quality locally, nationwide, and globally.

In 1990, only 16.2% of Waterbury commuters carpooled to work – more than 70% drove alone. More recent 2000 community survey results suggest that Waterbury residents are also willing to travel farther for shopping on a weekly or monthly basis – to Burlington, Williston, Berlin, and Montpelier. Waterbury is witnessing a large increase 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, annual average daily vehicle miles traveled (VMTs) on state roads through Waterbury have increased significantly in recent years – from 341,978 in 1990 to 431,018 in 1998 (26%). 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.

7.3 Energy Supply



Electricity

Green Mountain Power Corporation (GMP), the second largest electric utility in the state, is the primary supplier of Waterbury's electrical power. Almost every home and business is served by Green Mountain Power, with the exception of a few residences on Gregg Hill that are served by Stowe Electric.

The near-term electric power supply is relatively stable. GMP presently owns or has entitlements to generating capacity that is more than sufficient to meet expected demand for power. Renewable resources – hydro (including electricity from Hydro Quebec) wood, wind – make up the utility's largest energy source (39%). GMP was instrumental in developing a utility-scaled (6.1 MW) wind generating station near Searsburg, Vermont.
The Vermont Public Service Board regulates utility rates. At the end of 2000, GMP's average rate for all electricity delivered was 9.52 cents per kilowatt hour, compared with a New England average of 9.82 cents per kWh. Rates were last increased by 3.42% in January 2001 and are to remain frozen through 2003.

In recent years the state legislature has considered, but not enacted, utility restructuring legislation that would allow for greater consumer choice in electric service and more competitive rates, at both retail and wholesale. While the state will probably not implement major reforms in the near term, the creation of a competitive wholesale market in New England will nevertheless have an effect on the Vermont's energy future, and actions to mitigate the environmental and price risks of electricity will need to be taken.

Increasing reliance on end-use efficiency and renewables is among the most prudent steps that Waterbury and its citizenry can take to shield themselves from those risks.

Fossil Fuels

Waterbury has several local oil and gas distributors that supply homes and businesses with fuel. Coal is also available, on a much more limited basis. Eight gas stations in town serve the traveling public.

Fuel prices are typically higher in northern than in southern New England. Regional and national fuel shortages in 2000-01 resulted in significant increases in the costs of gasoline, diesel fuel, and heating fuel – leading 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. Average petroleum prices – which in December 2000 reached $1.83 per gallon for diesel fuel, $1.58 per gallon for unleaded gasoline, and $1.50 per gallon for fuel oil – have since dropped by about 20%, the result of warmer weather and replenished supplies (*Vermont Fuel Price Reports*, Vermont Department of Public Service). Such events, however, highlight our area's heavy reliance on limited sources and types of fuel and leave the local population – particularly the low income population –vulnerable to fuel shortages and price fluctuations.

The environmental impacts of such heavy reliance on petroleum are also precipitating state and national efforts to diversify our energy portfolio, to increase the use of more efficient, cleaner burning natural gas systems, co-generation systems (which generate electricity and heat), and renewable energy sources. The New England independent system operator (called ISO-New England) anticipates that most new power plants in New England will be fired with natural gas. Vermont is also actively seeking, at the federal level, greater efficiencies and pollution controls for mid-western coal-burning plants in an effort to improve local air quality.

Renewable Energy

Waterbury has many potential renewable energy resources available, but the extent to which they can be harnessed and replace other sources of energy is not clear. The availability since 1998 of "net metering"– which allows utility customers to use small-scale renewable energy systems to generate power for their own use and sell any excess back to the utilities – is intended to support increased use of renewable energy. Tax credit proposals in proposed legislation are also intended to encourage the use of renewable energy sources.

Wood. Wood is Waterbury's most abundant indigenous energy source. It is a relatively low cost source of renewable energy that is not disrupted by embargoes, high transportation costs, or tariffs. Town-level data are not available, but Washington County homes using wood for primary or supplemental heat burned an average of 30,000 cords per year – or 1.36 cords per household per year – between 1986 and 1998 (*Vermont Residential Fuel Assessment: 1997-98*, Vermont Department of Public Service 2000). Wood is not currently used for the heating of local school or municipal buildings, but under state-sponsored programs, several Washington County schools have shifted to biomass (wood chip or pellet) heating systems – including Barre, Berlin, Calais, and East Montpelier. Automated, wood-fired systems are proving to be an affordable heating alternative to conventional oil systems.

There are potential negative side effects to extensive wood harvesting and burning, among them soil erosion, sedimentation, water pollution, and habitat impairment if forests are not managed properly, and the degradation of air quality and an increase in the number of homes being destroyed and lives lost by accidental fire. These are, however, easily manageable risks. Waterbury has a large amount of woodland that, under effective management, could supply a reliable, local source of wood heat. High-efficiency wood stoves and heaters, if properly installed and maintained, can provide safe and effective home heating. Catalytic converters can be installed in wood stoves to reduce harmful emissions and particles

that are released into the atmosphere. Wood stoves sold since 1990 must be airtight and meet federal EPA requirements for emissions.

Solar. Solar energy is one of a few energy sources that are not depleted from use. Advances in solar technology have made it easier, and increasingly affordable, for solar energy to be harnessed to heat water, homes, and to furnish electricity. Although the use of solar energy in Waterbury for these purposes is nominal at best, the town has many south-facing slopes that could provide access for both passive solar heating and for solar power.

The contribution of solar energy to Waterbury's total energy picture is likely to increase only modestly over the next few years. More structures are being designed to take advantage of passive solar energy for heat and light; however, not all structures are suited to support the panels and systems needed to collect and store solar energy. Up-front costs for materials and installation remain relatively expensive for the average homeowner, and Waterbury may not have enough sunny days per year to either justify the expense or ensure a reliable source of energy. The use of photovoltaic cells, which convert sunlight directly to electricity, may become more viable in the future with advances in technology.

Hydropower. The rivers and tributaries in Waterbury provided power for the town's earliest mills and manufacturing plants in Mill Village and Colbyville. Today, those industries are gone. Green Mountain Power Corporation operates two hydroelectric facilities in Waterbury – Little River #22 at the Little River Dam and the Deforge Hydroelectric Station at Bolton Falls. Green Mountain Power, as noted, also purchases a good portion of its electric power from Hydro-Quebec.

Hydropower was long considered a relatively clean source of renewable energy. The environmental impacts of dam construction, operation and management – including the impacts of changing water levels on river flow, levels, temperature and aeration, and fisheries and adjoining riparian and shoreland areas – are now given much more weight in state and federal dam relicensing procedures. There are few if any available sites for new utility-scale hydropower plants; but there may be opportunities to upgrade existing systems and to develop smaller "micro-hydro" systems that supply individual users.

Wind. Wind is another source of renewable energy that, with improving turbine technologies, is receiving increasing interest statewide. In the late 1990s the Department of Public Service, in association with Green Mountain Power and other energy interests, conducted a statewide wind assessment to support further wind energy development. Mount Mansfield was one of four sites chosen. Winds at this site, mainly from the west, averaged more than 20 miles per hour most months, and more than 25 mph in winter months.

Wind is now considered one of Vermont's most promising renewable resources – the technology is well developed and continuing to improve, and costs are decreasing rapidly. As noted, GMP built the first "wind farm" in Searsburg, which currently supplies 6.1 MW of power to the utility grid. The aesthetic and environmental impacts of wind generation are still under consideration, but recent advances in structure design have dramatically reduced the visual, aural, avian, and wildlife habitat impacts of wind facilities.

Other. Other energy sources currently under consideration by the state include methane recovery systems that convert farm manure and landfill gas to usable energy, and alternative fuels (biofuels).

7.4 Energy Conservation

Since 1990 energy conservation programs have been actively pursued by the state to increase energy efficiency, reduce use, and thereby increase available supply. In the 1990s, under order of the Public Service Board, Green Mountain Power and other electric utilities developed a variety of demand-side

management (DSM) programs for their customers, which have since been consolidated into one statewide energy efficiency utility. Over the last decade the state also passed energy standards for residential and commercial construction, which are administered through the Department of Labor and Industry. Net-metering to encourage the use of renewables went into effect in 1998, and legislation is now pending to promote their greater use though tax credits and other state support programs.

The need for increased energy efficiency and energy conservation – particularly in Waterbury's older historic and municipal structures – has also been recognized locally, in past housing studies and more recent redevelopment efforts. A number of programs are available to local residents and businesses to increase energy efficiencies and thereby reduce energy costs.

Efficiency Vermont

Efficiency Vermont, created by the Public Service Board in 1999, consolidates efficiency programs formerly offered by individual utilities into one statewide utility. The "efficiency utility" is funded through an "energy efficiency charge" (EEC) that is paid by customers (1.48% for GMP and 2.07% for Stowe Electric customers in 2000). Efficiency Vermont operates independently of the electric utilities, and offers energy savings programs, technical support and some financial incentives. Brief descriptions of current programs are provided in Table 7.4.

Table 7.4 Efficiency Vermont Programs

Program	Services
Efficient Products	Information, coupons and rebates for energy efficient products for homes and small businesses
Energy Star Homes Program	Technical assistance, rebates to homebuilders and buyers for new home construction
Commercial Energy Opportunities	Technical assistance, financial incentives for energy efficient equipment, systems and design; assistance with Act 250 compliance
Dairy Farms	Technical assistance, financial incentives and low interest financing for the installation of energy efficient equipment
Residential Energy Efficiency Program (REEP)	Free technical assistance, energy audits, and financial assistance for new and existing low-income multi-family housing
Services for Income-Eligible Vermonters	Assistance for low-income households who are participating in the state's weatherization program, including assistance with the conversion of space heating systems, and the installation of energy-efficient products
Emerging Market Initiatives	Evaluation and testing of innovative efficiency technologies and practices to promote their use within targeted market sectors.

Transportation

As gasoline prices fluctuate and automobile emissions continue to erode air quality, facilities and programs should be maintained to encourage commuters to share rides and to reduce overall dependency upon the automobile. In 2003 the Central Vermont Transportation Association, also know as Wheels Transportation, went into bankruptcy and the transit service was taken over by the Green Mountain Transit Association (GMTA) under the ownership and direction of the Chittenden County Transportation Authority. GMTA provides information on ride sharing, carpooling, van pooling, and special transportation needs. Public transportation services delivered through *Wheels Transportation* expanded in recent years to include limited fixed route service between Waterbury and Montpelier. In FY2000, *Wheels* provided 10,554 rides to 287 Waterbury residents, and 159 carpool matches. GMTA is continuing these services and has added a Montpelier to Burlington bus route with a stop in Waterbury.

The State of Vermont also has a commuter parking lot off of Stowe Street, which is moderately used. Residents commuting to Burlington, Montpelier, or other areas have the opportunity to meet there and share rides. Alternatives should be explored and made available to residents and travelers for safe, convenient, and enjoyable means to get from place to place within and beyond Waterbury.

Waterbury could also take advantage of municipal programs offered through EVermont, a division of the Agency of Natural Resources, which advocates for cleaner, more energy sustainable alternative fuel vehicles (AFVs). Alternative fuel vehicles include those powered by electricity, natural gas, propane, biodiesel, and ethanol. EVermont, in association with the Agency of Transportation, currently offers electric vehicle (EV) leasing programs to towns, businesses and institutions. It is also involved in testing a variety of alternative fuel technologies for use in Vermont.

Land Use

More concentrated development and land use patterns can reduce reliance on the automobile, vehicle miles traveled, and inherent system energy costs. "Cluster" development, where buildings and infrastructure (such as roads, power) are concentrated in specific areas rather than spread out, generally disturbs less land, and requires less fuel, material, and energy to both build and maintain. It also encourages people to walk, rather than drive, to nearby destinations. Waterbury currently regulates subdivisions through zoning; separate subdivision regulations, which could include such siting standards, have not been adopted. Waterbury has adopted planned unit development (PUD) provisions that encourage the clustering of development.

At the site level, landscaping and building orientation can strongly influence the amount of energy consumed by a development. Siting buildings to have a southern orientation, with protective wind barriers and deciduous vegetative cover, can significantly decrease the amount of energy consumed and lost. Siting and landscaping standards for energy conservation could be considered under site plan, conditional use and/or planned unit development review as appropriate.

Equipment & Building Improvements

In addition to the adoption of energy codes for residential and commercial and construction, there are a number of programs the state currently has in effect to promote municipal energy efficiency and use of renewable energy resources. These include, but are not limited to EVermont electrical vehicle leases, the School Energy Management Program (SEMP) targeted to school administrators, and a program for the conversion of school heating systems to burn wood chips, as has been applied in other Washington County schools.

The state has also undertaken, under its Community Renewable Energy (CORE), the development of biomass-fired "district" energy systems. This program converts existing district heating systems, such as the one at the Waterbury State Office Complex, to biomass systems through the installation of cleaner-burning, more energy efficient wood-fired, cogeneration plants. To date, such systems have been installed in Burlington and Montpelier.

"Life cycle costing" – the fiscal analysis of purchase, construction, maintenance and operating costs of capital equipment and facilities over their anticipated life – is especially effective for evaluating the costs and benefits of energy efficient design and technologies. Such costing methods often demonstrate that long-term energy savings more than offset the higher initial purchase or construction cost of energy-efficient equipment or building improvements. Municipalities are encouraged to apply life-cycle costing when considering capital investments in equipment and new or renovated facilities.

7.5 Energy Assistance Programs

Energy costs have become an increasingly larger percentage of all budgets – not only for heating and electricity, but transportation as well. As previously noted, there are technical assistance programs

available through Efficiency Vermont to assist businesses, farmers, municipalities, homeowners and renters at little or no cost.

Discounts on heating oil and kerosene are available to members of Vermont Energy Investment Corporation, a nonprofit fuel buying cooperative that negotiates with local fuel companies for bulk purchase discounts. Membership is open to Central Vermont residents for a nominal annual fee.

Additional programs are available to Waterbury's low-income residents, who can least afford higher energy costs. These programs, administered through Central Vermont Community Action Council, include seasonal fuel assistance to help low-income households pay winter heating costs, emergency fuel assistance supported in part through WARMTH donations collected by utilities, and free weatherization services to reduce heating costs. Additional programs in support of low income housing and households are available through Efficiency Vermont. Waterbury can assist such programs through local information efforts and continued municipal support for CVCAC.

7.6 Goals, Objectives and Actions

Goal

Reduce the total costs of meeting energy needs in Waterbury, while ensuring public health and safety, and environmental protection.

Objectives

1.1 Conserve energy resources through the cost-effective deployment of end-use energy efficiency, renewables, and alternative sources of energy and through compliance with energy efficient building standards.

1.2 Encourage development patterns that minimize the use and waste of energy.

Actions

1. The Planning Commission will evaluate and make recommendations regarding planning and regulatory mechanisms that encourage and assist applicants to construct new development that takes advantage of energy efficiency and alternative energy technologies, as appropriate.

2. The Planning Commission will evaluate and, as appropriate, propose amendments to the bylaws, among them the following:
   a. Regulations for the siting of systems that make use of renewable energy, such as solar panels and windmills; such regulations may allow for flexibility in the application of setback, height, and other requirements, and they should also allow for building design and placement that maximize passive solar energy use.
   b. Review criteria that require the applicant and Planning Commission to consider the impacts of new development on energy use in the community, through the development's direct use of fuels, production of waste, utilization of transport, and land use.

3. When considering changes to the bylaws in general, the Planning Commission and legislative bodies will consider the impacts of the proposed changes on the use of energy in the municipality, particularly with respect to transportation and the reliance on single-occupant automobile use.

4. The municipality will actively support Vermont's adoption of improved building codes and other standards that reduce energy waste and promote energy efficiency.

5. The municipality will consider energy use and efficiency when making municipal investment and expense decisions. In particular, the municipality will work with local utility companies and Efficiency Vermont (or its successor) to develop and implement strategies for cost-effective reductions in energy use, in both municipal facilities and those of residents and businesses.

6. The municipality will actively seek to increase the utilization of ride-sharing, mass transport, alternative-fuel vehicles (such as Vermont's E-Vehicles), and other energy-saving strategies. The municipality will also explore opportunities for purchasing energy and fuel on a community or cooperative basis.

7. The municipality will actively support implementation of the Energy Element of the Central Vermont Regional Planning Commission regional plan.

CHAPTER 8. TRANSPORTATION

Waterbury's reputation as "Vermont's recreation crossroads" stems from the community's strategic location relative to several important transportation corridors and proximity to major resort destinations. Waterbury Village is situated at the confluence of 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. This chapter provides an overview of how the existing transportation network functions and how it might be improved.

8.1 Road & Highway Network

Reliance on the private automobile for transportation has grown steadily over the past 50 years. This has had far-reaching implications on 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 Table 8.1.

Table 8.1
Mileage Summary of State & Local Roads

Classification	Mileage (2001)
I-89	8.3
State/U.S. Highway	10.3
Class 1	1.4
Class 2	7.9
Class 3	38.6
Class 4	6.9

State Highways

Interstate 89, which is maintained by the state transportation agency (VTrans), runs between the eastern portion of Waterbury Village to the western portion of the town. 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. The interchange, Exit 10, is located in the village and provides access to major tourist destinations, including Stowe to the north and the Mad River Valley to the south, both via Route 100, and to Bolton Valley to the west via Route 2.

Traffic on I-89 has increased steadily since permanent traffic counters were installed in 1975. In 2001, the interstate highway carried over 26,000 annual average daily trips (AADT) just north of Exit 10, an increase of 42% over 1991 traffic levels and 210% over 1975 levels. Increasing traffic volumes have caused some 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.,

U.S. Route 2 and VT Route 100 provide for regional through traffic and access to I-89. 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. 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.

As with I-89, traffic has increased steadily on both routes over the years. In 2000, VTrans estimated that Route 100 carried 14,900 average daily trips between Waterbury Village and Waterbury Center, an increase of 28% over 1990 traffic volumes. Traffic volumes on Route 100 north of Waterbury Village, through the town, are considerably higher than traffic volumes south of the village. According to the Vermont Route 100 Corridor Study, prepared for VTrans in 1993, 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 Rd., Hollow Rd., Howard Ave., and Laurel Ln.;
- the creation of a town road connecting Stowe Street with Guptil Road;
- installation of climbing lanes 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 1993 corridor study have been implemented (e.g., signalization of the Stowe Street/Blush Hill and Route 100 intersection, access management improvements) even though the study was not officially endorsed by the municipalities elected officials or voters. Other study recommendations are in the planning stages or may occur in the future. In addition to the recommended improvements, VTrans is planning to improve the junction of Route 100 and N. Main St. (Routes 2 and 100), and is considering the installation of a roundabout to better manage traffic flow through this busy intersection.

U.S. Route 2 and Route 100, which serves as Main Street through Waterbury Village, also carries significant traffic volumes. In 2000, the AADT in the village was approximately 11,000, an increase of 12% over 1990 levels. The most significant improvement planned for this highway is the reconstruction of Main Street in the village. That project, scheduled for construction in 2006, includes the burial of power lines and improvements to village sidewalks and streetscape. It should be noted, however, that the portion of Routes 2 and 100 that travels through Waterbury Village is a Class 1 road maintained by the municipality. Other anticipated improvements to Route 2 include planned resurfacing west of the village in 2005.

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 residents, and old lanes 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 Table 8.1; 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 (AASHTO) 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.

Table 8.2
Summary of Municipal Road Improvement Projects

Projects on VTrans TIP	Description	Schedule
Loomis Hill Rd (TH6) /Thatcher Brook bridge	Bridge rehabilitation	2003 tent.
Stowe Street (TH2) Dry Bridge	Reconstruct "Dry" Bridge over railroad, town will assume ownership of bridge	2004 tent.
Stowe Street (TH2)/Thatcher Brook Bridge	Bridge rehabilitation	unscheduled
Main Street Reconstruction	Reconstruct Main Street, to include burial of utility lines	2006 tent.

Waterbury's roads are generally in good shape and adequate to accommodate current traffic volumes. 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*, prepared by Community Planning & Design and dated April 1999, include the following:

- the up-grade of Railroad Street to provide an alternative access to Pilgrim Park;
- the construction of a new road connecting Pilgrim Industrial Park with Grenier Industrial Park and Demeritt Pl.; 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 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), and
- 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 2001, the town expended over $767,000 on the highway department (this figure includes the cost of maintaining parks and recreation facilities, estimated at less than 5% of the total).

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 new town garage, finished in 1998, has improved the highway department's ability to serve its maintenance functions and maintain the department's equipment. The old village garage, located behind the fire station, is used primarily by the police and fire departments. The existing salt shed located on that property is also still in use.

Waterbury residents are generally satisfied with the performance of the highway department. Over 75% of the respondents to the 2001 Community Survey rated the quality of road maintenance as excellent or very good.

The capital improvement program (CIP), adopted by the Selectboard on an annual basis, provides a detailed inventory, analysis, and recommendations regarding highway and fire department equipment needs in Waterbury. The CIP adopted in 2001 includes a nine-year schedule for the replacement of existing highway maintenance and fire department equipment and recreation field improvements.

Access Management

The frequency, location and design of highway accesses – or 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. 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.

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, wide 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.

8.2 Parking

Parking, or the lack of it, in the immediate vicinity of the Stowe Street and Main Street intersection has for many years been identified as an issue of concern in Waterbury Village. 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, should provide ample parking opportunities in this area.

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.

8.3 Pedestrian & 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 sidewalks to the Crossett Brook Middle School in neighboring Duxbury, and expanding pedestrian links to and within Pilgrim Park and the state office complex.

There are no sidewalks outside of the Village. 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 recommended the installation of curbs and sidewalks.

Table 8.3
Community Support for Recreation Paths

A Village & Town-wide recreation path should be expanded:	Strongly Agree/ Agree
as an alternative form of transportation	57.0%
for recreation	90.0%
to connect other communities	63.9%
to link residential areas with commercial areas	65.6%
to link residential areas with schools	74.9%

Source: 2001 Waterbury Community Survey

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 Rd. 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.

Respondents to the community survey indicated strong support for the expansion of a village and town-wide recreation path (see Table 8.3). Surprisingly, however, many respondents supported the expansion of a path network to provide pedestrian and bicycle links between residential areas and schools and commercial areas, but did not indicate as strong support for the transportation functions of paths. Because providing such links serves a key transportation purpose – and VTrans may be among the most important funding sources for new paths – the transportation functions of recreation paths should not be ignored.

Despite the limited availability of off-road paths, bicycle traffic is relatively heavy in Waterbury, especially during the spring and summer months. This is especially the case on Routes 2 and 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 State Route 100 north out of the village has shoulders that are suitable for bicycling. There are no bicycle paths or marked bicycle lanes on town and village highways and streets. Bicycle and pedestrian safety programs are promoted in the local elementary school.

8.4 Transit & 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 provides daily transit service linking Waterbury Village with Montpelier. Service currently includes three morning runs and three afternoon runs, with fixed stops at the Senior Center on Stowe Street, Vincent's Drugs, the train station, and the state office complex.

Interstate Bus Service

Vermont Transit provides bus provides service to major cities primarily north and south of Waterbury and to smaller towns and cities along the way. The bus stop is in Waterbury Village at the Depot Beverage store.

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.

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 should occur within the next 2 years.

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

[Note: the text of the chapter will describe the state's own transportation planning goals as set out in statute and will explain that Waterbury's plan is consistent with, and promotes, state policy. In addition, the text should explain that the municipality recognizes that transportation has profound impacts on the environment and that, in particular, the policies identified therein are intended to have beneficial effects on Waterbury's and the state's air quality.

State Planning Goals, 24 VSA Ch 117 4302: Provide safe, convenient, economic, and energy efficient transportation systems that respect the integrity of the natural environment, including public transportation options and paths for pedestrians and bicycles.]

Goal 1

Provide and maintain safe, efficient, and integrated transportation facilities and circulation.

Objectives

2.1 With guidance from the "Transportation Infrastructure, Parking, and Circulation Study" (Central Vermont Regional Planning Commission, April 1999), take steps to:

   a. Improve safety along roads, streets, and bridges, at intersections and pedestrian crossings, and for bicycles on roadways; and

   b. Identify and address parking deficiencies.

Actions

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 Road-Route 100 intersection.

2. 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-limit roadways.

4. Continue in its efforts to restore the Dry Bridge on Stowe Street.

5. Create traffic-calming measures, such as "green" strips, curbs, sidewalks for pedestrians, and shorter turning radii, where appropriate, for example, along 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, and enforcing short-term parking regulations.

7. Consider developing and proposing standards for the construction of private rural roads, for incorporation in subdivision or zoning regulations.

Goal 2

Improve and expand alternative, non-automotive means of transport.

Objectives

2.1 Improve pedestrian circulation.

2.2. Encourage use of bicycles

Actions

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

2. Require a minimum width of five feet, and wider where appropriate, for downtown sidewalks. Extend sidewalks to under-served areas.

3. 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.

4. 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.

Goal 3

Promote multi-modal transportation systems that will integrate (and facilitate transfer among) rail, bus, taxi, pedestrian, and bicycle traffic.

Actions

1. Continue to support the restoration of the Village Railroad Station and promote its use as a multi-modal transportation hub.

2. 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.

3. Use and should 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.

Goal 4

The transportation system should be planned and designed encourage development in designated growth areas.

Actions

1. Minimize the number of curb cuts and encourage shared curb cuts. Evaluate whether changes to the by-laws are needed in this regard.

2. 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.

3. Where appropriate, retain Class 4 roads for use as future recreational paths.

Goal 5

Encourage a high standard of aesthetics and functional quality for the transportation system.

Actions

1. Encourage tree plantings, green strips, and sidewalks, particularly in designated growth areas (the Village, Colbyville, and the Center).

2. Complete the Main Street Project, which includes the undergrounding of utilities from the Public Library to Park St., installation of curbs, repair and widening of sidewalks, etc., in the Village.

CHAPTER 9. COMMUNITY FACILITIES AND SERVICES

There are a variety of services and facilities that are integral to Waterbury's diverse cultural and community life. The Plan identifies a set of actions that can be taken to support and expand these resources.

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.

76.1% of 2001 Community Survey respondents gave Waterbury school facilities passing marks –48.8%% felt current facilities were adequate, and another 27.3% rated them "excellent."

After five years in full operation, 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 the 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.

School enrollment at Thatcher Brook has been steadily decreasing in recent years. This may be due in part to a decline in pre-school age population (0-4) since 1990, as reported from 2000 U.S.Census data. Total school enrollment for the 2000-01 school year was reported at 452, down from 495 (-8.8%) in 1997-98.

Comparative trends for other available educational indicators, as compiled and reported for each school by the Vermont Department of Education, are presented in Table 9.1. Average class sizes and student–teacher ratios have been getting smaller in recent years; however, they still exceed state averages (as reported for all grades). Special education rates are significantly lower at Thatcher Brook. Staffing levels have remained relatively constant over the last four years.

Educational Trends, 1997-2001

Table 9.1 Thatcher Brook Primary School					
	1997-98	1998-99	1999-00	2000-01	Vermont (most recent)
Participation					
Total Enrollment	495	477	464	452	102,049
Attendance Rate	95.5%	96.2%	96.0%	96.5%	94.7%
Class Size					
Average Class Size	21.8	20.1	17.0	18.8	16.6
Student/Teacher Ratio	16.8	16.0	14.5	15.5	12.0
Eligible Special Education	7.3%	7.1%	6.7%	8.8%	13.6%
Home Study (number)	6	3	4	7	1,819
Technology					
Students per Computer	DNR	9.5	5.5	NA	5.0
Internet Access	Yes	Yes	Yes	Yes	97% Yes
Type of Internet Connection	Dial-up	Direct Link	Direct Link	Direct Link	N/A
Personnel (FTEs)					
Classroom Teachers	22.70	22.12	25.90	22.80	6511.28
Other Teachers	8.8	9.68	8.10	8.30	2455.92
Instructional Aids	11.00	10.00	9.00	9.00	3540.00
Coordinators/Supervisors	0.00	0.00	0.00	0.00	184.00
Licensed Administrators	1.50	2.00	2.00	2.00	426.77
Administrative Support	1.50	1.50	1.00	1.00	520.00
Other	11.70	11.21	12.20	12.00	2873.91
Average Teacher Salary		$38,502	$34,034	$33,708	$38,254

Table 9.2 Crossett Brook Middle School					
	1997-98	1998-99	1999-00	2000-01	Vermont (most recent)
Participation					
Total Enrollment	343	327	361	360	102,049
Attendance Rate	96.7%	96.2%	96.1%	96.0%	94.7%
Class Size					
Average Class Size	19.2	23.5	23.4	20.3	16.6
Student/Teacher Ratio	13.7	12.4	13.3	13.8	12.0
Eligible Special Education	10.5%	17.7%	16.3%	16.7%	13.6%
Home Study (number)	1	0	2	2	1,819
Technology					
Students per Computer	DNR	DNR	DNR		5.0
Internet Access	N/AV	DNR	DNR		97% Yes
Type of Internet Connection	N/AV	DNR	DNR		NA
Personnel (FTEs)					
Classroom Teachers	16.00	16.00	16.00	16.00	6511.28
Other Teachers	11.00	12.30	13.20	12.00	2455.92
Instructional Aids	6.00	12.00	11.90	13.50	3540.00
Coordinators/Supervisors	0.00	0.10	0.20	0.20	184.00
Licensed Administrators	1.50	1.90	1.80	1.80	426.77
Administrative Support	1.50	1.50	1.00	1.00	520.00
Other	10.00	10.44	11.30	11.10	2873.91
Average Teacher Salary		$35,083	$32,488	$33,147	$38,254

Table 9.3 Harwood Union High School					
	1997-98	1998-99	1999-00	2000-01	Vermont (most recent)
Participation					
Total Enrollment	722	615	607	619	102,049
Attendance Rate	95.2%	93.9%	94.6%	94.4%	94.7%
Class Size					
Average Class Size	N/A	N/A	N/A	N/A	16.6
Student/Teacher Ratio	12.6	13.9	13.5	13.4	12.0
Eligible Special Education	13.2%	13.2%	14.3%	14.7%	13.6%
9-12 Dropout Rate	2.3%	2.5%	2.0%	1.3%	4.7%
Home Study (number)	3	2	6	6	1,819
Technology					
Students per Computer	9.6	3.5	DNR	DNR	5.0
Internet Access	Yes	Yes	DNR	DNR	97% Yes
Type of Internet Connection	Direct Link	Direct Link	DNR	DNR	50% Direct Link
Personnel (FTEs)					
Classroom Teachers	27.20	20.10	23.00	25.50	6511.28
Other Teachers	34.00	26.79	25.20	25.60	2455.92
Instructional Aids	22.20	15.50	12.70	17.60	3540.00
Coordinators/Supervisors	5.40	4.95	11.60	3.00	184.00
Licensed Administrators	3.00	1.80	1.80	1.80	426.77
Administrative Support	3.20	2.80	2.40	1.40	520.00
Other	22.30	18.70	18.90	20.80	2873.91
Average Teacher Salary		$42,998	$40,322	$41,023	$38,254
Mean SAT Scores					
Verbal		532	538	547	511
Math		507	513	535	506
% Seniors who took exam		60%	61%	68%	62%
Post Secondary Aspirations (Srs)					
4-Year College		57%	66%	63%	N/AV
2-Year College		14%	9%	12%	N/AV
Other School		3%	1%	2%	N/AV
Homemaker		0%	0%	0%	N/AV
Full-time Job		22%	17%	16%	N/AV
Military Service		2%	4%	0%	N/AV
Take Time Off/Don't Know		1%	3%	7%	N/AV

Table 9.4 School District Expenditures [PK-12]				
	FY98	FY99	FY00	Vermont (most recent)
Total PK-12 Current Expenses	$5,784,557	$5,776,225	$6,208,801	$811,416,577
% Direct Instruction	65.5%	67.3%	65.3%	62.5%
% Student Services	4.7%	5.7%	5.5%	6.8%
% Staff Services	2.3%	2.3%	2.5%	3.6%
% Leadership Services	6.8%	7.3%	7.2%	9.8%
% Operation & Maintenance	20.7%	17.4%	19.5%	17.2%
Current Expenditures per Pupil	$8,287	$7,571	$8,388	$8,336
Total Expenditures (unduplicated)	$10,017,030	$6,819,844	$7,171,962	$930,068,209

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, however improvements are needed to 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. The renovation project has since become a priority of the School Board. In early 2002, the Board of Directors identified several alternative plans for renovating the school. They also conducted a community survey, which found that:

- 72% of 322 survey respondents agreed that it was important to maintain a primary school within the village;
- 68% agreed that it was important to maintain the current historical character of the buildings; and
- 63% believed that the school buildings are an important community landmark that should be maintained as a functioning school.

Only 22% of those responding supported demolition of the buildings, and even fewer (18%) supported moving the primary school to land located near Crossett Brook Middle School in Duxbury. In June 2002, a bond vote was held on the Board's recommended plan for renovation (which was the least expensive of the four alternatives and called for extensive upgrades to the interior, the addition of several classrooms and administrative offices in the rear, and removal of student drop-off to a circle off Armory Drive). The bond did not pass. In light of the community's response, the Board is working on amendments to the plan, which it will present to the Town and Village later in the year.

Crossett Brook Middle School (5-8)

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 Hardwood.

School enrollments have increased slightly (around 5%) since its opening, reaching 360 in the 2000-01 school year. The number of teachers has remained constant over the same period, resulting in slightly larger classroom sizes and student-teacher ratios, which currently exceed state averages.

In 2000, Crossett Brook Middle School staff worked collaboratively with the Washington West Supervisory Union and area human service agencies to submit a federal "Country Paths" grant application aimed at enriching after-school options for middle school youth. A three-year, $1.2 million grant was awarded and is being used to expand opportunities for academic tutoring, hobby groups, and other after-school programs through 2004. A consortium of school and business leaders is overseeing the grant.

Harwood Union Middle/High School (9-12)

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 High School District. The other communities are Duxbury, Fayston, Moretown, Waitsfield, and Warren. Waterbury students in 2001-02 made up nearly 30% of the school's total enrollment. This is reflected in Waterbury's share of the total annual municipal assessment of $7.4 million, which for 2001-02 was $2.25 million.

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. With the construction of Crossett Brook, enrollment at Harwood dropped, and has been well below design capacity in recent years. This year, however, total enrollment once again exceeded 800, and is expected to be near capacity in two years, based on current numbers in the lower grades of the sending towns. Enrollment then should fall off again. This increase through 2004-05 appears to represent a "bubble" in the student population, which could be weathered without a major facility expansion. There is concern, however, that rapid growth (or decline) in one or more member communities could place a burden on the

school system as a whole. Future options mentioned, but not yet seriously considered, include the construction of a separate middle school for Mad River Valley towns or building an addition onto Crossett Brook, to allow Hardwood to serve only high school students.

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. A 1999 study was undertaken to evaluate the possibility of expanding current fields – to include the creation of a softball field and another field to be used for soccer and lacrosse. A 2002 bond vote for $285,000 to support this expansion, and also refurbish the track and field shed, was defeated by voters.

The academic program includes college preparatory, business, and vocational courses, and has also created a technology reserve fund. Expanded program offerings are available through various agreements with other educational facilities. Currently 135 Washington West students (12.6%) are eligible for special education services. The high school offers special education services through the Learning Resource Center located within the school complex. An alternative school for students in grades 10-12 – the Waterbury-based Harwood Community Learning Center – was also established in 2001 to provide academic and work experience for students who are less successful in a traditional school setting. Currently there are 31 students enrolled in this program. An additional 35 home-schooled children receive support from the school's home school coordinator.

Harwood High School has a much lower drop-out rate (1.3% in 2001) than the state average (4.7%). Of graduating seniors in 2001, 75% planned to continue their education at 2- and 4-year colleges.

Education Financing

School tax rates are determined by spending levels per pupil. The proportion of costs that are not covered by the state (State Education Tax) and other sources must be borne by taxpayers through a local school tax (Local Share Tax), part of which pays for Waterbury's share of district school budgets. The cost to educate a single student has remained relatively constant in recent years (Table 9.4).

With the passage of Act 60 in 1997, which took effect in FY99, the state instituted a statewide property tax to fund education. One aspect of Act 60 is an "income sensitization" feature that limits the amount of education property tax to be paid by income-qualified Vermont residents. For Waterbury this currently includes those with household incomes less than $47,000, whose property taxes exceed 2.79% of their income.

The statewide property tax is calculated for each community using an "Equalized Education Property Tax Grand List," as determined by the state, based on estimates of the fair market value of all listed real property in the community. This is used to measure the property wealth of a school district. Currently, the equalized statewide education tax rate is $1.10; every student receives a general state support grant of $5,810. For districts spending above the grant, a local share tax is imposed in addition to the statewide tax, as in the case of Waterbury. The local share tax is determined directly from per pupil spending above the block grant.

As estimated for FY02: total budgeted school expenditures of $6.9 million, less other revenues of $1,053,399, left $5,866,273 to be raised in state and local taxes (Local Education Spending). The district's general state support grant of $5,383 per pupil, calculated based on 843.11 "equalized" pupils, raised $4,538.461, less $31,544 set aside for students attending technical centers. Spending per pupil

above the state support grant was $1,612, or 39.33% of the state property tax required to support this amount. The estimated equalized tax rate of $1.53 included $1.10 for the state share, and $0.43 for the local share of spending. This was then adjusted upward based on Waterbury's common level of appraisal in relation to the state's equalized education grand list for Waterbury (81.68%) – resulting in an estimated total education tax rate of $1.88. FY02 estimates, in relation to actual numbers for recent years, are presented in Table 9.5.

9.5 State & Local Education Financing

	FY99	FY00	FY01	FY02*
School Budget Expenditures	5,760,060	6,110,380	6,809,775	6,919,672
Education Spending/Pupil	5,788	6,013	6,703	6,958
Above Block Spending/Pupil	778	951	1,549	1,612
Equalized Education Tax Rate	1.36	1.36	1.53	1.53
Actual Tax Rate	1.51	1.54	1.77	1.88
Limit on Education Tax (Income Based)	2.37%	2.45%	2.77%	2.79%

Source: VT Department of Taxes; *FY02 figures are estimates.

This suggests that, although total school expenditures per pupil (as reported in Table 9.4) have remained relatively constant, "above block" spending per pupil and overall school tax rates have increased. A recently completed property reappraisal should, by increasing the grand list in relation to fair market value, reduce Waterbury's overall tax rate. It will not, however, reduce the amount to be raised in local taxes to support school spending.

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. The current policy, adopted in 2001, allows 100% of money market dividends and interest income and 75% of the annual appreciation in equity mutual funds to be transferred into the town's general fund to reduce property taxes. The withdrawal in 2001 was $30,396.

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. Opportunities for "distance learning" on-line and through Waterbury's Vermont Interactive Television (ITV) site are also growing each year.

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

Libraries

The Waterbury Public Library is housed in two facilities. The main facility 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. It is within walking distance of the Thatcher Brook Primary School and two senior citizen housing developments. A branch library, established in 1920, is located in leased space in the Green Mountain Seminary building on the Hollow Road, just off of Route 100 in Waterbury Center.

The Library is governed by an elected Board of Library Commissioners, and funded from municipal appropriations ($132,247 in 2000) 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 combined holdings of the main library and the branch include more than 22,000 books, audio books, videos, and magazines. The main library provides free Internet access, weekly story hours for preschoolers, summer literacy programs for children, monthly book discussions and general interest programs for adults, home deliveries to house-bound residents, and a summer bookmobile service. Principal offerings at the branch library include children's books, some adult fiction, and children's programs.

The town-owned main library building has recently undergone a some renovations, funded by a Vermont Public Library Incentive Grant, to improve accessibility of the library space on the first floor in accordance with state and federal requirements. Other recent improvements include repairs to the plumbing, heating and electrical systems and roof, and new flooring throughout most of the ground floor of the building.

In recent years the use of both library spaces has increased dramatically – combined circulation reached 50,352 in 2000. The library facilities, particularly the main library, are severely overcrowded. The combined useable area of the two facilities is approximately 3,300 square feet, compared to an estimated need of 10,000 square feet. Neither facility is able to accommodate the expansion of stacks, reading/study areas, computer services, program areas, staff workspace, and public meeting space to serve increased demands.

Previous planning studies identified the need for expansion and accessibility improvements at both the main library and the branch. This finding was supported by the results of a 2000 town meeting library survey. Several proposals put forth in recent years to expand the historic main library structure proved controversial and were rejected. However, the need to resolve the library's space crisis remains critical. In 2002 the Board of Library Commissioners appointed a planning committee to evaluate Waterbury's current and prospective library needs and develop a 5-year plan (2003 - 2007) for improved services and facilities.

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 & Cultural Committee (WACC), 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 activities of a number of local groups were featured at the Waterbury Town Planning Fair held in the spring of 2002. In addition to local cultural activities, a variety of arts and cultural events are often available in surrounding areas, such as Stowe, Montpelier, Burlington, and the Mad River Valley.

Over 80% of the 2002 Community Survey respondents agreed that Waterbury should actively encourage and expand local cultural resources such as theater, arts, and community activities – up from 74% as reported in the 1990 Community Survey. Only 5% disagreed. Individual responses suggest that residents would like more variety in local offerings, and more coordination among community groups and activities. The Crossett Brook School is now used for a variety of community events. Support was also expressed, however, for the establishment of a local community or cultural center – to house such uses as a new library, theater, a teen center, and/or community events.

9.3 Health & Social Services

Child Care Services

Day Care Facilities. With the number of families in which both adults work outside of the home increasing, the demand for child day care has also increased. Day care homes and childcare centers are an important community service, which is why small family care homes serving up to six children are allowed under state law. A state registered or licensed home day care facility serving six or fewer children full-time (and up to four children part-time) must be permitted by right and considered equal to a single-family residential use [24 V.S.A. §4409(f)].

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 preliminary 2000 U.S. Census data, children under 5 years of age numbered 310, making up 6% of the total population. Families with children under the age of 6 numbered 161 – or 12.2% of the total.

> Of 2001 Community Survey respondents, 67.3% agreed, with 31.5% strongly agreeing, that Waterbury should encourage the opening of more accredited and affordable childcare facilities.

Currently Waterbury has 12-licensed child care homes (with an estimated capacity of 72 full-time and 48 part-time) – down from 17 in 1990. There are also three child care centers (total capacity 124), and a pre-school program through the Thatcher Brook Primary School (with a capacity of 12). 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. A number of facilities have waiting lists and many are at capacity. Over 67% of respondents to the 2001 Community Survey agreed that Waterbury should encourage the opening of more accredited and affordable childcare facilities – only 8% disagreed. Small grants are available, from the state's Child Care Division to individual providers, for training, education and accreditation, for equipment and facility improvements and to initiate, expand, and improve day care programs.

Day care services provided in or by a church or community-owned facility should receive the same consideration as provided under 24 V.S.A. §4409(a). Day care services provided by an employer at the work place should be encouraged and considered as an accessory to the business similar to that of an on-premise cafeteria, library, or recreation facility.

The Children's Room. 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. During the 2001-2002 school year, it served over 150 local

families. The award-winning parent-child resource center offers parenting information and programs for parents and caregivers. It 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.

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. In 2000, the WCYSB provided services to 50 Waterbury youths and their families. Programs and services are funded through fundraising, 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. Planned Parenthood has offices in the village. Waterbury is home to several private practices that provide family medical services, dentistry, physical therapy, therapeutic massage, optometry, and prosthetics. Construction has been completed on new 8,700 sq.ft. medical facility located at 130 South Main Street. The primary tenant is the Central Vermont Physician Practice Corporation. Waterbury Medical Associates is a local family practice that offers five providers and is open extended hours for patient convenience. They offer a diverse variety of services including preventative care for all ages, management of acute and chronic conditions, minor office surgery, radiologic services, and osteopathic manipulation. In addition, the following services are available at the new medical facility. Associates in Gynecology and Obstetrics provides service on Thursdays, and rehabilitation and nutrition services from the Central Vermont Medical Center are available by appointment.

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 the Medical Center Hospital of Vermont (MCHV) in Burlington, approximately 25 miles away. The Vermont State Hospital (VSH), located in Waterbury Village, provides mental health care, drug treatment, and nursing care for residents with special needs.

CVHHA. The Central Vermont Home Health & Hospice Agency (CVHHA), located in Berlin, is a private, non-profit visiting nurse association that provides comprehensive home health and hospice care to thousands of people in Central Vermont, regardless of their ability to pay. The agency has been in existence in some form since 1918. It is certified to provide services under Medicare, Medicaid, and Blue Cross/Blue Shield, and it receives funding from member communities, donations, clinics, and the United Way. In 2000 staff made 9,918 visits to 257 Waterbury families, for the following purposes:

CVHHA Service	# of Visits
Skilled/High-Tech Nursing	2,556
Home Health Aides	5,089
Homemaker & Attendant Care	1,282
Physical Therapy	595
Occupational Therapy	44
Speech Therapy	31
Medical Social Worker	49
Maternal Child Health	272

Additional services provided by the agency include health promotion services (screening, vaccinations, counseling, and classes), childbirth and parenting education, service coordination to create a smooth transition from hospital to home care, and home hospice services (training, support groups, and bereavement services).

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. In 2000 CVCAC helped 158 individuals in 102 Waterbury families. CVCAC is supported in part through municipal funding, using a formula based on population, numbers of residents served, and dollars spent in each community.

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. In 2000, VCIL provided services to 31 Waterbury residents, including information and referral services, Meals on Wheels, and peer advocacy counseling.

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 2000, 10.3% of Waterbury's population was 65 years and over, and another 9.4% were between the ages of 55 and 64. Over 19% of Waterbury households included household members who were 65 years or 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. According to 2001 Community Survey results, 37.3% of respondents rated current services for the elderly as adequate, and another 9.5% found them to be excellent. Only 9.2% ranked found them to be inadequate or poor.

> ***The Waterbury Area Senior Citizens' Association affirms and celebrates the dignity and worth of older citizens by providing the opportunity to socialize, to share skills and knowledge, and to learn from others.*** – Mission Statement.

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 noted in Chapter 4 (Housing), income-subsidized apartments for elderly residents are located above the Senior Center. There are also two Level III Community Care homes in Waterbury, which provide

room and board, help with personal care, 24-hour non-medical supervision, and limited nursing assistance. These include the Kirby House on South Main Street, with the capacity for 43 residents, and the Squier House on Union Street, with the capacity for 14 residents.

9.4 Recreation Facilities & Services

A variety of municipal and state facilities, for both passive and active recreation, 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 listing of local recreation facilities is provided in Table 9.6

Table 9.6 Waterbury Recreation Facilities

Facility	Location	Facilities	Activities
Anderson Field	Village; NE side of Main Street, accessed from Butler Street	Outdoor Pool Bathhouse Recreation Building Baseball Field Basketball Court Tennis Courts (4) Ice Rink Playground Parking Lot	Swimming Basketball Baseball Tennis Ice Skating Summer Program Public Meetings
Waterbury Center Park	Waterbury Center; Intersection Maple, Howard, Guptil Roads	Grass Park Benches Picnic Tables	Passive Recreation Picnicking
Dascomb Rowe Recreation Field	Village; North Main Street	Softball Fields (Lighted) Babe Ruth Field Soccer Field Horseshoes Canoe Launch Drinking Fountain Restrooms Parking	League Baseball League Softball League Soccer Horseshoes Canoeing
Seminary Field	Waterbury Center; Hollow Road behind the Seminary Building	Playground Baseball Field, Dugouts	Baseball Softball Playground

Table 9.6 Waterbury Recreation Facilities (cont'd)			
Hope Davey Recreation Field	Waterbury Center; Maple Street	Picnic Pavilion Playground Basketball Court Baseball Fields Softball Field Soccer Field Nature Trail Drinking Fountain Disc Golf Course	Skating Playground Baseball Basketball Softball Soccer Nature Walks Disc golf
Thatcher Brook Primary	Village; Stowe Street	Basketball Court ( ) Playground Tetherball Indoor Gymnasium	Playground Baseball Basketball Indoor Sports Community Events
Rusty Parker Park	Village; South Main Street	Park Benches, Tables, Gazebo, Bandstand Swing Set	Picnics, Concerts, Farmers Market, Cultural Events

A 2001 random telephone survey of over 100 Waterbury households, conducted by the Waterbury Recreation Committee, identified the following five recreation priorities as "most important" (83 households participated):

1. Repair of the outdoor pool (31.8%).
2. Indoor skating facility (24.7%).
3. Teen center (18.8%).
4. Indoor swimming pool (10.6%).
5. Updated playground equipment (8.2%).

The top five recreation or leisure activities identified by survey participants included the 4th of July parade, recreation path, the farmers market, concerts in the park, and the swimming pool. Forty-six percent traveled out of town for recreation, many of whom traveled to Stowe to use the recreation path and skating facility. Repairs to the town pool, built in 1930, were undertaken recently to fix the drain and to prevent leaking and chlorine contamination. Allocations also have been made to maintain and upgrade playing fields, and consideration is being given to the development of a skateboard park at the Dascomb Rowe Recreation Field.

A new $2.2 million indoor ice center on four acres of village-owned farmland along the Winooski River, at the southern end of the village is under construction. The facility will offer time for public skating, and a home for local figure and hockey skaters. Ice Center development has been supported largely through the fundraising efforts of Ice Center of Washington West, Inc. In addition to use of the land, the village has also extended water and sewer lines to the site, as approved by voters in 1998. The town has upgraded the access road, also with voter approval. The larger 40-acre site may also include ball fields, a walking path, and parking areas in the future. The proposal is currently going through local and state permitting processes.

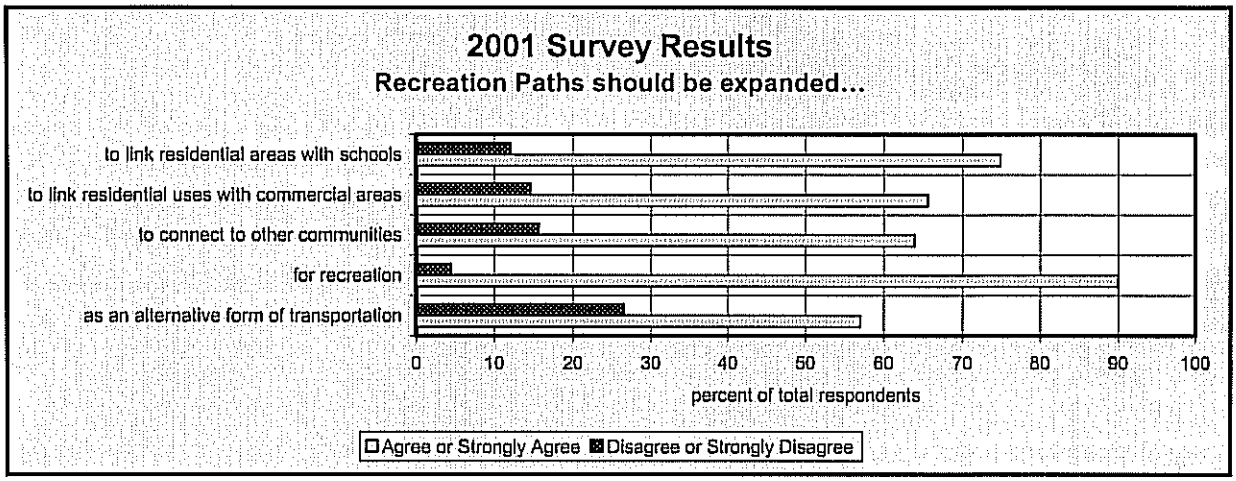
Recreation Paths

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).

According to the results of the 2001 Community Survey, a large majority of Waterbury residents continue to support recreation path expansion and development, particularly for recreational purposes (90.0%) and to link residential areas with schools (74.9%). There is currently interest in extending village sidewalks to Colbyville and out to the Crossett Brook Middle School in Duxbury for use by school students and recreation path users. There appears to be less support (57.0%) for recreation path development as an alternative form of transportation.



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 81 campsites, 20 lean-tos, several flush 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, 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. The draw down of the reservoir in the fall of 2000 for dam repairs has temporarily affected water-based recreation, and related activities and businesses. Water levels currently support small, non-motorized boat traffic, and swimming at one of the campground's beaches. Full use is expected to resume in 2005 with the completion of the repairs.

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 Public Safety

Police Protection

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 are more characteristic of urban areas, and typically exceed town, county, and state rates per 1,000 of population. Crime rates in the village, however, dropped below state and county rates 2000 (Table 9.7), possibly the result of the increased effectiveness of local police coverage.

Table 9.7 Waterbury Crime Statistics, 1997-2000

	1997		1998		1999		2000	
	Part I	Part II	Part I	Part II	Part I	Part II	Part I	Part II
Count (#):								
Town	28	113	37	119	25	124	40	148
Village	102	363	64	336	55	211	44	138
Rate (per 1000 population):								
Town	9.28	37.45	12.27	39.46	8.34	41.39	12.88	47.65
Village	61.82	220.00	38.74	203.39	33.56	128.74	26.72	83.79
County	42.17	113.12	38.71	122.19	30.63	115.64	33.52	115.31
State	36.34	91.03	34.01	89.34	31.29	87.36	32.72	85.94

Part I – Forgery, fraud, embezzlement, stolen property, vandalism, sex offenses, drugs, family/child, liquor violations, disorderly conduct, simple assault, weapons, prostitution, gambling, vagrancy, DUI, other.
Part II – Homicide, rape, robbery, aggravated assault, burglary, larceny, auto theft, arson.
Source: *Vermont Crime Reports*, VT Dept. of Public Safety.

The Village of Waterbury is patrolled by a police department, which also provides 250 hours of service to the town under contract. The department currently consists of four full-time police officers. In 2001 village police responded to 909 complaints (down from 940 in 2000), issued 530 traffic citations (up significantly from 357 in 2000), and 47 criminal citations (down from 55 in 2000). The department hopes to expand coverage in the village. 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. A butler building owned by the municipality is used by both the police and fire departments for short-term storage. There is some interest in the development of a new public safety facility to house both village police and fire departments.

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

Of respondents to the 2001 Community Survey, 49.5% rated the quality of current fire protection services as excellent, and another 40.2% rated them adequate. Less than 1% felt they were inadequate or poor.

Fire protection in Waterbury is provided by two fire departments – the Waterbury Village Fire Department, located on Main Street near the Municipal Building, and the Waterbury Town Fire Department, whose station is in Waterbury Center. The fire departments provide dual response for calls within Waterbury. Both departments also provide mutual aid assistance to surrounding communities as part of the Capital Fire Mutual Aid System. In addition, the Village Fire Department responds to rescue calls. In 2001 the departments bought twin pumpers that can be run by volunteers from each department. There are currently 21 fire fighters in the town department, and 25 in the village fire department. Each department is also supported by a ladies auxiliary and participates in fund raising activities and community events. The Village Fire Department recently started a cadet training program for children between 12 and 15 years of age.

In 2001 the Village Fire Department responded to 214 calls (124 fire, 90 rescue), for what was considered an average year. The Town Fire Department responded to 215 calls, including 185 calls within the coverage area, and 30 mutual aid calls – up slightly from 200 calls in 2000.

In 2000 funds were allocated for improvements to the Village Fire Department's historic station on Main Street, to include asbestos removal and improvements to the electrical system. In the process of getting estimates for the work, the department found that the station's electrical system also needs to be replaced. Given the need for additional space, consideration is now being given to the cost-effectiveness of building a new station, possibly a new public safety complex to include the police department.

In 2000, the Town Fire Department undertook a major interior renovation project the resulted in new office space, new gear racks, and more room, allowing for improved vehicle storage. The department also purchased $8,500 in additional equipment, including 6 portable radios, a portable pump, and a commercial washing machine.

Emergency Medical Services

Ambulance services were rated excellent by 57% of respondents to the 2001 Community Survey, and another 29.7% rated them adequate. Less than 1% rated the services poor or inadequate.

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. Currently around 40 volunteers serve the area on a rotating schedule – down from 50 in 1990. More volunteers are needed. WASI has developed, in association with the Mad River Valley Ambulance Service, a "teen ambulance corps" at Harwood Union High School. This training program is tended to provide a pool of future emergency medical technicians.

WASI owns two ambulances, including a new unit placed in service in 2002, 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. Due to an substantial increase in the number of calls in the area involving mountain or back country rescues, WASI members have been working with local firefighters to develop and train a Waterbury-based back country rescue team. Currently there are three back-country rescue teams located in Waterbury, Stowe and Colchester. Local fire departments and municipal officials support these efforts, and are currently working out functional and administrative details.

WASI is funded from three sources: (1) family subscription drive, (2) donations and memorials, and (3) 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 is consolidating the PSAPs, and as part of that plan the Middlesex PSAP that currently serves Waterbury has been eliminated.

9.6 Sewer & Water Facilities

Sewer Facilities

Of those responding to the 2001 Community Survey, 28.5% reported that existing public water and sewer services were excellent; and 26.5% indicated they were adequate. Over 43% lived outside infrastructure service areas.

Waterbury's public sewer facilities serve only lands within village limits (or immediately adjacent under certain circumstances). 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 lbs. per day. As of April, 2003, the facility had an average monthly flow of 263,750 gpd and a BOD load of 508 lbs. per day. The uncommitted hydraulic reserve capacity is 246,750 gpd. Although the plant is operating at 51.7% of its total hydraulic design capacity, it is operating at 70% of its BOD design capacity. Generally the ratio of hydraulic capacity to BOD capacity is 1:1. The presence of Ben & Jerry's, Green Mountain Coffee Roasters, and the State Office Complex, which includes over 100 institutional residents, causes increased BOD loading. 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 until recently 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. New computer technology has been installed as a first step, and 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

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 under the town's on-site sewage ordinance and state subdivision regulations. 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 than 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 May 2001) of 185,000 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. The water is chlorinated and flouridated, 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 cast iron pipe. The buildup of deposits has resulted in a loss of capacity in some distribution lines. Many of the pipes are old and in need of replacement, and are upgraded as funding permits. 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; however, in smaller diameter pipes, the supply may be inadequate for such purposes.

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 consider 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 proposed merger of water and sewer system staff under the direction of a water and sewer superintendent is intended to increase efficiencies in the operation and maintenance of both systems. If a merger of the town and village occurs, a separately defined water (or fire) district will need to be delineated, partly in relation to desired patterns of growth and development as identified in the land use chapter of the plan (Chapter 11).

There are two private community water systems in town, serving East Wind and Kneeland Flats mobile home parks. Both systems have approved source protection plans. The remainder of town residents and businesses are served by individually owned wells and springs. Currently, the installation of private residential wells is not regulated by the state, but such sites should meet state recommended 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.

9.7 Solid Waste Management

Of those responding to the 2001 Community Survey, 57.8% rated solid waste management services (trash, recycling) as good (45%) or excellent (12.8%) – however 30.7% felt there was room for improvement, rating them inadequate (20.4% or poor (10.3%).

Waterbury is one of six members of the Mad River Solid Waste Alliance (MRSWA), formed in 1994 through an interlocal agreement. The Alliance MRSWA 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). The MRSWA has an adopted solid waste implementation plan, approved by the state. In 2002 the MRSWA will be updating its 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 Waste Systems International of Vermont, Inc. (WSI). Trash collection services are also provided by other private haulers. MRSWA is the "host district" for the WSI Landfill, located in Moretown. As a result, local residents can bring their recyclables to the facility at no charge. Free disposal of appliances, tires, and collected roadside trash is also provided in association with annual MRSWA-sponsored events such as Green Up Day, Household Hazardous Waste Collection Days, and tire collections. The Alliance works with the Association of Vermont Recyclers, and is a member of the Northeast Resource Recovery Association, which helps market some recyclable commodities. The MRSWA also sells composting bins.

Fast Trash operates a recycling center in Waterbury, located at the entrance to the Old Dump Road, that is open to area residents seven days a week. Fast Trash takes trash, recyclables, appliances, tires and construction debris, and also operations a bottle redemption center.

9.8 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 Deforge Hydroelectric Station)

The Bolton Falls dam 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, 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.

9.9 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

Exit 10, first published in 1988, is Waterbury's monthly local newspaper. It reports the minutes from select board, trustee, and planning commission meetings, and provides regular information on the activities of local groups. The newspaper is also used by local officials to inform the public about municipal projects and upcoming events. The paper receives no financial support from the municipality. Financial considerations at the newspaper may result in cutbacks in coverage and/or distribution.

The *Valley Reporter* and the *Stowe Reporter*, published weekly, also provide some Waterbury coverage. 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

Of those responding to the 2001 Community Survey, 11% rated existing telecommunications facilities as excellent, and 43.5% indicated they were adequate. Nearly 16% felt they were inadequate or poor. Interestingly, nearly 30% reported that telecommunications facilities were not really applicable to them.

Telecommunciations 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. The information access provided by cell phones and "personal digital assistants" (PDAs), on-line Internet services, and the world wide web was unheard of even a decade ago.

Telecommunications technologies, and associated services available to Waterbury residents and businesses, are now multiplying at an unprecedented rate (Table 9.8). This is due to industry deregulation, ongoing technological advances (e.g., the introduction of wireless and digital technologies), and an expanding number of local and national service providers. 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.

Table 9.8 Telecommunications Services Available in Waterbury, 2001

	ATM	Cable	DSL	Frame	ISDN	T1
Adelphia Business Solutions					Y	
Adelphia Cable		Y				
Lightship			Y			
Verizon	Y			Y	Y	Y

ATM – Asynchronous Transfer Mode, Cable – Cable Service, DSL-Digital Subscriber Line, Frame-Frame Relay Service, ISDN-Integrated Services Digital Network, T1- Hard Line
Source: VT Dept. of Economic Development, *Telecom Providers Survey*, 3/2001 (includes only survey respondents).

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.

Telephone. Verizon, formed by the recent merger of NYNEX (formerly Bell Atlantic) and GTE, 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.

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.

Television. Because of the mountainous terrain, Waterbury residents without cable or satellite service get limited television reception. Adelphia Cable, one of the nation's largest cable television providers, serves the Waterbury area. Services include a local access channel that televises municipal meetings and community events. Aldelphia continues to upgrade its systems with state-of-the-art fiber optic technology to provide enhanced picture quality, improved service and greater reliability. New technologies will also allow for cable television Internet access, and high definition, digital television. Waterbury residents outside the cable service area have access to other wireless television services, for the price of dish installation and a monthly service fee. Waterbury residents also have ready access to one of twelve Vermont Interactive Television (VIT) sites, located at the State Office Complex. VIT, subsidized by the state, provides opportunities for distance learning, participation in statewide public meetings and hearings, and video conferencing.

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, Waterbury libraries offer public on-line access. Waterbury schools also have dial-up and direct line access to on-line services and resources through "K12net," an extension of Vermont's GOVnet, which connects schools to each other and to the Internet.

In 2000, the Waterbury Community Development Committee brought Waterbury's municipal web site (www.waterburyvt.com) on-line, which averaged 40,715 "hits" per month in its first year of operation. The web site currently includes an introduction to Waterbury, a historical tour, travel and tourism information, a variety of municipal information (including meeting minutes), maps, and information for doing business locally. Area businesses can contract to link with the site.

9.10 Cemeteries

The Waterbury and Waterbury Center Cemetery Associations 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.

9.11 Goals, Objectives and Actions

Goal 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.

Goal 2

Provide utility services and municipal facilities that support orderly growth and controlled development at a rate and in locations that Waterbury can accommodate.

Goal 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.

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

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

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

9. Provide a variety of recreational opportunities to Waterbury residents of all ages.

Actions

A. 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 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.

B. Utilities

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

2. The municipality should not extend municipal sewer lines to areas other than designated growth centers.

3. The municipality should 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.

4. 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. The findings of each such study should be considered by the municipality when deciding whether to invest in the new extension.

5. Waterbury should 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.

C. Facilities and Services

1. Planning for, and use of, cultural facilities (in particular, schools, libraries, and historical societies) 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:
   a. Educational programs for children and adults
   b. Provision of access to resources for learning such as books, the internet, etc.
   c. Child care
   d. Artistic activities, performances, readings, recitals, etc.
   e. After-school and summer programs (recreational, historical, naturalist, etc.)

2. The municipality should 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.

3. The municipality should participate in discussing the potential renovation/replacement of the Thatcher Brook Primary School and, on the basis of such evaluation, pursue the option that best serves the school district.

4. The municipality should support the creation of new space for the library in the Village.

5. The Planning Commission should consider 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.

6. The municipality should continue to expand the Town and Village recreation paths

7. 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.

8. The municipality should continue to participate in the Mad River Solid Waste Alliance as long as this is the most cost effective solid waste disposal option.

9. The municipality should continue to support community-wide recycling, explore programs for composting food and agricultural wastes, and use recycled products when possible.

10. Day care facilities should be encouraged in locations that would best serve the children and their families.

11. The municipality should continue to 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 Services, Inc.

CHAPTER 10. LOCAL GOVERNMENT

10.1 Government Structure

The Town and Village of Waterbury are separately incorporated municipalities, each with its own charter. Waterbury Village, however, is part of the town. Village residents are also town residents, taxpayers and voters, but town residents outside the village do not pay village taxes, and cannot vote on village matters.

A majority of Waterbury residents are satisfied with the quality of local government – of 2001 Community Survey respondents, 57% rated the quality of town and village government as good, and 15% as excellent. Another 16% , however, thought the quality of local government could be improved.

The Town of Waterbury is governed by a five-member Board of Selectmen. The Village is governed by a three-member Board of Trustees. 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.

Table 10.1 Town & Village Government

Municipal Function	Town	Village
Legislative (Governing) Board	Selectboard (5-member, elected)	Trustees (3-member, elected)
Manager	Town & Village Manager (appointed)	
Clerk/Treasurer	Town Clerk, Treasurer (elected)	Village Clerk, Treasurer (elected)
Highway Department	Road Commissioner (appointed)	None (included with Town)
Police Department	None (contract for village services)	Village Police Dept.
Fire Department	Waterbury Center Fire Dept.	Waterbury Village Fire Dept.
Municipal Building	Space in village building	Village Municipal Building
Water Department	None	Village Water & Sewer Commissioners (3, elected)
Sewer Department	None	Village Water & Sewer Commissioners
Planning & Zoning Department	Town/Village Planner, Zoning Administrator (appointed)	
Planning Commission	Town/Village Planning Commission (7-member, appointed)	
Conservation Commission	Town/Village Conservation Commission (7-member, appointed)	
Zoning Board of Adjustment	5-member (appointed)	5-member (appointed)
Health Officer	Town Health Officer (appointed)	
Union School Directors	6 (elected)	None (included with Town)
Library Commissioners	5 (elected)	None (included with Town)
Listers	3 (elected)	None (included with Town)
Cemetery Directors	5 (elected)	None (included with Town)
Recreation Committee	7-member (appointed)	None (included with Town)
Development Committee	8-member (appointed)	None (included with Town)
Budget Officers	None	3 (elected)
Fire Wardens	None	4 (elected)

The town governs services and facilities that serve all community residents, including road, fire, recreation, and community development programs. Services and facilities governed by the village are specific to the village, including public water and sewer systems, the municipal building, and village police and fire departments. Waterbury has a joint planning commission, formed in 1988, and a municipal

plan and zoning bylaw that cover both the town and village. The zoning bylaw is administered by a shared zoning administrator, appointed by the planning commission, and separately appointed boards of adjustment. The village has also adopted separate wastewater, parking, traffic and utility line ordinances.

The town and village share municipal offices on South Main Street in a house owned by the village. The house was renovated in 1983, has since undergone regular maintenance and repair, and is scheduled for asbestos removal. Initially, this building was considered adequate; however, office and storage space is near capacity. All office space is occupied, and vault capacity is limited. Some materials, such as planning and zoning records and maps, are not kept in the vault due to lack of space. Meeting space in the municipal building is also limited. The main meeting room on the ground floor is handicapped accessible (through the clerk's entrance) and can tightly accommodate a maximum of fifteen persons. Boards and committees at times compete for meeting space despite efforts to stagger regular meeting schedules. Local schools, area churches, the recreation building, and fire stations provide additional meeting space as needed.

Merger

> Of those responding to the 2001 Community Survey, 68% supported the merger of the town and village, including 81% of village residents and 62% of town residents. It should be noted, however, that the response rate for this question was low (85%), suggesting that many residents may have not yet formed an opinion.

The possibility of merging the town and village has been discussed for more than twenty years. When merger was considered a decade ago, town and village voters defeated a proposed merger (1517-870) at a special town meeting held in November 1992. In 2002 a vote on Town/Village merger took place. The Village passed the merger proposal by a 3-1 margin, however the entire Town, including the Village voters, defeated the proposal by a very narrow margin of 21 votes. The town's selectboard currently supports a merger, to improve efficiencies and make budgeting for shared services and facilities easier. Village trustees are concerned about the potential impact on village assets, including the village's water and sewer systems, and support a full evaluation of all options, including but not limited to a merger.

10.2 Financing Government

Tax Base

Waterbury, as all Vermont municipalities, depends largely on property taxes to fund local government. The grand list for the town and village includes taxable real estate, and certain taxable personal property (cable). Waterbury's 2001 Grand List totaled $335,910,669, an increase in value of 61% since 1991, unadjusted for inflation (Table 10.2). Since 1991, Waterbury has phased out its inventory tax, but the difference has been more than made up in the value of local real estate. Year-round residences on less than six acres of land (R1 properties) continue to make up the greatest share of the local tax base, increasing from nearly 47% of the total value in 1991 to 53% in 2001. During this same period, the relative value of homes on larger parcels (R2 properties) and industrial properties also increased significantly, while the value of some vacation properties (V1), farm land, forest land, and electric utilities (associated in part with the temporary draw down or the Waterbury Reservoir) decreased.

In 2001 town listers completed a three-year reappraisal of all properties in town, based on the past three years of reported sales (1999-2000). As a result, the value of the grand list increased significantly in 2001 - by 35% - which was accompanied by a comparable reduction in the local tax rate (Table 10.3). Listers

are concerned, however, that Waterbury is continuing to experience high rates of inflation, particularly for residential properties, estimated at 0.5% per month. This will affect the town's equalized grand list, estimated annually by the state in relation to fair market value, which is used to determine state education tax rates.

Table 10.2 Waterbury Grand List 1991-01

Listing Category	1991	% Total Real Estate	2001	%Total Real Estate	%Change 1991-01
Residential 1 (<6 acres)	$94,534,800	46.5%	$176,623,000	52.6%	86.8%
Residential 2 (6+ acres)	$26,113,400	12.8%	$52,988,140	15.8%	102.9%
Mobile Home	$2,717,900	1.3%	$2,530,200	0.8%	-6.9%
Mobile Home w/Land	$2,463,700	1.2%	$3,478,300	1.0%	41.2%
Vacation 1 (<6 acres)	$5,572,500	2.7%	$4,484,500	1.3%	-19.5%
Vacation 2 (6+ acres)	$6,217,400	3.1%	$8,378,019	2.5%	34.8%
Commercial	$30,024,000	14.8%	$47,372,991	14.1%	57.8%
Commercial Apt (5+)	$4,012,600	2.0%	$6,843,300	2.0%	70.5%
Industrial	$4,175,400	2.1%	$11,571,100	3.4%	177.1%
Utility (Electric)	$9,728,400	4.8%	$6,472,300	1.9%	-33.5%
Farm	$1,279,100	0.6%	$601,276	0.2%	-53.0%
Woodland	$412,200	0.2%	$381,438	0.1%	-7.5%
Other	$3,854,800	1.9%	$110,000	0.0%	-97.1%
Miscellaneous	$12,222,000	6.0%	$13,945,605	4.2%	14.1%
Total Real Estate	$203,328,200	100%	$335,780,169	100%	65.1%
Inventory	$5,147,300	NA	$130,500	---	-97.5%
Total Grand List	**$208,475,500**	NA	**$335,910,669**	---	**61.1%**

Source: Grand List Summaries (Form 411); 2001 411 dated 7/18/01 (not final).

Table 10. 3 Summary of Grand List & Budget Increases

Year	Grand List	Annual Change	Town Budget	Annual Change	School Budget	Annual Change	Tax Rate
1990	$203,377,500	3.14%	$833,295	16.10%	$2,616,173	14.21%	$1.69
1991	$208,255,500	2.40%	$856,877	2.83%	$2,824,167	7.95%	$1.75
1992	$212,378,200	1.98%	$703,286	-18.00%	$3,008,090	6.51%	$1.74
1993	$217,042,200	2.20%	$739,600	5.16%	$3,327,116	10.61%	$1.83
1994	$229,430,500	5.71%	$848,892	14.78%	$3,418,514	2.75%	$1.86
1995	$235,178,700	2.50%	$917,194	8.05%	$3,986,267	16.61%	$2.09
1996	$235,716,400	0.23%	$1,155,010	25.93%	$4,384,325	9.99%	$2.35
1997	$240,011,700	1.82%	$1,248,056	8.05%	$4,248,207	-0.31%	$2.29
1998	$243,481,300	1.45%	$1,245,015	-0.01%	$3,584,176	-15.64%	$2.00
1999	$247,249,700	1.55%	$1,165,306	-6.40%	$3,718,294	3.74%	$2.01
2000	$248,586,862	0.50%	$1,342,369	15.19%	$4,363,972	17.36%	$2.31
2001	$335,823,969	35.10%	$1,364,583	1.65%	$4,556,357	4.40%	$1.76

Source: Listers' Report, 2001 Town Report. Note: 2001 grand list differs slightly from that initially reported on 411 form.

The village portion of the municipal grand list is used to raise property taxes to support the village's annual budget. In 2001 the village share of listed property, as initially reported, was $98,618,147, representing 29.4% of the total. This included $98,574,447 in real estate and $43,700 in taxable personal property (cable). The village tax rate in 2001 was $0.28. Comparative information from annual village reports is presented in Table 10.4.

Table 10.4 Village Tax Trends		
Year	Taxes Billed	Annual Change
1997	$232,196.25	8.82%
1998	$250,663.56	7.95%
1999	$234,189.90	-6.57%
2000	$245,161.54	4.68%
2001	$276,130.80	12.6%
Source: 2000, 2001 Village Reports.		

Capital Improvement Program & Reserve Funds

Capital Improvement Program. Municipal budgets have varied significantly from year to year, largely as a result of bonding to cover capital improvements. As noted, 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 recent years. Yields on investments have been higher than expected to date; as a result, the improvement program will be adequately funded through 2006 without incurring additional debt.

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 (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 received from the state prison contract),
- 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, and
- a wastewater sludge abatement reserve.

As noted previously, the village also manages an Urban Development Action Grant (UDAG) revolving loan fund, with a 2001 portfolio value of $806,098, that was initially used to bring Ben & Jerry's to Waterbury in 1984.

Taxpayer Satisfaction

Nearly half of those responding to the 2001 Community Survey (49%) felt that they were paying too much in taxes for the services they received, including slightly more town (51%) than village (43%) residents. However, 44% indicated that they were getting a good value for their taxes. These survey results are somewhat contradictory, suggesting that there may be uncertainty or confusion with regard to local tax issues. When the merger vote took place in 2002, the issue of increased taxes for Town

residents living outside of the Village, that would result from a merger was a factor in the defeat. However, the tax increase issue was not as significant as in past merger votes that were defeated by a much larger margin.

10.3 Goals, Objectives and Actions

Goal 1

Increased cooperation and efficiency in the municipal government.

Objectives

1.1 Continue to consolidation of municipal boards and/or committees to increase cooperation, communication, and efficiency.

1.2 Continue to reduce the level of tax delinquency.

1.3 Consolidate and modernize municipal facilities and services.

1.4 Improve municipal office, storage, and meeting space.

Actions

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.

5. Explore options for developing a modern, centralized municipal building, or for rehabilitating existing structures, to improve the delivery of municipal services.

CHAPTER 11. LAND USE

11.1 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 as such 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.

Table 11.1 Land Use/Land Cover

	Acreage	%Total
Agriculture/ Open Land	2855	9.0%
Cemetery	25	0.1%
Commercial	130	0.4%
Forest Land	25065	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	1156	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	**31788**	**100%**

SOURCE: CVRPC GIS LULC Data, 2001.

Together, Waterbury Town and Village have a combined area of approximately 49.6 square miles (31,788 acres) of land, as calculated from current geographic information system (GIS) coverages (Table 11.1). Waterbury Village currently occupies approximately 1,200 acres, or 1.9 square miles.

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 (Map 5-1).
The Land Use / Land Classsification 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 three distinct settlement areas – Waterbury Village, 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 Route 2 toward Bolton.

Parcel Trends

Between 1991 and 2001, 169 new parcels were added to the grand list through the subdivision of land, an increase of 9.0%. (Table 11.2). Residential properties are by far the predominant category of listed uses in Waterbury. The proportion of residences on less than 6 acres of land has continued to increase over the past ten years. This appears to be due in part to the continued conversion of seasonal dwellings (V1 properties) to year-round use. The number of single-family dwellings on large lots (6 acres or more) also increased, resulting from the subdivision of farm and forestland outside the village for residential use. A large increase in the number of commercial apartments may be attributed in part to the continued conversion of single to multi-family dwellings in the village. Over the same period, the number of commercial parcels continued to increase, while the number of industrial parcels declined by one parcel.

Table 11.2 Change in Parcel Categories, 1991-01

Listing/Use Category	Number of Parcels		% Change 1991-01
	1991	2001	
Residential 1 (< 6 acres)	983	1207	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	**1870**	**2039**	**9.0%**

Source: Waterbury Grand List Summaries (Form 411).

11.2 Existing Settlement Patterns

Waterbury Village

Waterbury Village, comprised of approximately 1200 acres, is listed on the National Register of Historic Places as a historic district and contains an impressive collection of historically and architecturally distinctive structures. Many of Waterbury's civic and institutional resources are located here, including the state office complex, municipal offices, the elementary school, the post office, several churches, the village police station, a public library and museum, the fire station, and public parks. It is also home to over 1,700 Waterbury residents. A large proportion of Waterbury Village is within the Winooski River and Thatcher Brook flood plains. This should be an important consideration in the siting of new land uses and structures.

Downtown. Prior to the construction of the I-89 interchange (Exit 10) in 1967, Waterbury Village was Waterbury's core business district. I-89 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 to Route 100 toward Stowe. The village is still considered the area's major business center, with its mixture of retail, office, service, employment and manufacturing activities. Many of its facilities and businesses continue to serve residents outside of Waterbury and visitors. There is strong sentiment within both the town and the village to reinforce the village role as Waterbury's primary commercial center.

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. In 2000 Waterbury began looking at options for state downtown designation under the Vermont Downtown Program, and delineated three core sub-districts (historic commercial, industrial, and institutional) for potential designation. These are set forth in two planning commission publications: a May 2000 *Technical Report*, outlining planning options for downtown designation, and a March 2001 *Downtown Design Review District Final Report.* [A synopsis of Planning Options for Downtown Designation is attached in Appendix 4]. After a two year effort spearheaded by the Planning Commission, the recommendation to implement a Design Control District for the village, as a first step toward designation, was tabled by the Village Trustees.

The intersection of Stowe St. and Main St. is considered the traditional core of the village. Aside from the shopping center off Park Row, it has the highest concentration of 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 accomplishments of downtown revitalization to date are most noticeable here in the heart of the village. Beginning with the restoration of the Stimson-Graves Building (1993), Stowe Street has seen a number of improvements in recent years that retain its historic character and contribute to economic the vitality of the larger community.

Neighborhood Commercial. Other commercial areas located in the village include the Pomerleau shopping center, the area by the I-89 interchange, and the area at Demeritt Place and Main Street. These have developed in a more auto-oriented fashion that breaks with traditional patterns of downtown development. Such areas should be maintained as neighborhood commercial areas; however, any infill or redevelopment – along Main Street in particular – should reflect the village's more traditional, pedestrian-oriented pattern and scale of development.

Residential. There are a number of historic residences lining Main Street, many of which have been converted to multi-family, office or other commercial uses. This trend is expected to continue. Upper story apartments above commercial storefronts and a group home are also located within the downtown. Waterbury Village also includes a number of residential neighborhoods, which should be maintained and protected from inappropriate land uses. These neighborhoods include Randall St., Winooski St., Wissel Mountain, Batchelder St., Union St., and Butler-Intervale-Prospect Streets. Several residential subdivisions are located on or off of Blush Hill, some of which are in the village limits.

Industrial. Waterbury is fortunate to have three distinct industrial areas located within the village, within easy walking distance of neighboring residential and commercial areas. These include:

- **Pilgrim Park**, accessed from Park Row, which includes land for development, and the potential development of the Anderson Concrete parcel;

- land at the end of **Foundry and Bidwell Lanes** where Green Mountain Coffee Roasters offices, and the old Granite Shed are located; and
- **Grenier Industrial Park** accessed from Demerritt Place, where several commercial and industrial businesses are located.

These areas are served by the New England Central (formerly Central Vermont) rail line. In keeping with the desires of the community, and in light of the availability of water, sewage, rail, and interstate traffic routes, industrial uses should continue to be encouraged in these areas. There is interest in better linking the village's industrial areas with the historic downtown – for example, through the development of an interconnecting pedestrian network, and the creation of transitional "gateways" into adjoining historic areas. There are several historic structures within or adjacent to these areas, including the Central Vermont Railway Train Station, scheduled for restoration due to the work of Revitalizing Waterbury, Inc., and a grant from the Transportation Enhancements fund.

There is also some interest in the redevelopment of the A.G. Anderson Concrete parcel to accommodate a higher density and mix of commercial, service, and industrial uses that will add to the downtown's economic and cultural base. 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. 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 area. A potential development scheme for this area has been developed and is attached to this plan as Appendix 5. This conceptual scheme offers a high density, mixed-use development scenario for one of the key remaining parcels within the Village.

Institutional. 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 incorporates 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 serves as Waterbury's primary employment center, and houses the largest concentration of workers, and parking, in the downtown. Waterbury residents have stated in surveys that a community goal is to maintain public buildings that are open to and serve the public in the downtown (as noted in a 2001 community survey about Thatcher Brook Primary School).

Mill Village

Mill Village, within Waterbury Village, is a historic residential and commercial neighborhood at the north end of Stowe St., which is also on the National Register of Historic Places. A large area of undeveloped land adjacent to this area, and off Lincoln Street, contributes to the historic nature of the area and is also a prime site for future development. This undeveloped area is either already served by or has easy access to municipal water and sewer. Water and sewer could allow for a greater concentration of new development; such development, however, could also adversely affect the historic character of the area. Future development in the Mill Village Historic District should be compatible with the architectural and historic character of the neighborhood.

Colbyville

The settlement of Colbyville includes the area from the foot of Blush Hill northward on Route 100, beyond the Thatcher Brook Inn, to Ben & Jerry's Homemade, Inc. It currently contains a mixture of uses,

including residential, commercial, and manufacturing. Much of Colbyville lies within the expanded village, and is served by municipal water and sewer.

The area 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 mill 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.

Waterbury Center

Waterbury Center, an unincorporated village within the town, is located off of Route 100. The Waterbury Center Common is one of Waterbury's earliest settlements. Here are located the Waterbury Grange, a post office, a general store, the fire department, recreation areas, and a residential neighborhood. 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. The Seminary building was recently redeveloped into 16 units of affordable housing by the Central Vermont Community Land Trust and Housing Vermont, with financial assistance from various grant and tax credit sources including a major Community Development Block Grant obtained by the Town of Waterbury. The restored Seminary building, which opened in June, 2002, continues to house the Waterbury Center branch of the library, and includes a reconstructed town Little League field on the site.

Waterbury Center is also characterized by a concentration of mixed uses along Route 100. In the midst of what appears to be tight, mixed-use, residential settlement is Cold Hollow Cider Mill, one of Vermont's major tourist attractions. It stands adjacent to the Waterbury Center Community Church, which is listed on the National Register for Historic Places.

Upland Forests

Much of Waterbury, which by the end of the 19th century had been cleared for timber and farms, was, by the end of the 20th century, reforested. Currently, 79% of the town is forested and only 10% remains open. Waterbury's forests support a variety of ecological functions and recreational activities.

State Forestland. 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 Waterbury portion of Putnam State Forest is in two parcels and totals 589 acres (Maps 2-2 and 4-1). The state makes a payment in lieu of taxes to the town for its holdings.

The Department of Forests, Parks and Recreation has developed a forest management plan to manage its resources. 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:

- the promotion and management of recreational activities in appropriate areas, which currently include camping, hiking, hunting, fishing, canoeing, snow-mobiling, and cross country skiing;

- the protection of wildlife habitat, especially critical wildlife habitat, including deer wintering yards, endangered and threatened species, and bear habitat;
- the sound management of natural resources, such as fragile areas, waterways, and timber stands; and
- the protection of natural and cultural features which constitute scenic and/or historic areas.

Private Holdings. While much of the town's forestland is in public ownership, the remaining private holdings, including some upland areas in the Worcester Range, are available for potential development. Development could result in the fragmentation of important timber stands and wildlife habitat, and impacts to environmentally sensitive areas. Subdivision and development of these forested areas should be carefully reviewed to minimize negative impacts on valuable natural resources.

Route 100

The Route 100 Corridor is a 5.6-mile stretch of state highway from Route 2 (Main Street) in Waterbury Village to the Stowe town line. Route 100 is a major feature of Waterbury and must be managed with care. A major access to the Stowe Ski resort areas, Route 100 is being transformed from a rural, residential transportation route to a growing commercial strip. While this trend may offer economic benefits to landowners along Route 100 and potentially affects the tax base, three quarters of the Waterbury community is concerned about the effects that continued linear and loosely-controlled commercial growth along the Route 100 corridor will have on the community (as noted in Community Survey results in Appendix 1).

Development within the corridor has the potential to bring new businesses and services to Waterbury which are not currently available. There are concerns, however, about the economic consequences of such development on businesses in Waterbury Village. As long as the corridor continues to be a highly traveled route, it will be a desirable location for those businesses which seek or depend upon high traffic volumes, and so cannot locate in Waterbury Village. Commercial development along Route 100, if done with prudent forethought and coordinated planning, could be an asset to Waterbury, including the downtown portion of the Village.

Several scenic views, including distant mountain peaks and broad expanses of open space, can be experienced while traveling along Route 100. For many visitors, it is their only experience of Waterbury. Development within the corridor has the potential to detrimentally alter the visual and rural character of community; it also has the potential to improve upon it. Many residents acknowledge that some developments have improved the landscape by replacing decrepit structures and overgrown fields with viable and attractive businesses. Others express deep concern about visual and other consequences of future development.

Many historically significant and architecturally distinctive structures are located along Route 100, particularly in Colbyville, Waterbury Center, and the Shutesville Hill area. As noted in the community survey, residents are concerned that these resources may be adversely affected or obscured by inappropriately located and sized commercial developments.

Traffic on Route 100 is an ongoing concern that must be addressed through access management and other traffic control measures. The location of intersections, the alignment of the corridor, and fast-moving vehicles create hazardous situations where sight distances are limited and response times short. 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.

Increased traffic volumes will likely be the result of - and stimulate more - commercial growth. Increased commercial growth could result in an increase of the number of curb cuts along Route 100, which could compound existing hazardous traffic conditions and reduce the level of service of the State highway. Existing commercial corridors, such as in Conway, NH, the Barre-Montpelier Road, and Williston Road in South Burlington are examples frequently pointed to as something to be avoided in Waterbury.

U.S. Route 2

Along Route 2 northwest of the village is a mix of commercial and residential uses and open spaces, with I-89 on one side and the Winooski River on the other. Waterbury's sewage treatment plant is located here. The entrance to the Mount Mansfield State Forest along the Little River is off of Route 2. Though less traveled than Route 100, there is the potential for additional commercial strip development along sections of Route 2, which could be avoided through appropriate site development and good access management.

Rural Residential Areas

Much of the rest of the town is characterized by rural (low to moderate density) residential development along town roads, interspersed by agricultural and open land. The subdivision of open land for large lot (6+ acre) residential development has become increasingly common in recent years. As identified within the community survey, there is strong community support for preserving the rural character of these outlying areas, including Waterbury's remaining farmland, to include the clustering of development to minimize the fragmentation of open space and agricultural soils, and associated environmental and aesthetic impacts.

11.3 Desired Patterns of Development

Waterbury residents who responded to the 2001 Community Survey identified the following as their highest priorities over the next five years (the complete 2001 Community Survey Report is Appendix 1):

- downtown revitalization,
- the protection of natural resources,
- the protection of open space,
- maintaining rural character, and
- recreation path development.

New development proposals should be evaluated for their consistency and compatibility with each of these identified objectives. Survey results also give some indication of the preferred type and location of development. These are summarized as follows.

2001 Community Survey Results: Land Use & Development

Table 11.3 Types of Development		
	Strongly Agree/Agree	Strongly Disagree/Disagree
Waterbury Should...		
Improve the vitality of existing businesses	89.7%	3.7%
Promote preservation and reuse of historic structures	87.3%	4.6%
Encourage small-scale commercial development	84.1%	10.1%
Encourage/expand cultural resources (e.g., theater)	80.1%	5.3%
Direct more resources to downtown revitalization	79.2%	9.9%
Encourage tourism-related business and industry	77.9%	12.5%
Provide additional housing for seniors/handicapped	75.8%	8.0%
Provide affordable housing for low/moderate income	68.6%	12.5%
Encourage adequate, affordable child care facilities	67.3%	8.0%
Encourage large-scale commercial development	16.8%	75.2%
The following businesses should be encouraged...		
Retail	85.1%	8.0%
Personal/Professional services	82.6%	2.8%
Home-based businesses	80.3%	3.8%
Small scale high technology	77.4%	2.5%
Farming	75.9%	9.3%
Neighborhood corner stores	73.1%	11.1%
Light industry	71.4%	15.5%
Commercial recreation	57.6%	22.6%

Table 11.4 Location of Development		
	Strongly Agree/Agree	Strongly Disagree/Disagree
Residential development should be encouraged...		
In existing buildings in the village	82.9%	9.5%
Within existing neighborhoods	77.1%	14.2%
In clusters to protect open space, natural resources	73.0%	16.3%
In the town's outlying areas	50.9%	34.8%
Along Route 100	24.6%	58.3%
Commercial development should be encouraged...		
Within developed areas	81.5%	10.7%
Within the village	73.0%	19.5%
Within designated areas along Route 100	70.6%	23.9%
Along Route 2 toward Bolton	60.4%	25.2%
In the town's outlying areas	32.6%	50.3%
Along the entire length of Route 100	14.9%	77.8%
Industrial development should be encouraged...		
Within developed areas	66.5%	23.7%
Along Route 2 toward Bolton	58.1%	29.2%
Within designated areas along Route 100	52.8%	39.7%
Within the village	40.3%	47.8%
In the town's outlying areas	32.8%	50.9%
Along the entire length of Route 100	11.6%	79.4%

Waterbury residents, as represented by survey respondents, **support:**

- downtown revitalization and the adaptive reuse of historic structures;
- development within existing developed areas (e.g., infill and redevelopment);
- the designation of growth areas along Route 100 to avoid strip development;

- small-scale commercial development in appropriate locations (downtown, existing and designated growth areas), including services, retail and cultural amenities that serve the local community and, to a lesser extent tourists;
- light industry in existing developed areas, including small scale, high technology;
- additional housing for seniors, and to a lesser extent low and moderate income households;
- farming and home-based businesses; and
- clustered residential development to protect open space and natural resources.

Waterbury residents **oppose:**

- large-scale commercial development,
- residential, commercial and/or industrial development along the entire length of Route 100 (strip development), and
- commercial and industrial development in the town's outlying rural areas.

In addition, a majority of survey respondents (55.5%) agreed that it was important to use the extension of municipal water and sewer services to direct development to desired locations. This could be done through the delineation of facility service areas to include only the downtown and other designated growth areas, and by allocating unreserved water and sewer capacity accordingly.

11.4 Existing Land Use Regulations

Zoning regulations for the town and village were combined in 1994 into one set of bylaws. They have since been updated on a regular basis, most recently in 2001. The zoning regulations include nine town and eleven village zoning districts (Table 11.5).

Village zoning districts reflect the pattern of more concentrated, mixed-use development that exists within the village. Town 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 industrial zoning districts.

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 the vicinity of Waterbury Center. A variety of commercial uses, as well as single and multi-family dwellings, are allowed in this district.

Table 11.5 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

The zoning regulations include provisions for site plan review by the planning commission, conditional use review by the town or village board of adjustment, and sign regulations, including related sign design standards. There is also an adopted flood hazard area overlay district, which is required for municipal participation in the National Flood Insurance Program (NFIP). In 2000, the zoning was amended to include telecommunications facility provisions. The Planning Commission proposed downtown design regulations and associated guidelines in 2001 to meet planning requirements for downtown designation, but these were tabled by the Village Trustees.

At present, Waterbury does not have separate subdivision regulations. The subdivision of land is reviewed to a limited extent under site plan review, and related planned residential and planned unit development (PRD and PUD) provisions.

11.5 "Smart Growth" for Waterbury

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. Some tell-tale features of sprawl include large lot developments, low average densities, large paved areas, fragmented open spaces, separation of uses into distinct areas, and the necessity of automobile-travel to meet basic needs. "Smart Growth" is an antidote to sprawl and seeks to preserve compact settlement patterns, encourage mixed-use development, preserve working land as well as historic and cultural facilities, offer choices in both housing and transportation, and involve citizens in the deciding the community's future. 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, suggest that sprawl is becoming a problem in Waterbury, particularly along the Route 100 corridor.

11.6 Future Land Use Plan

Overview. The general goal of the Land Use Plan is to direct growth into areas most appropriate for development. The object 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, institutional, and high density residential - in two growth centers in the future: Waterbury Village and Waterbury Center village.

This Land Use Plan is a conceptual plan for how future growth in Waterbury should be managed. The Future Land Use Maps 5-2A and 5-2B are not Zoning Maps, or a substitute for the Zoning Maps in the Waterbury Zoning Regulations, and should not be interpreted as such. Even though the Town and Village Zoning Maps have been used in the past in the place of proper Future Land Use Maps in the Municipal Plan, the Future Land Use Maps in this Plan are representational of the existing and desired future land use patterns. Each Land Use Area shown on the Future Land Use Maps includes various Zoning Districts and the Areas are intended to represent broad land use categories that include a variety of minimum lot sizes and appropriate uses.

A key to developing a future Land Use Plan lies in an understanding of the traditional and current settlement patterns in our community. A casual tour of the community reveals a variety of activities that can be broadly grouped into five land use categories, and a review of the current zoning map confirms this. From further review emerge those areas where concentrated development appears most appropriate. The Plan developed here follows, in many respects, the historic settlement patterns in Waterbury. The historic village areas of Waterbury Village include Main Street and Stowe Street, Pilgrim Park, Mill Village and Colbyville. The historic areas of Waterbury Center Village include the area along Route 100 near Cold Hollow Cider Mill and Waterbury Center Common. These two growth centers encompass most of the existing commercial, industrial, institutional, and higher density residential uses, as they have in the past. Their designation as growth centers is an "overlay" on the zoning in those areas, and is an expression of the community's desire to make the fullest possible and appropriate use of them, to both promote economic growth and protect the rural nature of the outlying districts.

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, and
- 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."[1]

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.[2] Waterbury Village and Waterbury Center Village certainly fit within one or another of these categories.

The Planning Commission recognizes that not all of the areas within the two designated growth centers are currently suitable for intensive development. Without enhancements to pedestrian and vehicular access, Route 100 will be unable to support compact settlement patterns, walking communities, and mixed-use development – the touchstones of "smart growth."

The 1999 Transportation Study conducted by the Central Vermont Regional Planning Commission identified a number of potential solutions to the problems of pedestrian and vehicular access along Route 100. The proposed projects for the Route 100 area include the construction of a new town road running parallel to Route 100 from Guptil Road to Lincoln Street, traffic-calming elements at the intersection of Laurel Road and Route 100, sidewalk and pedestrian crossings at the Blush Hill intersection, narrower roadways at the I-89 interchange, and the use of roundabouts. (Copies of the 1999 Transportation Study are available at the Waterbury Municipal Offices.)

[1] State of Vermont HUD Consolidated Plan 2000-2004.
[2] Agency of Natural Resources: Growth Center and Growth Management Guidance Document (2002)

In the absence of infrastructure improvements for pedestrian and vehicular traffic, further development along Route 100 would exacerbate the conditions already identified in the 1999 Transportation Study: the deterioration of village character, severe backups, heavy traffic volume, rushed traffic, and unsafe pedestrian and vehicular conditions.

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 as follows:

- Mixed Use – Commercial/Industrial/Institutional/Higher Density Residential
- Village Residential
- Route 100
- Rural Residential/Agricultural
- Agricultural/Forestry/Conservation

The Village Overlay Areas/Growth Centers are shown including the higher density land use areas 1 and 2. One overlay encompasses Waterbury Village and the other includes Waterbury Center Village. A more detailed description of these areas, including the Village Overlay follows:

1. **Mixed Use – Commercial/Industrial/Institutional/Higher Density Residential Area.**

A. Physical characteristics and boundaries

This mixed-use area includes all the industrially zoned property in the Village and the Town including Pilgrim Industrial Park, the Demerit Place industrial area owned by Grenier Land Co., and the area around the flea market on Route 2, Bolton Rd. The mixed use area also includes the State Office Complex, the commercial and mixed residential areas of the Village of Waterbury, most of Colbyville, the Ben & Jerry's site, and the commercial areas in Waterbury Center Village including the Cold Hollow Cider Mill and the area around the triangular town green. These areas are located entirely within the designated Village Growth Centers and are shown on the Proposed Land Use Plan.

B. Current land uses, trends, problems/issues

The 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 general industry to light industry, offices, small scale retail, and other commercial uses. Some of the industrial areas, such as Pilgrim Industrial Park and the flea market area, have room left for a significant amount of development. There are also other opportunities for new commercial development and re-development in Colbyville and infill sites in Waterbury and Waterbury Center Villages.

The trend in the foreseeable future is for a variety of new development and re-development in these mixed-use areas to provide employment, shopping, and recreational opportunities. The anticipated challenges will include how to relieve and help prevent traffic congestion that may result from local and regional development and tourism activity, and how to address access management along Route 100, particularly in Colbyville and Waterbury Center Village. Accommodating pedestrian activity in these areas is an increasingly important challenge.

C. Desired Future Conditions

It is essential for Waterbury to retain and support its existing employers and to enhance the associated mixture of land uses that these anchor employers generate. Retaining Waterbury's major employers such as Green Mountain Coffee Roasters, Ben & Jerry's, and the State Office Complex is critical to the future of our community. It is also desirable to keep these and future large employers, as well as the many existing and future smaller businesses, located within the Mixed Use Areas and to support new compact development as infill within the Mixed Use Areas as well.

D. Recommended Strategies

- Encourage additional mixed uses, including residential growth, in the mixed use areas of Industrial Park, Colbyville, and Waterbury Center.
- Encourage higher density development in the designated Mixed Use Areas.
- Retain civic buildings and uses within the Village Growth Centers.
- Develop a strategy for extensions to the public water and sewer system consistent with the goals, objectives, and actions identified in theChapter 9.
- Provide continued financial incentives for development within the Village Growth Centers.
- Promote multi-modal transportation in the Mixed Use Areas including the provision and maintenance of adequate pedestrian and bike facilities.

2. Village Residential Area

A. Physical characteristics and boundaries

These areas are located within the Villages of Waterbury and Waterbury Center. They are characterized as almost exclusively residential areas with a combination of one-, two-, and multi-family dwellings in the Village of Waterbury, and primarily one-family dwellings in the Village of Waterbury Center.

B. Current land use trends, problems/issues

These residential areas include several historic buildings, especially in the Village of Waterbury, where the majority of the houses are more than 50 years old. 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 the Village of Waterbury and on-site systems in Waterbury Center.

C. Desired future conditions

These Village Residential Areas are in the Growth Centers Overlays and higher density is desirable. Availability of public sewer and water within the Village of Waterbury will continue to facilitate compact development, while the lot sizes in Waterbury Center will continue, in most areas, to be larger due to the limitations of soils and on-site septic. Higher densities in some of these areas may be considered to support compact development where possible and appropriate. Any extensions of the higher density residential development outside of the designated Growth Centers Area should be reviewed for conformance with the Municipal Plan.

D. Recommended strategies

- Allow for infill development in these areas as appropriate and compatible with the surrounding development and the natural constraints of the area.

- Encourage the addition of accessory apartments or additional units on individual lots as allowed by the zoning regulations.
- Encourage the use of shared septic systems and new on-site systems in the area within the Waterbury Center Village as a way to facilitate higher density.

3. Route 100 Area

A. Physical characteristics and boundaries

This area follows both the east and west side of Route 100 from Colbyville to Waterbury Center Village, and then from Waterbury Center Village to the Stowe-Waterbury town line. The area is generally accessible directly from Route 100. The area includes pockets of existing commercial and residential development as well as a significant amount of agricultural and forested land, scenic open areas with vistas of the mountains, and natural areas such as wetlands, streams, and ponds. Route 100 is a state road that is heavily used by people going to and from work, tourists, commercial vehicles, and local traffic.

B. Current land use trends, problems/issues

The Route 100 area continues to experience significant development pressure in part because it is a highly traveled route with existing tourist attractions such as the Stowe Mountain Resort, Ben & Jerry's, Cold Hollow Cider Mill, and other shops and businesses. The entire Route 100 area is experiencing both commercial and residential development pressure. Regional growth and development adds growth pressures as well.

Fortunately development along Route 100 is currently focused in a number of nodes separated by open space and some of the most scenic vistas in the state. Two of the key issues in the Route 100 area, already identified and addressed to some extent in the zoning regulations, are preservation of important open space and clustering development in appropriate areas, as well as limiting road access/curb cuts off Route 100 for proposed and existing development.

C. Desired future conditions

- Preserve/conserve key open spaces and scenic vistas along Route 100.
- Allow for future development in nodes or concentrated areas without compromising the quality of the natural and rural quality of the landscape.
- Limit access for development to retain the ability of Route 100 to carry through-traffic and help prevent strip development with multiple access points.
- Allow for and support development with pedestrian amenities to reduce required automobile traveled.

D. 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 conserve scenic and sensitive natural areas along Route 100.
- Work closely with the Vermont Agency of Transportation to limit 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.

4. Rural Residential/Agricultural Area

A. Physical characteristics and boundaries

Until recent decades this area was primarily farmland. Currently less than 30% is actually farmed. Much of this land is flat or gently sloping. Many fields have overgrown and become wooded again and the area is more diverse now. Large and small open fields do remain, and significantly contribute to the rural character of our town. Significant residential growth has occurred in this area over the past several decades, affecting the rural character of the area.

B. Current land use trends, problems/issues

This area contains nearly all of the town's active farmland, including three dairy farms, sugaring operations, fruit orchards, Christmas tree plantations, and vegetable farms. It is also the area of most new residential development, including conventional and cluster subdivisions. These land uses may conflict, resulting in the loss of productive farmland. Residential development along roads may place an excessive burden on these roads and diminish the rural character that attracted people to live in these areas in the first place.

C. Desired future conditions

In keeping with the desire to accommodate new development while protecting important resources within the area, this area should have the following characteristics in the foreseeable future:

- The rural character and landscape are maintained. New development will be generally residential in nature and sited so as to maintain the productive capacity and visual integrity of the landscape.
- Development will be clustered to the extent possible to minimize the impact on sensitive natural resources and scenic lands.
- Curb-cuts and strip development along town roads will be effectively controlled by encouraging single curb cuts serving multiple residences wherever possible.
- 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.
- The regulatory framework will be conducive to thriving yet compatible home occupations in this area.

D. Recommended strategies

- Develop subdivision regulations and zoning amendments to promote the desired future conditions listed above.
- 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 agricultural, and land conservation through the purchase of development rights and conservation easements.
- Institute a town policy limiting curb cuts on town roads and encouraging curb cuts that serve multiple lots.

5. Agricultural/Forestry/Conservation Area

A. Physical characteristics and boundaries

The Agricultural/Forestry/Conservation Area is all the land lying outside the other areas as shown on the Land Use Plan. This area includes private land with a very low population density, and a large area of State land that is mostly in two State Forests. The majority of the area is forested hillsides and mountainsides with steep slopes, thin and rocky soils, and very limited access, mostly via Class 4 Town roads and private or state-owned logging roads. This area includes large blocks of significant wildlife habitat, with opportunities for passive recreation and the production of timber.

B. Current land uses, trends, problems/issues

This area includes very important forestry and some agricultural resources. The area also includes recreational areas such as Little River State Park and an extensive network of trails on private and public land used for snowmobiling, biking, and hiking. Hunting is also an important use of these areas. Visually the area provides the backdrop for Waterbury's scenic beauty. Development of these areas, especially for residential use, can have a very negative impact on the natural, scenic and functional quality of these areas. Logging and other traditional uses of these areas can be very detrimental as well if roads, trails and clearings are not properly located and carried out.

C. Desired future conditions

- The area should primarily be devoted to forestry, agricultural, passive recreation, and other land conserving uses. Most of the area should remain undeveloped or for residential use.
- Prominent landscape features such as ridgelines, hilltops, and steep slopes should not be visibly developed.

D. 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 limit development on slopes exceeding 25%, on lands above 1500 (plus or minus) feet in elevation, and all prominent ridgelines and hilltops.

Village Growth Centers

General Description and Purpose. In keeping with the Goals, Objectives, and Actions in this Municipal Plan, the Land Use Map includes two Village Growth Centers. These are overlay areas that include both the Mixed Use Areas and the Village Residential Areas. The general purpose of these Village Growth Centers is to identify our existing village centers and provide opportunities for additional development and re-development within and around the existing villages.

An additional purpose is to concentrate development where public and private services, and transportation infrastructure are generally adequate and can be economically extended. With reasonable public and private investment these areas can continue to thrive and be economically productive into the future.

These Village Centers are both the commercial and cultural centers of our community and should be supported and enhanced in this role.

By encouraging development in and around our existing Villages, we will be better able to retain the character and function of the more rural areas surrounding the villages. By concentrating development in these Growth Centers we may be able to help prevent inappropriate suburban residential growth that may degrade the character of the surrounding rural areas. An additional incentive for concentrating development in the Village Growth Centers is that dispersed suburban growth is generally more expensive to serve with municipal services and infrastructure than compact village development.

11.7 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 adjacents towns may be beneficial to coordinate planning efforts, projects involving public infrastucture 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. Additional commercial uses along Route 100 in Waterbury are allowed . 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.

11.8 Goals, Objectives and Actions

Goal 1

Guide future growth and development by reinforcing Waterbury's traditional pattern of concentrated settlements surrounded by rural countryside.

Goal 2

Preserve and maintain the character of Waterbury's residential neighborhoods, commercial and industrial areas, and natural and recreational areas.

Objectives

2.1 Administer the town zoning regulations and site plan review in a fair and consistent manner.

2.2 Promote the appropriate use of land to prevent the sub-urbanization of Waterbury's rural countryside, and to discourage strip development.

2.3 Ensure that development is not detrimental to Waterbury's, public services and infrastructure, transportation safety and mobility, and natural and scenic resources.

Actions

1. Evaluate whether zoning regulations promote development densities that are consistent with existing and desired settlement patterns, the physical capability of the land, the availability of public water or sewer, and significant natural features.
   - Review allowed uses in industrial zone, with particular attention to the transition zones between industrial and residential area. Consider a mixed-use industrial zone.
   - Evaluate whether development regulations in the Route 100 District are addressing the goals of the Plan.

2. Consider options, including subdivision review, to improve review of all subdivisions and ensure that new development conforms to the Town Plan.

3. Consider establishing basic design standards under site plan review to ensure development is compatible with adjoining properties and with the purpose of zoning districts.

4. Consider establishing a Development Review Board to streamline permit review and enable the Planning Commission to focus on planning issues.

5. Designate Waterbury Village as a primary growth center and Waterbury Center village as secondary growth area. Strive to develop these as pedestrian-friendly, mixed-use with public facilities, services, commerce, housing, recreation, and employment.

6. Work to establish the downtown portion of the Village of Waterbury as a State Designated Downtown or Village in order to encourage commercial and retail development, support revitalization efforts and enhance cultural activities in the central business district. Promote Waterbury Village's historic district and ensure that commercial development maintains the existing architectural context of Waterbury's historic Main Street.

7Explore the development of an Official Map as a means to identify and reserve areas suitable for public uses, including public buildings, recreation areas, green paths, streets, and other facilities.

8. Explore implications of changes in state septic regulations for land use in Waterbury.

9. Designate specific nodes along Route 100 and Route 2 as areas of concentrated growth to focus growth in these areas and preserve the rural character of the remaining portions of the corridor.

10.Pursue access management strategies for reducing turning movements along Route 100 and improving overall circulation patterns.

11.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.

12. 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.

13. Maintain a scale of commercial development that is consistent with Waterbury's village and rural character. Restrict building and parking lot sizes to avoid sprawling suburbanized development.

14. Reduce the impact of development in upland areas and steep slopes by developing siting standards and permissible uses for ridgeline areas and hillsides.

APPENDICES

Appendix 1 Excerpts from 2001 Community Survey Report
Appendix 2 Community Fair – Feedback from Attendees
Appendix 3 Community Workshop – Meeting Notes
Appendix 4 Planning Options for Downtown Designation
Appendix 5 Excerpts from New Models for Commercial and Industrial Development[1]

[1] This is a project of the Vermont Forum on Sprawl and the Vermont Business Roundtable with assistance from William Maclay, Maclay Architects, and Jeffry Glassberg, Renaissance Development Corp.

APPENDIX 1

WATERBURY PLANNING COMMISSION

2001 COMMUNITY SURVEY

FREQUENCIES AND REPORT

BY:

THE CENTER FOR RURAL STUDIES

UNIVERSITY OF VERMONT

TABLE OF CONTENTS

SECTION 1.
EXECUTIVE SUMMARY

The Waterbury Planning Commission 2001 Community Survey was mailed out to a random sample of 23.8% of Waterbury's registered voters. The data in this report was gleaned from returns with a 56.2% response rate.[1] The returns represented a stratified sample that is comparable to the U.S. Census 2000 demographics data for Waterbury's registered voters.[2]

A small sample of the survey data includes:

- 67.6% of respondents answered that they support the merger of the Town and Village of Waterbury.[3]
- 82.9% supported the statement that Waterbury's development should be subject to some form of local regulation.[4]
- 79.2% agreed that Waterbury should direct more resources to downtown revitalization.[5]
- 59.3% of respondents identified natural resource protection as an important community objective.[6]

This report contains summarized methodology and demographics for the 2001 Community Survey as well as discussions of data topics highlighted by the Waterbury Planning Commission. These data topics include:

1. The 5 highest-scoring objectives for Waterbury of the next 5 years
2. Opinions on the location of future residential development
3. The response to the Waterbury Town/Village merger
4. Responses to taxes in Waterbury
5. A three-way cross-tabulation between taxes, the merger and Town/Village residency.

An extensive series of appendices follows. These appendices include expanded background materials as well as frequencies and respondent comments.

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[1] See *Methodology*, Appendix A.
[2] See *Demographics*, Appendix B.
[3] See question E4, Appendix C.
[4] See question E2, Appendix C.
[5] See question A1e, Appendix C.
[6] See question E1c, Appendix C.

SECTION 2.
METHODOLOGY SUMMARY

PURPOSE

The purpose of the 2001 Community Survey was to assist the Waterbury Planning Commission by assessing public opinion on issues concerning economic development, land use, natural resources, cultural and community resources, municipal services, and various other topics. Information gleaned from the survey will aid the Commission as they fulfill their duties concerning the 5-year revision of the Waterbury Municipal Plan.

METHODOLOGY SUMMARY

The Center for Rural Studies at the University of Vermont was contracted by the Town of Waterbury to develop and conduct the Waterbury Planning Commission 2001 Community Survey. The Center was also responsible for data entry and preliminary analysis.[1]

The 2001 survey was developed through a synthesis of previous Waterbury survey (1990[2]) questions, new questions introduced by the Waterbury Planning Commission, and suggestions and modifications from the Center.

The main body of the survey consisted of 3 pages of 23 question sections or "foci."[3]

The survey sample was constructed from the Waterbury Voter Registration List, which consisted of 2,525 citizens – 51.4% of Waterbury's US Census 2000 population of 4,915. A sample of 600 was randomly selected, which represented 23.8% of the Voter List.

Address corrections reduced the sample size to 585 citizens. The surveys were mailed out in two waves to encourage a good response rate. The surveys were tracked using code number labels that corresponded to the Voter List address information.

Overall, 337 surveys were filled out and returned, representing 56.2% of the original sample and 13.3% of Waterbury's voting population.

The Center entered the returned survey data in SPSS format to produce frequency information and cross-tabulations.[4]

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[1] For the full methodological text, see Appendix A.
[2] See *Waterbury Planning Commission 1990 Community Survey*, Appendix F.
[3] See *Waterbury Planning Commission 2001 Community Survey*, Appendix E.
[4] See *Highlighted Data Topics*, Section 4; and *Frequencies*, Appendix C.

SECTION 3.
DEMOGRAPHICS SUMMARY[1]

The Waterbury Planning Commission 2001 Community Survey asked 7 demographic questions:

1. age
2. gender
3. household size
4. home ownership
5. residence
6. place of work
7. preferred locus of shopping.

The survey return demographics are compared to the corresponding data for Waterbury in the 2000 US Census. The survey sample was obtained from Waterbury's Voter Registration List, the main consequence being that the survey demographics will not match the Census data – e.g. the Voter List only contained citizens with the inclination to vote and does not include citizens under 18 years of age. Table 3.1 compares some of the survey demographic data with the 2000 US Census data.

Table 3.1

Survey Data	2000 US Census Waterbury Data
No citizens under 18 years of age in Voter List	Under 18 represents 25% of overall population
Voter List equals 2,525 of 18+ population	18+ population is 3,682 out of 4,915
No respondents between 18-21 years of age	18-21 represents 2% of overall population
Respondents are 44% male and 56% female	Population is 48% male and 52% female
Mean of 2.63 persons per household	Mean of 2.4 persons per household – note: *owner-occupied* figure is 2.62, almost identical to survey data
29.7% of respondents live in Village (from Voter List) – note: only 26.5% actually answered to that effect.	36.6% of adult population lives in Village

Table 3.2

Place of Work	Response
Waterbury	27%
At home	13%
Montpelier	17%
Burlington	12%

Table 3.2 gives the approximate rates of respondents that answered they work in Waterbury or at home – 38%, combined – as well as Montpelier and Burlington in question. Barre, Stowe, and

[1] For full demographics text see Appendix B.

Randolph all received responses of 3% or less. This information corresponds to question F6 in the survey (App. C).

In question F7 (App. C), respondents were given 9 locations and asked whether they shop there *weekly*, *monthly*, *annually*, or not at all. Table 3.3 gives the approximate *monthly* response rates of 7 of the locations in order of preference. Massachusetts and Quebec both scored 2% or less. Note that Waterbury places fifth in this list because it is primarily a *weekly* shopping destination with a response rate of 74%.

Table 3.3

Shopping Locus	***Monthly* Response**
Williston	53%
Burlington	51%
Berlin	43%
Montpelier	37%
Waterbury	21%
Barre	18%
New Hampshire	7%

SECTION 4.
HIGHLIGHTED DATA TOPICS

During conversations with the Waterbury Planning Commission, certain data topics were highlighted and discussed. Four of those topics are explored in this section. They are:

1. Waterbury objectives
2. Location of residential development
3. The Town/Village merger
4. Taxes

WATERBURY OBJECTIVES

Survey question E1 (App. C) listed 14 possible objectives. Respondents were asked to choose 5 for Waterbury to achieve over the next 5 years. In Table 4.1, the response rate for each objective is used to determine its priority in comparison to others. The response rate represents the percentage of total respondents who chose that particular objective. The top 5 objectives are listed:

Table 4.1

E1: Objective	Response Rate
Revitalize Downtown	63.8%
Protect Natural Resources	59.3%
Protect Open Space	55.5%
Maintain Rural Character	52.8%
Develop a Recreation Path	46.9%

Table 4.1 shows that almost 64% of survey respondents chose *downtown revitalization* as an objective – either by giving it a rating of 1-5 or just checking it off. *Developing a recreation path* was the last of the highest objectives with a rate near 47%. In contrast, the lowest of the 14 objectives was *developing Town water facilities* with a rate of 9.8%.

LOCATION OF RESIDENTIAL DEVELOPMENT

Table 4.2
Future residential development should be encouraged in existing buildings in the village[1]

Answer	Response %[2]
Agree	82.9
No Opinion	7.6
Disagree	9.5

Table 4.2 shows that nearly 83% of respondents would prefer to see residential development occur within existing buildings in Waterbury Village. This was the highest rate of support given to any of the residential development options under A3. A3b also had the highest response rate[3] of the 6 options.

Table 4.3	Town/Village Residency[4]	
A3b...in existing buildings in the village	Town	Village
Agree	187	77
% of Town/Village	83.9	80.2
No Opinion	16	9
% of Town/Village	7.2	9.4
Disagree	20	10
% of Town/Village	9.0	10.4

Table 4.3 shows that agreement to locate residential development in existing buildings in the Village is relatively consistent between Town and Village residents – 83.9% vs. 80.2%, respectively.

[1] See question A3b, Appendix C.
[2] Taken from Cmb % in App C. – the combination of the Strongly Agree (S/A) and Agree (A) categories into one rate, as well as the Strongly Disagree (S/D) and Disagree (D).
[3] Given in Appendix C as *Response %* (97.0).
[4] See question F5 *Waterbury Voter List Town/Village Data*, Appendix C.

THE TOWN/VILLAGE MERGER

Table 4.4

Would you support the merger of the Town and Village of Waterbury?[5]	Freq[6]	Valid %[7]
Yes	194	67.6
No	93	32.4
Total	287	

Table 4.4 shows that almost 68% of respondents support a merger between the Town and Village of Waterbury. It also reveals that only 287 of all survey respondents answered this particular question. That represents a response rate of 85.2%, one of the lowest among all of the questions. This low response rate could be the result of the lack of a *no opinion* option – e.g. those who did not have any opinion simply did not answer the question.

Table 4.5	Town/Village Residency	
E4: Support Merger?[5]	Town	Village
Yes	122	68
% of Town/Village	62.2	81.0
No	74	16
% of Town/Village	37.8	19.0
Total Count	280	
% of Survey Respondents	83.1	

Table 4.5, a cross-tabulation between support of the Waterbury merger and Town/Village residency, shows that the majority of both types of residents are positive toward the merger. The percentage of supportive Village residents (81%) is higher than the Town percentage (62.2%). Note that this cross-tabulation can only account for approximately 83% of total survey respondents. Sixteen respondents from the Village (84%) chose not to answer the question, vs. 196 Town citizens (85.6%). In other words, similar proportions of Village and Town residents declined to answer the question, with the Town having a slight majority.

[5] See question E4, Appendix C.

[6] *Freq* stands for *frequency* – the total number of respondents who answered in a particular manner – in this section and throughout the report.

[7] *Valid %* signifies the frequency as a percentage of all respondents who answered that particular question in this section and throughout the report.

TAXES

Table 4.6

Waterbury's taxpayers are paying too much for the services they receive[8]	Cmb %
Agree	49.4
No Opinion	20.8
Disagree	29.8

Table 4.6 illustrates that a slight majority of respondents (almost 50%) feel they are paying too much in taxes. In contrast, 44% of respondents in question D2C also stated that they get a good value for the taxes they pay.[9] This represents the majority of respondents who answered that question. Table 4.7, below, is a cross-tabulation of these two questions. The table shows that more than one fifth of respondents (20.9%) who *agree* that they are paying too much for the services they receive *also agree* that they get a good value for the taxes they pay. A contradiction exists in the responses.

Table 4.7	D2c: Get a good value...		
D2a: Paying too much...	Agree	No Opinion	Disagree
Agree	31	22	95
% of D2a	20.9	14.9	64.2
No Opinion	20	46	1
% of D2a	29.9	68.7	1.5
Disagree	83	9	3
% of D2a	87.4	9.5	3.2

Table 4.8	Town/Village Residency	
D2a: Paying too much...	Town	Village
Agree	110	43
% of Town/Village	51.2	43.4
No Opinion	37	29
% of Town/Village	17.2	29.3
Disagree	68	27
% of Town/Village	31.6	27.3

Table 4.8 is a cross-tabulation between question D2a and Town/Village residency. It shows that the majority of both categories *agree* that they are paying too much in taxes, with the Town rate of 51.2% being slightly higher than the Village rate (43.4%).

Table 4.9 (next page) cross-tabulates between question D2b and Town/Village residency and shows that both Town and Village respondents are more likely to *agree* that they get a good value for the taxes they pay – 46.0% and 40.9%, respectively. This data seems to evoke the

[8] See question D2a, Appendix C.
[9] See question D2c, Appendix C.

same sort of contradiction apparent in Table 4.7. Both Tables 8 and 9 reveal that that nearly 30% of Village respondents express *no opinion* in both questions. This lack of opinion, in combination with the contradiction discussed above, seems to signify some sort of confusion and/or uncertainty surrounding the subject of taxes in Waterbury.

Table 4.9	Town/Village Residency	
D2c: Get a good value...	Town	Village
Agree	99	38
% of Town/Village	46.0	40.9
No Opinion	47	28
% of Town/Village	21.9	30.1
Disagree	69	27
% of Town/Village	32.1	29.0

Table 4.10 is a three-way cross-tabulation between the tax question D2a, support for the Town/Village merger (E4) and Town/Village residency. The table reveals that the majorities of Town and Village residents support the merger no matter how they answered D2a. Nevertheless, the majorities are most significant for those who *disagree* that they are paying too much in taxes – 80.0% and 81.8%. In addition, Village residents are more likely to support the merger than Town residents, yet the degree is narrower among those who *disagree* to D2a. Overall, tax opinion seems to have more of an effect on Town residents when it comes to support for the merger.

Table 4.10		Town/Village Residency	
D2a: Paying too much...	**E4: Merger support...**	Town	Village
Agree	Yes	49	30
	% of Town/Village	51.6	76.9
	No	46	9
	% of Town/Village	48.4	23.1
No Opinion	Yes	20	19
	% of Town/Village	66.7	86.4
	No	10	3
	% of Town/Village	33.3	13.6
Disagree	Yes	48	18
	% of Town/Village	80.0	81.8
	No	12	4
	% of Town/Village	20.0	18.2

WATERBURY PLANNING COMMISSION
2001 COMMUNITY SURVEY

What do you think are the major issues facing Waterbury?

_____

_____

_____

Please indicate whether you **STRONGLY AGREE (S/A), AGREE (A),** have **NO OPINION (N/O), DISAGREE (D),** or **STRONGLY DISAGREE (S/D)** with the following statements in the four issue areas: A. Economic Development & Land Use, B. Natural Resources, C. Cultural & Community Resources, and D. Municipal Services & Resources.

A. Economic Development & Land Use:

1. Waterbury should:

a. improve the viability of its existing business community.	S/A	A	N/O	D	S/D
b. encourage large-scale commercial development.	S/A	A	N/O	D	S/D
c. encourage tourism-related business and industry.	S/A	A	N/O	D	S/D
d. encourage small-scale commercial development.	S/A	A	N/O	D	S/D
e. direct more resource to downtown revitalization.	S/A	A	N/O	D	S/D

2. The following business activities should be encouraged in Waterbury:

a. Commercial recreation facilities	S/A	A	N/O	D	S/D
b. Farming	S/A	A	N/O	D	S/D
c. Home-based businesses	S/A	A	N/O	D	S/D
d. Light industry	S/A	A	N/O	D	S/D
e. Neighborhood corner store	S/A	A	N/O	D	S/D
f. Personal/Professional Services	S/A	A	N/O	D	S/D
g. Retail	S/A	A	N/O	D	S/D
h. Small scale high technology	S/A	A	N/O	D	S/D
i. Unrestricted	S/A	A	N/O	D	S/D
j. Business activities should not be encouraged	S/A	A	N/O	D	S/D
k. Other_____	S/A	A	N/O	D	S/D

3. Future <u>residential</u> development should be encouraged:

a. within existing neighborhoods.	S/A	A	N/O	D	S/D
b. in existing buildings in the Village.	S/A	A	N/O	D	S/D
c. along Route 100.	S/A	A	N/O	D	S/D
d. in the Town's outlying areas.	S/A	A	N/O	D	S/D
e. in clusters to protect open space and natural resources.	S/A	A	N/O	D	S/D
f. other_____	S/A	A	N/O	D	S/D

4. Future <u>commercial</u> development should be encouraged:

a. within developed areas.	S/A	A	N/O	D	S/D
b. within the Village.	S/A	A	N/O	D	S/D
c. within certain areas along Route 100.	S/A	A	N/O	D	S/D
d. along the entire length of Route 100.	S/A	A	N/O	D	S/D
e. along Route 2 toward Bolton.	S/A	A	N/O	D	S/D
f. in the Town's outlying areas.	S/A	A	N/O	D	S/D
g. other_____	S/A	A	N/O	D	S/D

5. Future <u>industrial</u> development should be encouraged:

a. within developed areas.	S/A	A	N/O	D	S/D
b. within the Village.	S/A	A	N/O	D	S/D
c. within certain areas along Route 100.	S/A	A	N/O	D	S/D
d. along the entire length of Route 100.	S/A	A	N/O	D	S/D
e. along Route 2 toward Bolton.	S/A	A	N/O	D	S/D
f. in the Town's outlying areas.	S/A	A	N/O	D	S/D
g. other_____	S/A	A	N/O	D	S/D

6. A Village- and Town-wide recreation path should be expanded:

a. as an alternative form of transportation.	S/A	A	N/O	D	S/D
b. for recreation.	S/A	A	N/O	D	S/D
c. to connect to other communities.	S/A	A	N/O	D	S/D
d. to link residential areas with commercial areas.	S/A	A	N/O	D	S/D
e. to link residential areas with schools.	S/A	A	N/O	D	S/D

B. Natural Resources:

1. Waterbury should take specific efforts to protect its:

a. scenic vistas.	S/A	A	N/O	D	S/D
b. forest lands.	S/A	A	N/O	D	S/D
c. wildlife habitats.	S/A	A	N/O	D	S/D
d. prime agricultural lands.	S/A	A	N/O	D	S/D
e. open spaces.	S/A	A	N/O	D	S/D
f. water resources.	S/A	A	N/O	D	S/D
g. other:_____	S/A	A	N/O	D	S/D

C. Cultural & Community Resources:

1. Waterbury should:

a. encourage/expand cultural resources (such as theater, fine arts, and community activities).	S/A	A	N/O	D	S/D
b. promote the preservation and re-use of its historic resources.	S/A	A	N/O	D	S/D
c. encourage more adequate and affordable childcare facilities.	S/A	A	N/O	D	S/D
d. provide affordable housing for people of low and moderate income.	S/A	A	N/O	D	S/D
e. provide additional housing for seniors and handicapped people.	S/A	A	N/O	D	S/D

D. Municipal Services & Resources:

1. Waterbury should use extension of municipal water and sewer service to direct development.	S/A	A	N/O	D	S/D

2. Waterbury's taxpayers:

a. are paying too much for the services they receive.	S/A	A	N/O	D	S/D
b. would pay less if there were more business and industry in Waterbury.	S/A	A	N/O	D	S/D
c. get a good value for the taxes they pay.	S/A	A	N/O	D	S/D

3. How do you rate the quality of services in Waterbury?

Excellent = 5, Adequate = 4, Not Applicable = 3, Inadequate = 2, Poor = 1

a. Ambulance Service	5	4	3	2	1
b. Public water and sewer (if available)	5	4	3	2	1
c. Telecommunications facilities	5	4	3	2	1
d. Elderly services	5	4	3	2	1
e. Fire services	5	4	3	2	1
f. Recycling/Refuse	5	4	3	2	1
g. Roads maintenance	5	4	3	2	1
h. School facilities	5	4	3	2	1
i. Town and Village government	5	4	3	2	1
j. Police Dept.	5	4	3	2	1
k. Town Clerk's office	5	4	3	2	1
l. Other _____	5	4	3	2	1

E. General:

1. If Waterbury could achieve only five of the following objectives during the next five years, which five would <u>you</u> choose?

Please rank 1-5 (1 = most important, 5 = least important).

_____ Protect open space
_____ Revitalize Downtown
_____ Protect natural resources
_____ Encourage commercial growth
_____ Improve recreation facilities
_____ Develop a recreation path
_____ Improve government effectiveness
_____ Merge the Town and Village
_____ Maintain rural character
_____ Improve Waterbury's image
_____ Improve traffic/transportation
_____ Develop Town water facilities
_____ Develop Town sewer facilities
_____ Encourage industrial growth

2. **Which statement comes *closest* to expressing your opinion regarding property rights?** (circle A, B, or C)

A. Property owners should be able to do what they want with their land.
B. Development should be regulated by local government so that what one person does with his or her land does not adversely affect adjoining property owners.
C. Development should be regulated by local government so that what one person does with his or her land does not adversely affect the common good of Waterbury residents.

3. **Would you support the formation of a Town and Village Conservation Commission or a Community Land Trust to promote projects such as land conservation, trails development, and wildlife monitoring?** (circle one) Yes No

4. **Would you support the merger of the Town and Village of Waterbury?** (circle one) Yes No

F. Demographic Information:

1. Please enter the last two digits of the year in which you were born: ____ ____
2. Gender: _____ Male _____ Female
3. How many people are in your household? _____
4. Do you _____ own or _____ rent your home?
5. Are you a resident of _____ the Town of Waterbury or _____ the Village of Waterbury or _____ unsure?

6. **Where do you work?**
_____Waterbury _____Burlington _____Randolph _____Montpelier _____Barre _____Stowe
_____at home _____other

7. **Where do you shop?**

	Weekly	Monthly	Annually	Never
Waterbury				
Berlin				
Montpelier				
Barre				
Williston				
Burlington				
New Hampshire				
Massachusetts				
Quebec				
Other _____				

WE ENCOURAGE YOU TO PROVIDE ADDITIONAL COMMENTS:

_____
_____
_____
_____
_____

THANK YOU FOR PARTICIPATING!

IF YOU WOULD LIKE MORE INFORMATION ON A VILLAGE-TOWN MERGER OR IF YOU WOULD LIKE TO KNOW ABOUT SERVING ON THE WATERBURY PLANNING COMMISSION, PLEASE CALL STEPHEN LOTSPEICH, WATERBURY COMMUNITY PLANNER AT : 244-1012

PLEASE SEE THE FOLLOWING PAGE FOR INSTRUCTIONS ON HOW TO MAIL THIS SURVEY.

-57012

PLEASE AFFIX
TAPE HERE

NO POSTAGE
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IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY MAIL

FIRST CLASS MAIL PERMIT NO. 141 BURLINGTON, VT

POSTAGE WILL BE PAID BY ADDRESSEE

UNIVERSITY OF VERMONT
CENTER FOR RURAL STUDIES
COLLEGE OF AGRICULTURE & LIFE SCIENCES
207 MORRILL HALL
BURLINGTON VT 05401-9931

--FOLD HERE--

To mail this survey:

Fold it into thirds so that this panel and the above panel (with return address information) are showing.

Use a piece of tape where indicated above to secure the survey.

PLEASE DO NOT STAPLE.

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APPENDIX 2

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
1	Historical perspective, old photos and maps, town/village merger, school renovation and construction projects			It was great to so many exhibits containing so much information		
2	School system, youth recreation	A family oriented town	manage growth	Yes	Keep it going!	
3	We are part of an exhibit but I would have come anyway to acquaint myself with Waterbury happenings	A hometown to be proud of. Electricity under the streets	Restoration of the Railroad Station. Main Street beautification (lampposts etc), Connect Stowe Street with shopping center.	Yes - To see people come out and get to know what's happening in Waterbury.		The community seemed very enthused and interested in all the organizations
4	Education and commerce - Wanted to learn more about merger of Town/Village, school building proposal, and library renovation and pool maintenance.	Waterbury of the future should have excellent education opportunities as well as a broad spectrum of goods and services	High quality education	It was informative - almost too much to digest in a day.		
5	Just moved into town and I wanted to know more about the merger and other happenings in town.	Not sure yet but I think the skating rink would be a great addition to the town	Growth and vision to keep in check with a common government for the town and village	yes		
6	Children's events and activities, athletic facilities, environmentally friendly policies and land use	attractive, pedestrian friendly town with quality services where residents don't have to leave to shop and receive services	I cant figure that out in this short time	Yes, it was great! People had amazing displays and lots of information. Kids stuff was nice	Hold it every two years	
7	Recreation programs, concern about school, and tax increases	not too much different from now.	Steady growth - mixed residential and commercial	Very good idea!		

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
8	We were asked to participate as ARRTI	An attractive community of caring citizens with small shops, a depot project completed, as well as an expanded library.	Depot Project, Expanded library, more cooperative environmental efforts with Duxbury	The enjoyment of people coming to our booth and recognizing our garden projects	Let participants know before hand of the charges involved.	We were never informed of any costs involved. The custodian costs should be assumed by the town. We are a small club which has donated much volunteer time and plantings, etc. to the community. While we are committed to doing so, we feel charging $20 for participation is inappropriate.
9	Town Plan, Cultural, Environmental Issues. Historic.	More trees around parking lots and streets. Esthetics.	Coordination of different groups and interests. Not losing the good things we have.	Wasn't sure what to expect. Enjoyed most things. Interested me were Historic, natural, and new plans for school.	Prittier?	
10	Kids stuff	Grow - more of everything	Develop	Yes	Provide bags	
11	Kids activities	Community center - central place - one-stop shopping for activities - family, adult, kids etc. I would love to see a place for all ages.	People head to Burlington area for things- movies, classes, etc. There are not a lot of social things to do in Waterbury.	It was fine. Would like to see this at Crossett Brook Middle School with perhaps more activities for all ages.	Showcase some local talent.	
12				The music	Do it in the summer so we can be outside.	The parents were very interested in the clay classes for their children. The said there is not a lot of things for 5-year-old and younger to do around Waterbury.
13	My husband is a Trustee and I was interested in seeing what was here.	Keeping it the same but changing only necessary things	Railroad bridge and Ice center	Seeing all the different organizations that are interested in revitalizing Waterbury	In a space more spread out so not so congested and noisy.	

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
14	To find out what groups and organizations are in Waterbury.	Looks good now.	Keep streets paved and sidewalks flat. Schools continuing to provide the good education they do now.	Yes, the many exhibits and friendly people.		
15	General - Increase my awareness	Slow development - with care and thought	Reservoir back and functioning	Yes - very	keep this up...great idea	
16	Preschool program information. Activities for children	More middle class young family programs and less big money dynasty focus	Children and youth programs. New Fire station and police station	Needs more room	More pre-warning so people could set up booths	
17	School and children's activities	I'd like to see Waterbury be a great place to raise a family	Develop opportunities to benefit children - Ice Center, school and filed improvements, and a better Village library	Yes	Sunday afternoon was a pretty good time.	
18	We live here and are planning to open a small business this fall	Remove swimming pool and replace with recreation center for year-round use	Reduce construction and roads through wetlands. Restrict paving to reduce water runoff	Gained a lot of information on local service providers and business	Put brochure in Exit10 before fair	
19	Curiosity	Active economically viable community - Not, however, a suburb of Williston and Burlington. Not interested in national chains, etc.	Economic stability; moderate growth, reframe Main Street to make it more attractive	Very nice to see so many peo9ple here	Support the TBPS bond vote for better parking and handicapped access.	
20	Learn about community	Increase retail spaces and tourist opportunities	Revitalize Downtown	AWESOME		
21	Getting to know who/what is happening in my community	Preservation of its historical character and natural surroundings	Develop/encourage small business in the Downtown core. Preserve our natural surroundings	Yes - Well Done!	Continue the same format	
22						It's a great idea- It is an eye opener.

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
23	Was invited to represent the Duxbury Land Trust	Revitalization continues - Sprawl is discouraged. An emphasis is placed on open space and conserving natural resources	Restore Railroad Station. Repair Primary School - but retain historic character.	Good turnout - Had a chance to chat with several folks	Well organized - Good opportunity to inform the public of our existence activities. Thank You!	This is Great! What a good turnout!
24	I was new to Waterbury last year so I am interested in learning whatever I can about my new community. I particularly came hoping to educate myself about the issue that will be voted at town meeting.	I support infrastructure and centers that create more of a community feeling. I worry, however, about increasing property taxes. My home was barely affordable when I bought it a year ago and my property taxes have already gone up considerably. A more welcoming community center wont benefit me if I can't afford to live here.	I have not been here long enough to presume an opinion on this	I did not get what I most hoped for - a clear presentation of issues for town meeting and data to inform those decisions. But I found some information useful.		
25	Everything!	Ice Center, etc		Great information		
26	Zoning, Town Plan, Harwood fields, merger	A merged government	A merged government	Very impressed with the variety of information	Do it again!	
27	Recreation	Improved elementary facility, improved new pool, centralized recreation, better sidewalks, upkeep what we have!	Bring current facilities up to date and in top condition (i.e. pool sidewalks and buildings)	Yes, talking in the community was!	Very great turnout. Parking an issue	Very good turnout. Great idea. Great to see all that Waterbury has to offer.
28	Addition to elementary school	To come together as a community. We don't seem to have a unifying focus.	Support its schools and library. Look at providing auditoriums and performance space	yes	Keep up the good work.	

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
29	I am interested in learning more about activities, programs, business, and development for the Waterbury community.	I would like to see Waterbury business thrive without too much expansion. I really enjoy our size and would be sad to see many more developments pop up.	Early childhood programs increased and strengthened, There is a need for more preschool, after school, infant and toddler care.	It was wonderful to have groups come together. I learned more about many different project occurring in our community.	Annual event would be wonderful. Invite other small business in the area, too. Great opportunity to gent the word out.	
30	Family / community activities and look of the town.	It would be great to have a nice downtown with good looking store fronts and a better playground. A better pool - take a look at Essex pool and playground. Nothing for small children.	Make it more connected community. The downtown needs work; store fronts lack charm , areas around Rt. 100 need sprucing up, what about grants or something or incentives to store owners - similar to what St. Street Emporium accomplished. All our stores should look like that.	A little crowded at the booths, but lots of good information.	How about baby sitters in the play area so parents have more time to read and talk with people about the information. With small children, I had to run through it.	
31	General Interest	Maintain the serene nature of the community. Protect the traditional character. Growth in good taste.	Keep taxes as stable as possible. Keep it affordable for seniors.	Very good cross section. People are trying to service the needs.	This is perfect!	
32	Cultural activities.	Keep village as a hub with small-town feeling. Expand job opportunities in outlying areas.	Keep the mix of population: young families, senior citizens, people of modest income.	Enjoyed the fact that so many diverse groups were represented and could explain themselves.		Great Fair. Good to learn about these organizations.
33	Library	Stable	Expand infrastructure; pipes, wires, and roads	Better than expected.		
34	Recreation Committee and new road on Randall Street.	New road on Randall Street, side walks, and ice center.	Merge the Town and Village (save time, $, and energy in the long run). New road on Randall Street.	I did not see a specific exhibit for New Randall Street.	Overall, pretty good. (unreadable last word).	
35	School addition.	A better place to live.	Downtown improvements	yes		

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
36	Interested (?) in Revitalizing Waterbury and Town/Village Merger.	Better relations with legislators, (illegible), schools and police.	Lower taxes			
37	Would like to have theatre in Village.	Movie theatre, railroad station used for transportation center, buss stop, taxis, Wheels, etc. Fix up sidewalks.	Youth Activity Center.	Yes		
38	Development and Family resource	I want Drive-Throughs and an increase in "regional" type development.	Increased opportunity to work and live here	Yes - being able to talk on-on-one to the people who shape the laws and atmosphere of the Town.	Add welcome to local businesses. One just for Children's resources - a Dabble Day sort of thing.	
39	Recreation	Well planned growth - quality recreation; concerns and local business. Keep some open space like community gardens.	Route 100 traffic flow improvement.	Yes	Possibly combine with Home & Garden Show or other activity for better attendance.	
40	We live across the street.	Services without taxes going through the roof.	Ice Rink, better grocery store (e.g. Shaws or Hannafords). Bike stands all over for riders.	Yes.		
41		Growth and Investment	One goal - Speed limit signs on High Street. People fly up and down. My dog was hit and my kids are in danger.			
42	See my neighbors and find out what's going on.	Good schools. Too much Rt. 100 traffic. Economic congestion at Waterbury Center. Great time on Lake Waterbury.	Town and Village merger. New library.	Yes, lots of people and good energy.	Keep at it. You just hit a home run.	

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
43	I was told I had to go!	What I would like - minimal residential growth, enough industry to meet local needs financially, then stop. Maintain open areas. What I expect - just the opposite.	Decrease traffic and development on Route 100.	It was all enjoyable.	Pretty good job. Not much to add.	
44	Ice Rink; Thatcher Brook PS renovations, environmental waste issues; childrens center; town plan; Village/Town merger; basically...everything!	We would like the town to be and stay quaint. To have a beautiful and working town community, i.e.. Not just for show.	I dunno, I'm stumped	Yes, we wish we came earlier and spent more time.	Great event, thanks!	
45	Very interested in the library. I came to see people and exhibits.	Unify the Village and Center.	An excellent, state of the art, library in the Village.	Yes, meeting friends and getting information.	Keep it up. - each year.	
46	Business development, parking improvements, merger.	Adopting a crossroads community. Encouraging the type of community through which many pass.	Merger, gentrification, boutiqueish (Kittery Point, Maine)	Yes, groups came together for the fair. It's a start - more efforts for groups to combine needs.		
47	Need a theater for plays and movies	Keep small town flavor	Economic stability - I would like to do all my shopping here instead of traveling to other towns.	Yes	Why isn't this combined with the Home Show?	
48						Appreciate the opportunity that are all located in one place. Liked finding out specific information on hazardous waste disposal. The music was a nice touch. Need microphone for the musicians. Compost bin was a good attention getter.

Waterbury 2002 Municipal Fair Public Feedback Information

	What are your particular areas of interest in our community and what brought you to the Fair?	What is your Vision for Waterbury's future?	What do you think is the most important goal for Waterbury to achieve during the next 10 years?	Did the Community Fair meet your expectations and what aspects were most enjoyable and beneficial?	Please give us comments and suggestions for a similar event in the future.	Please list the outstanding comments your heard from a Fair participant that visited your table.
49	Solid waste management, farmers market, development in the community.	An affordable community that offers retail, social, and academic opportunities for residents and visitors.	Keep taxes down. Get more financial or in-kind services from State government.	Yes, the community came to the fair. Good exhibits.	Maybe a few seminars could be held in conjunction with the fair. Have some food available in the gym.	
50	To review all of the new and improved town activities and buildings.	Continued improvements.	A coherent and progressive town plan.	Yes		
51	Ice rink, school plans, downtown revitalization, and farmers market plans.	Continued progress - this is a fabulous community!	Keep up with growth and community needs.	Absolutely!	Fair was great!	
52	Greater knowledge and awareness of various community programs. Linking some common names with faces, as well.	Hopefully, the Town Plan will strike a good balance between necessary growth and retaining the positive historical town character.	Establish firm limits re; growth and environmental protection of land and resources.	Yes, great event. Enjoyed meeting and talking to many people.	Off to a good start this year. Timing is right as well. An annual event would be a good idea.	

APPENDIX 3

Municipal Plan Re-write
COMMUNITY WORKSHOP
Thatcher Brook Primary School Gym
May 9, 2002
Meeting Notes

Planning Commission Members Present: Bob Butler, Bob Murray, Rick Weston, Rebecca Ellis, Sue Minter, Ann Miller.
Staff: Steve Lotspeich
Public: 14 people - (see attached list)

Bob Butler, Chair of the Planning Commission welcomed everyone to the workshop at 7:05 p.m. The Planning Commission members then introduced themselves. Bob Butler introduced Sue Minter as the workshop facilitator. Sue outlined the agenda, goals, and guidelines for the evening including the following:

- This meeting to be a community conversation and discussion of key priorities for guiding our community's future.
- Develop action steps to implement priorities. Will vote using dots. Think about timeline (short- vs. long-term actions).
- Break up into small groups for more in-depth discussion of issues.
- Each small group reports back to the entire group on priorities and action plan.
- Respect others' opinions. Listen and don't dominate conversation.

The Goals in the Draft Municipal Plan were read by Planning Commission (PC) members. There was a further explanation of going from the broad goals to specific action or implementation strategies.

I. These are the Additional Priorities Identified by Members of Public During Open Discussion

- Need large space for civic events, *e.g.*, concerts.
- Need to identify recreational and cultural priorities, such as an indoor pool and ice rink.
- The Village fire station is small compared to the need for additional space, including space for a future ladder truck.
- The community needs to plan ahead [*i.e.*, needs some means of planning ahead] for civic needs.
- The Historical Society needs space for exhibiting and properly storing its collection.
- Chapter 9 should be divided into two, thus separating certain cultural needs (library, etc.) from other community infrastructure needs (sewer, water, etc.).
- Need to conserve natural habitats
- Need to present priorities to the community in an organized, digestible fashion

- Need to identify growth nodes throughout the municipality, not just along Rt. 100
- Breathe life into the spirit of John Dewey
- The library promotes a sense a community; it needs more space.
- The library offers educational opportunities about current events.
- The library can be used to promote community interaction.

Various members of public spoke up about some of their concerns; Sue encouraged them to save these for small groups.

The entire group split into three groups ("blue dots", "yellow dots", "red dots") with about five people plus two PC members. Then reassemble into one large assembly and report.

Dr. Felix Callan commented that there were 18 out of 5000 residents here, that si a very small sample of the community opinions. The Planning Commission pointed out that a large-scale random survey was accomplished earlier this year, with almost 500 responses. Bob Butler welcomed suggestions to increase community involvement. Kathy Grace mentioned need for a community center to promote sense of community. Another suggestion was to make better use of technology (i.e. web-based methods). Bill Minter suggested putting up a community events calendar in a central place (e.g. Waterbury web site). Bob Dostis noted upcoming legislation involving downtown designation, that will add the option for having Village Centers designated.

II. Break-Out Discussion of the Blue Group: Community Facilities

A. Potential Actions

- Develop land use maps including existing and potential future uses.
- Consider acquiring land for new municipal facilities.
- Identify municipal facilities in need of upgrading or replacement such as:
    - Pool, library, fire station, ambulance station, police station, historical society
- Identify other needs such as:
    - Connect the library to the schools [physically or only in terms of coordinated activities?]
    - Private or non-profit recreational facilities: indoor pool, skatepark, ice center
    - Space for concerts, theater
    - Opportunities for multi-use facilities
    - Teen center
    - Bike/pedestrian recreational path
    - Senior center
    - Early childhood facilities
    - Future ball fields
    - Nature center
    - Enhancing recreational facilities for tourism activities
        - *E.g.*, mountain biking in the Putnam State Forest

B. Implementation Steps

- What can the Planning Commission/municipality do to support these community initiatives?
  - Designate a civic center
  - Encourage employers to support "wellness" programs and make use of the municipality's cultural and recreational facilities
- Develop a "master plan" for community facilities
  - Create an ad hoc committee to develop such a master plan, to feed into the municipal planning process
  - Coordinate with the capital budgeting process

III. Break-out discussion of the Red Group: reinforce traditional settlement patterns; concentrate growth.

Group participants' thoughts:

- Preserve individual choice for living outside of settlement areas.
- Keep current zoning.
- Cluster housing – more affordable, while preserving some open space and habitat – PUD/PRD.
- Land is too expensive for lower income families.
- Investigate possibility of creating fund for both land preservation and affordable housing.
- Continue with pursuit of Downtown Designation.
- Re-examine current zoning: is it meeting goals?

ACTIONS:

- Create a structure for community support of land preservation and affordable housing, e.g. special fund.
- Research:
  - Possible lands for subsidized housing, and owners willing to sell within current zoning,
  - Federal and State funds for such projects,
  - Developers willing to undertake such projects,
  - Possibility of involving Vermont Community Land Trust,

Minimize adverse impact of development along Route 100.
Designate specific nodes (growth centers) along Routes 2 and 100 to prevent sprawl.

Group participants' thoughts:

- Discuss where Waterbury should allow growth to happen.
- Reinforce appropriate design.

- Denying landowners' use for property versus taxation of the property,
- Don't zone areas as commercial if we don't want them developed as commercial.
- What are maximum growth and supportable population levels?
- Preserve ample green space for new buildings on Route 100 north of the Stowe Street intersection.
- Building designs should be "tasteful".

ACTIONS:

- Re-examine zoning and design standards (e.g. which zones should be commercial areas).
- Develop mechanism for purchasing land or compensating landowners for limiting use of their land.
- Engage property owners along Route 100.
- Articulate plan for land use (nodes) and preservation.
- Identify key large developable areas of land.
- Develop land preservation strategy.

IV. Break-out Discussion of the Yellow Group: Economic Base and Development, Historic and Cultural Resources, and Tourism Promotion

Economic Base and Development

- Waterbury still perceived as poor; need to educate public how far we have come
- Local leadership has worked hard, and successfully, to attract business.
- Promote our resources: schools, transportation.
- Leverage location along Interstate-89.
- Promote rail access.
- Need vocational & adult education.
- Favorable tax breaks for business,
- Local bylaws need to facilitate desired economic growth.
- Promote small business.
- "Gradual" economic development,
- Support merger as a way to promote economic development.
- Annual event to celebrate accomplishments of Waterbury, like the Community Fair,
- Community dialogue
- Chatroom on Waterbury Community Development Corp (WCDC) website: www.waterburyvt.com,
- Use technology to promote community dialogue.
- Accelerate site review process.

Forum for Discussing Community Priorities

- Selectboard should facilitate opportunities for development of community vision.
- Chatroom on Waterbury Community Development Corp (WCDC) website: www.waterburyvt.com
- Town fair should be an annual event.

- Let Planning Commission focus on Planning, not site review.
- Create Development Review Board to focus on site review.
- Create student internships with the planning commission, select board, other civic organizations

Historic and Cultural Resources

- Need to preserve and enhance downtown area,
- Seek downtown designation.
- Ombudsperson to help owners of historic properties preserve & enhance buildings,
- Mentorship program to pair people who want to renovate buildings with those who have already renovated buildings,
- Use grassroot efforts to promote the idea of downtown designation.
- Expand spaces for library and historic society.
- Celebrate Waterbury's history by recognizing Dr. Janes' Birthday on January 24 (Chief Surgeon at Battle of Gettysburg).
- Train Station - sign lease soon!
- Need money for train station renovation.
- Thatcher Brook Elementary School - preserve this asset.
- "Wecome to Waterbury" package with town meeting book, volunteer organizations, phone numbers, etc.

Tourism

- Support Waterbury Tourism Council
- Put water back into the reservoir
- Publicize Waterbury Tourism Council's website: www.waterbury.org
- Bumper stickers for www.waterburyvt.org

V. Wrap-up session

A wrap-up session followed the break-out group discussions. A "reporter" from each group summarized the ideas listed by their group. Rick Weston, reporter from the Blue Group, noted the need for a Master Plan for developing community facilities. An ad-hoc committee could formulate this plan and present it to the Planning Commission, Select Board, and Trustees.

Bob Butler, reporter for the Yellow Group, discussed the need for a forum to discuss community priorities. He noted how far we have come in terms of developing an economic base. He reported the actions identified by the group on promoting and developing historic and cultural resources, and tourism support.

Sue Minter reported for the Red Group. The group discussion focused on how to accomplish land preservation and creating affordable housing. There was focus on the Route 100 corridor and the need to amend the zoning for the corridor. A Conservation Commission or Land Trust could help promote and explore land conservation efforts.

A comment was made that this is a small group of people providing input on critical issues, and how can we get more people involved in the process? In response a PC member said that the Community Survey was successful in getting much wider public involvement and comment. Additional suggestions were to write up the notes for the meeting and publish them in Exit 10, and create a "chat room" on the WaterburyVt.com website.

Members of public were thanked for their participation. The meeting ended at 9:15 p.m.

APPENDIX 4

	Option 1: Design Control District	Option 2: Historic District	Option 3: Local Act 250 Review	Option 4: Urban Renewal District
Statutory Authority	24 V.S.A. §4407(6)	24 V.S.A. §4407(15)	24 V.S.A. §4449	24 V.S.A. Chapter 85
Designation	Area of historic, cultural or architectural significance	Area of historic or architectural significance	Projects subject to state Act 250 Review	Areas of "slum" and "blight"
Adoption	Zoning Amendment(s)	Zoning Amendment(s)	Zoning [and/or Subdivision] Amendments	Municipal Vote/ Finding of Necessity
Administration	Planning Commission [or Development Review Board]	Planning Commission [or Development Review Board]	Development Review Board	Legislative Body or Urban Renewal Agency
Other Requirements	Report; Design Criteria/ Guidelines (community)	Design Criteria/ Guidelines (statutory)	Subdivision Regulations; Municipal Administrative Procedures Act [MAPA]; Local Act 250 criteria: Municipal Services Educational Services Conformance w/ Plan	Urban Renewal Plan(s) [w/ Planning Commission review]; Urban Renewal Projects
Options	Design Review Board [Advisory to PC or DRB]	Report	Waiver Provisions	Neighborhood Plans; Zoning Amendments
Considerations	Review criteria are developed locally May be administered by existing boards (w/ local involvement) Effective tool for protecting historic and cultural resources, visual character Can enhance property values May be considered overly restrictive Additional review process Vague criteria can lead to arbitrary reviews and/or applicant frustration	Review criteria defined in statute; may be more restrictive May be administered by existing boards Effective tool for protecting historic resources, visual character; includes demolition provisions Can enhance property values May be considered overly restrictive; (e.g., alterations to single family homes) Additional review process	Review criteria apply to specific projects, not a designated area (more limited) Cannot be administered by existing boards Decisions go to Act 250; not appealable to court Effective for reviewing project impacts on municipal and educational services, and conformance with municipal plan policies Gives greater weight to local decisions in state Act 250 reviews Additional review process	Applies to locally designated areas that meet state/federal definitions of slum and blight May be administered by existing boards; projects subject to public hearing and vote Tends to emphasize demolition and redevelopment over rehabilitation Municipality is given broad powers over private property; however court orders or petitions (e.g., for eminent domain) are required New program, process

BRI 5/00

APPENDIX 5

New Models for Commercial and Industrial Growth

Summary of Case Study Models and Analysis of Conformance with Smart Growth Principals

South Burlington Site

1) Project Summary

- 12.6 acre site located on the west side of Shelburne Road (Route 7). Currently houses 100,000+/- s.f. 1 story retail building. K-Mart is sole current tenant; about 30k s.f. is unoccupied. Building condition is substantially depreciated.
- Two redevelopment scenarios for the site were developed, both of which assume demolition of the existing building and substantial reconfiguration of the site. Both include construction of a through road to link up with a north – south street that currently runs from a recently developed apartment complex to the adjacent newly developed retail shopping area (Hannafords and Lowes). In addition, both scenarios assume a combination of on-street, below grade and structured parking.
- Scheme A assumes a 378k s.f. build-out, including an 80k s.f. retail big box with office tower above, and several mixed use buildings with ground level retail/service and 77 residential apartments above.
- Scheme B assumes a 312k s.f. build-out, including a 108k s.f. hotel and conference facility, along with a range of mixed use buildings including office, retail and 84 residential apartments.

2) Analysis of Conformance with Smart Growth Principals

- Both Options
  1. Uses land efficiently
     - Multi-story buildings
     - Underground parking and minimal setbacks
     - High lot coverage and close together
  2. Meets people's needs and viable
     - Mixed use, park space/green space
     - Good mix of circulation (auto/pedestrian/transit)
  3. Uses existing infrastructure
     - Builds on grayfield site
     - Good road connections (Rte. 7, I-89, bus service)
     - Completes proposed secondary loop road
     - Good cable/gas/electric, possible rail connection
  4. Integration into existing and planned growth
     - Connects to commercial, residential areas
     - Possible park connection
     - Good road, pedestrian, bike/connection
     - Connects with planned growth center
  5. Reuses existing structures – NA

6. Promotes mixed use
    - Offers apartment over business
    - Office and retail
7. Good design
    - Introduces a new design element
    - Picks up on some design ideas for Lawes' site
    - Intensifies uses but doesn't overwhelm
    - Reflects community planning ideas
8. Environmental harm
    - Mixed use
    - Saves energy – compact design minimizes energy loss
    - Solar access incorporated
    - Storm water retention areas
    - Green roofs, park, street trees, increasing permeability
9. Alternative transportation
    - Allows all modes of transportation, minimum parking, minimum curb cuts

Bennington Site

1) Project Summary

- 6.45 acre site comprised of 8 adjacent parcels, 6 of which are owned by one owner. Located at the south westerly junction of Routes 7 and 9 in the heart of Bennington's downtown. There are 7 existing buildings containing 134k s.f. Current uses on the site include an active lumber and hardware business, retail space, convenience store and gas station and some office space. Many of the existing buildings are listed on the National Register of Historic Places. There are substantial vacancies currently. None of the upper floors are ADA accessible. The building conditions range from good to substantially deteriorated.
- Two redevelopment scenarios for the site were developed, both of which assume relocation of the lumber and hardware business, demolition of some of the existing non-historic buildings and substantial reconfiguration of the site. Both scenarios assume a combination of on-street, and structured parking.
- Scheme A assumes a 168k s.f. build out, including restoration of the Putnam Hotel for use as a 90 room hotel and conference center , construction of 20 townhouses along the southerly edge of the property, a gateway park and visitor center at the western edge of the property, and a mixed use multi story building to anchor the northwest corner of the property, including ground floor retail space suitable for a downtown market, with 76 residential apartments on the upper floors.
- Scheme B assumes a 173k s.f. build out. The Putnam Hotel is adapted for a mix of retail, office and residential uses. A performance space and recreation center are housed within existing industrial buildings. The number of townhouses is increased to 36, to include several located at the western edge of the property. The newly constructed building at the northwest corner includes retail, office and residential apartments.

2) Analysis of Conformance with Smart Growth Principals

- A – Hotel Option
  1. Uses land efficiently
     - Parking deck
     - Multi-story buildings
     - Filling in empty spaces and underutilized land
     - Greater coverage
     - Small setbacks
  2. Meets people's needs and viable
     - Convenience
     - Mixed uses
     - Pedestrian orientation, adds parking for existing businesses
     - Highly accessible at 4 corners
  3. Uses existing infrastructure
     - Existing water, sewer, roads used
     - Improves by adding mid-block connection
  4. Integration into existing and planned growth
     - Reinforces 4 corners

- Residential neighborhood generated
- Community wants downtown revitalized, post office nearby

5. Reuses existing structures
   - Preserves almost all historic structures
   - Tears down marginal buildings and one brick building
6. Promotes mixed use
   - Apartments, townhouse, office, retail
7. Good design
   - Fits with scale
   - Fills in existing patterns
   - Community wants it
   - Takes advantage of historic structures
8. Environmental harm
   - Restoring riparian area
   - Visitor center, green roofs, street trees
   - Storm water will slightly improve
   - Energy savings with shared walls
   - Pedestrian environment
   - Mixed use
9. Alternative transportation
   - Bus depot, train connection, in pedestrian area
   - Shared parking, but more limited opportunity due to hotel

- B – Mixed Use Option
  1. Uses land efficiently
     - Parking garage
     - Multi-story buildings
     - Filling in empty spaces and underutilized land
     - Greater coverage
     - Small setbacks
     - Multi-story building, etc.
  2. Meets people's needs and viable
     - Convenience
     - Mixed uses
     - Pedestrian orientation, adds parking for existing businesses
     - Highly accessible at 4 corners
  3. Uses existing infrastructure
     - Existing water, sewer, roads used
     - Improves by adding mid-block connection
  4. Integration into existing and planned growth
     - Reinforces 4 corners
     - Residential neighborhood generated
     - Community wants downtown revitalized, post office nearby
     - More connectivity than hotel option with street network

5. Reuses existing structures
   - Preserves almost all historic structures
   - Tears down marginal buildings and one brick building
   - Re-use buildings – uses more buildings/more dense than hotel option
6. Promotes mixed use
   - Apartments, townhouse, office, retail
7. Good design
   - Fits with scale
   - Fills in existing patterns
   - Community wants it
   - Takes advantage of historic structures
8. Environmental harm
   - Restoring riparian area
   - Visitor center, green roofs, street trees
   - Storm water will slightly improve
   - Energy savings with shared walls
   - Pedestrian environment
   - Mixed use
   - More green space in middle than hotel option
9. Alternative transportation
   - Bus depot, train connection, in pedestrian area
   - Shared parking, but more limited opportunity due to hotel
   - Parking demand is less than hotel option

Waterbury Site

1. Project Summary

- 40+/- acre site known as Pilgrim Park located just north of village shopping center, Route 2 and the railroad tracks, and just south of interstate 89. Comprised of 4 parcels that have been acquired over time by a local partnership. Significant utility infrastructure has been constructed to support the development of 140k s.f. in 2 buildings housing the production facilities for Green Mountain Coffee Roasters as well as a multi tenant office building.
- One development scenario for the site was prepared. It assumes a build out of 600k s.f., to include a range of uses: 220k s.f. of industrial space, 228k s.f. of office space, 67 housing units in a range of types and tenures, community and civic uses including a childcare center and a recreation facility, and a small amount of retail space, including a bank with drive through to be located within a former railroad storage building.

2. Analysis of Conformance with Smart Growth Principals

1. Uses land efficiently
   - Fills in around existing development
   - Extends village pattern
   - Multi-story

2. Meets people's needs and viable
    - Recreation paths
    - Daycare
    - Convenient stores next to site
    - Housing and employment together
3. Uses existing infrastructure
    - Some new streets
    - Tie into existing contiguous infra-structure
4. Integration into existing and planned growth
    - Connected to other development
5. Reuses existing structure
    - Moves historic building
    - Removes poor quality structures
    - Improves design of existing functional buildings with new building
6. Promote mixed use
    - Housing for workforce
    - Connection to existing retail
    - Adding new community uses
7. Good design
    - Links to the village
    - Preserves historic structure
    - Improves aesthetics of industrial site
    - Connects new and existing residential
    - New green space
8. Environmental harm
    - Truck traffic potentially improved with new access
    - Storm water management
    - Improved energy conservation with walls
    - New ped/rec path
9. Alternative transportation
    - Road, bus, rail, walking; mixed use

New Models for Commercial and Industrial Development

Discussion of Financial Feasibility Analysis
May, 2002

Overview

The Vermont Forum on Sprawl and Vermont Business Roundtable ("the sponsors") issued requests for proposals from real estate consulting firms and from design firms to provide a range of services in support of the sponsors' work on the New Models for Commercial and Industrial Development project ("the project").

The principals of Renaissance Development Company and William Maclay Architects and Planners ("the consultant team") met with the sponsors and reviewed the proposed scope of work for the project. The consultant team advised the sponsors that the budget for the project would support only a preliminary assessment of development feasibility on each of the respective sites, and would not support the level of due diligence that the consultant team would typically perform in the course of such work. Significant additional research in the areas of market demand, finance, regulatory process and compliance, infrastructure capacity and construction cost estimating would be required for the consultant team to proffer its professional opinion as to the feasibility of any one of the proposed development models. The sponsors acknowledged that a preliminary assessment was sufficient for purposes of the project, and that any representations as to the feasibility of developing one or more of the proposed models would indicate the preliminary level of analysis completed.

Process

The consultant team assembled a range of background materials on each of the respective case study sites, including: 1) GIS data (orthophotos, site plans, parcel maps, topographic information) and building plans where available; 2) property tax assessment data; 3) market and demographic data; 4) current operating income and expense data where available; 5) municipal plans and zoning ordinances; 6) other public studies, news articles, or proposed plans pertaining to the community or site. This baseline information allowed the consultant team to define the parameters of each site and get a sense of the opportunities and challenges associated with each.

The consultant team and sponsors organized a design workshop in each of the case study communities. Participants included members of the project's Technical Advisory Committee, the property owners (or their representatives), local civic and business leaders, and municipal planning officials. The groups conducted site visits, generated lists of opportunities and challenges, as well as program ideas for the development of the sites, and concluded the day by working in small groups to produce conceptual site plans, each illustrating a preferred development plan.

Subsequent to each respective design workshop, the consultant team reviewed the outcomes of the session and refined the development models into one or two development concepts for each site. Conceptual site plans were developed, reviewed and refined, to illustrate how the models would "fit" on the respective sites. A preliminary financial analysis of each model was conducted to determine its probable development cost, forecasted operating income and expenses, and options for market rate sources of financing.

Caveats

The conceptual site plans have been developed to a point where the consultant team believes they provide a reasonable basis to illustrate build out capacity, site circulation and parking capacity. The site plans do not reflect detailed analysis of regulatory impacts, infrastructure capacity or architectural design of particular buildings.

The financial analysis of each respective development model is comprised of 3 components: 1) A build out analysis translating the program depicted on the site plan into building components and square footage for each particular use; 2) A development budget indicating the cost to develop each particular use; and 3) An operating analysis and investment analysis indicating the likely operating income and expenses associated with each particular use, the proceeds from sales of particular components, and the ability to raise debt and equity capital from commercial sources.

In general, the financial analysis is more than a "back of the envelope" exercise, and is sufficient to illustrate, in broad terms, a preliminary assessment of the financial feasibility of each of the respective models.

The development budgets were prepared assuming prices to acquire the properties close to the respective owners' target prices, utilizing square foot construction cost assumptions, and typical percentages associated with other hard and soft development costs. This order of magnitude does not reflect detailed analysis of: market values for property acquisition, site conditions, unique factors reflecting a particular building's construction or rehabilitation cost, nor a schedule of soft costs reflecting unique project conditions.

The operating analysis assumes current market rates for commercial and residential rentals, derived from discussions with sources knowledgeable about local market conditions in each respective case study area. Operating expenses are based on a combination of current actual expenses in some cases, as well as standard underwriting assumptions used in commercial real estate financing.

The investment analysis is elementary and assumes the availability of fixed rate commercial financing based on a debt coverage ratio of 1.25. Equity investment is derived from a cap rate of 15% on the NOI. No analysis of mezzanine financing

structures, debt to equity ratio requirements, or public subsidies for capital and operating costs was performed.

Summary of Financial Analysis

In the case of each model, the assumed development cost exceeded the assumed available sources of funds. Looking solely from a private sector perspective, an analysis was run to identify those changes in operating assumptions (increased rental rates, decreased expenses, decreased vacancy factors, extended loan terms, etc.) necessary to close the gap between sources and uses of funds.

Additional Considerations

The analysis conducted is static and assumes that all development would occur at one time. In reality, the models proposed, would, if implemented, likely be developed in a phased approach. Such an approach might result in a master plan whose individual components would be developed by discrete ownership entities utilizing financing structures suitable for that specific undertaking. For example, the development of for sale housing would require equity and short term construction financing, while the development of rental apartments could utilize up to 40 year fixed rate financing and the equity yield from syndication of a stream of tax benefits. Rehabilitation and operation of historic buildings in downtown Bennington would provide a range of powerful tax benefits that could form the basis of an equity syndication. Development of new industrial space could be financed with long term fixed rate VEDA financing. While it was beyond the scope of this analysis to illustrate such options, the reader should consider both their availability as well as their potential to enhance the feasibility of each of the models.

When a preliminary analysis indicates a gap between sources and uses of funds, the consultant team would typically assess all components of the project to determine strategies to close the gap. This would include seeking ways to reduce development costs (acquisition, construction and soft costs), identifying opportunities to increase net operating income through expense reductions and income enhancements, as well as seeking below-market rate sources of financing unique to the specific community, use or occupant, as noted above.

In the case of these models, some downward adjustment would likely be possible in acquisition costs. Additionally, further refinement of parking requirements (both those required from a regulatory perspective as well as those necessary from a marketing perspective) might result in a reduction in the cost of structured parking. However, total development cost would likely rise, as the impacts of time, phasing, and due diligence on construction costs are accounted for.

The South Burlington models have the greatest capacity for some enhancement of NOI. The strong market and superior location combine to present that opportunity. We believe that at this time, the other case study sites do not have that same opportunity.

A range of financing tools can be brought to bear at each of the respective sites. In addition to those briefly noted above, the potential for a tax increment financing district, and/or a VEPC-derived reallocation of tax revenues, could serve to finance in-whole or in-part, the cost of the parking infrastructure at each site. Such a mechanism would go a long way toward closing the gaps identified.

In summary, while the preliminary analyses we conducted indicate that none of the models "works" financially, further detailed analysis would be needed to determine if an appropriate development and financing structure could be assembled to make any or all of the models financially feasible.

Index of Financial Analysis Exhibits

SMART GROWTH PRINCIPLES FOR NEW MODELS FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENT

These principles were developed by the Steering Committee for the New Models for Commercial and Industrial Development Project – a joint effort of the Vermont Forum on Sprawl and the Vermont Business Roundtable. The principles are intended to guide the project through to its completion.

The project will develop effective models for new commercial and industrial development that reinforce Vermont's policy for development in compact settlements surrounded by open countryside and these smart growth principles. The project will also make recommendations as to how to implement these models through policy changes, better planning, and incentives, while avoiding cumbersome regulatory processes.

Smart Growth

1. Uses land efficiently;
2. Through planning and design, meets the needs of the people it will serve and is economically viable;
3. Uses existing infrastructure to the fullest extent;
4. Is connected with other development and/or integrated into existing and planned growth centers;
5. Reuses existing structures to the fullest extent and does so creatively;
6. Promotes mixed uses, including existing or new housing for workforce in or near the proposed development;
7. Represents good design that integrates into the community, respecting community desires and fitting in terms of scale, aesthetic qualities, and character of surroundings;
8. Does not cause environmental harm; and
9. Enables alternative forms of transportation, minimizes vehicle trips, shares parking with other businesses and uses, and minimizes curb cuts.

New Models for Commercial and Industrial Development

Discussion of Zoning Compliance
May, 2002

Overview

The Vermont Forum on Sprawl and Vermont Business Roundtable ("the sponsors") issued requests for proposals from real estate consulting firms and from design firms to provide a range of services in support of the sponsors' work on the New Models for Commercial and Industrial Development project ("the project").

The principals of Renaissance Development Company and William Maclay Architects and Planners ("the consultant team") met with the sponsors and reviewed the proposed scope of work for the project. The consultant team advised the sponsors that the budget for the project would support only a preliminary assessment of development feasibility on each of the respective sites, and would not support the level of due diligence that the consultant team would typically perform in the course of such work. Significant additional research in the areas of market demand, finance, regulatory process and compliance, infrastructure capacity and construction cost estimating would be required for the consultant team to proffer its professional opinion as to the feasibility of any one of the proposed development models. The sponsors acknowledged that a preliminary assessment was sufficient for purposes of the project, and that any representations as to the feasibility of developing one or more of the proposed models would indicate the preliminary level of analysis completed.

Process

The consultant team worked with the municipal planner in each of the respective case study communities to assemble pertinent background information regarding the case study site. The consultant team obtained copies of the current town plan and zoning ordinance for each of the respective case study communities and discussed with the planner the status of updates to the town plan and the zoning ordinance.

With respect to each case study site, the consultant team identified the zone in which it is located, as well as the permitted and conditional uses within that zone. Although this information was collected and analyzed, the sponsors and consultant team agreed that in order to meet the goals of the project, the development of the models would not be limited by the confines of the current zoning. As a result, the current zoning was identified at each of the design workshops, but the workshop participants were encouraged to consider a range of uses that would meet the smart growth principles.

Caveats

The conceptual site plans have been developed to a point where the consultant team believes they provide a reasonable basis to illustrate build out capacity, site circulation and parking capacity. The site plans do not reflect detailed analysis of regulatory impacts, infrastructure capacity or architectural design of particular buildings.

Summary

In each case study community, the municipal planner and residents who participated in the design workshops were enthusiastic about the project and the models that were developed. Each community was in the process of either revising its municipal development plan, or, had recently completed that revision and was about to engage in the process of updating its zoning ordinance. As a result, all expressed interest in incorporating those revisions that would serve to facilitate development consistent with the models prepared as part of the project.

A more detailed analysis of each respective site follows:

Bennington

Current Zone: Central Business District

Permitted & Conditional Uses: A wide range of uses are allowed in the CBD, including all of the uses proposed in both of the models developed for the site.

Discussion: The current zoning in the Bennington CBD would appear to permit either of the two proposed models. The current lot area minimum of 10,000 square feet would not restrict the plans, nor would the requirement for 1,000 square feet for each dwelling unit. There are no required front, side or rear setbacks. New construction is subject to a *minimum* height of 2 stories. Lot coverage of 100% is allowed.

Importantly, proposed revisions to the zoning ordinance may remove or reduce the lot area minimums, increase the maximum building height from 40 to 60 feet and slightly expand the list of allowed uses. Although none of these changes would be needed to facilitate development of the proposed models, they illustrate the affirmative efforts Bennington is making to encourage redevelopment of its central business district.

South Burlington

Current Zone: Commercial 1

Permitted & Conditional Uses: Permitted uses include office, retail businesses (*excluding* shopping centers, supermarkets, department stores and discount stores), hotels and motels, restaurants, service stations, theaters, radio and television studios and personal service businesses.

Conditional uses include government and education facilities, daycare, recreation, convenience retail, transportation and parking facilities and light manufacturing.

Specifically permitted are planned unit developments "...in order to encourage innovation of design and layout, encourage more efficient use of land for commercial development, promote mixed-use development and shared parking opportunities , provide coordinated access to and from commercial developments via public roadways, and maintain service levels on public roadways with a minimum of publicly financed roadway improvements." It is through this provision that those retail uses specifically *excluded* from permitted uses (shopping centers, supermarkets, etc.) may be proposed and considered under the current zoning ordinance. In addition, multi family dwellings may be considered under this provision.

Discussion: The planned unit development option opens the door for consideration of mixed use developments such as those envisioned in both of the models proposed for the site. However, current limitations on maximum lot coverage (20% for buildings/40% for buildings, parking and outside storage for multi family, or, 30% for buildings/70% for buildings, parking and outside storage for commercial and industrial uses) would likely inhibit the ability to develop the proposed models. In addition, a limitation of 7 multi family residential units per acre would result in the site being fully built out with the construction of 84 residential uses - no other uses could be developed on the site. Furthermore, the existing height limitations (up to 40 feet for pitched roof structures) would restrict the ability to develop the proposed "gateway" towers envisioned in both models, although the ordinance does allow the development review board to waive the height requirements.

Importantly, the municipal planner has indicated an interest in using the models developed as part of this project as tools to facilitate the revision of the pertinent zoning ordinances so that South Burlington can encourage and promote innovative redevelopment of older, under utilized shopping centers.

Waterbury

Current Zone: Industrial

Permitted & Conditional Uses: Permitted uses include office, equipment sales/rental, agricultural production, storage facilities and recreation.

Conditional uses include a range of manufacturing, retail, service businesses, agricultural, government and parking/transportation uses.

Although planned unit developments are authorized under the town's zoning bylaw, only those uses that are permitted or conditional within the zoning district are allowed within the PUD.

Discussion: The current zoning would not permit the model envisioned for the site. Residential uses are specifically excluded from the industrial zone, as are a number of the public/semi-public uses (child care, library, etc.) proposed. Lot coverage is limited to 50%. The setbacks required would prohibit zero lot line development. The 40 foot height limitation might affect the design of one or more of the proposed multi-story buildings.

The model anticipates development of a new at-grade crossing to facilitate traffic flow and direct that traffic away from an adjacent residential area. This crossing would serve to address traffic concerns that would likely arise were the proposed model subject to regulatory review. However, there is no assurance at this time that the consents and approvals necessary to construct the at-grade crossing can be obtained.

Importantly, the land owner is supportive of the multiple use concepts envisioned in the model for this site. Both the municipal planner as well as members of the planning commission have indicated interest in using the model developed as part of this project as a tool to facilitate the revision of the pertinent zoning ordinance to enable Waterbury to promote innovative development of this area of town.