



BOLTON TOWN PLAN

ADOPTED 26 APRIL 2017

Bolton Town Plan 2017

Adopted by the Bolton Selected Board April 26, 2017
Bolton Select Board Hearing April 26, 2017
Bolton Planning Commission Hearing February 9, 2017

The Bolton Town Plan was completed with funding support from a Municipal Planning Grant Program administered by the Vermont Department of Housing and Community Development.

Cover Art: "All About Bolton" by Jordyn Gosselin, Spirit of Bolton Art Contest

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INTRODUCTION

With this plan, the Bolton Planning Commission has created a plan that is user friendly and understandable. This planning process has been a pilot project for the [Vermont Planning Manual](#), a new guide from the Vermont Agency of Commerce and Community Development to help towns create “town plans that work.” The writing of this plan was funded by a Municipal Planning Grant from the Vermont Agency of Commerce and Community Development.

This plan replaces the 2012 Bolton Town Plan. That plan was a re-adoption of the 2007 Bolton Town Plan. This plan takes into account all the changes that have happened in the past ten years and establishes a vision and series of goals, objectives and actions for the eight-year life of this plan.

Purpose and Use

The Bolton Town Plan serves as a guide for accomplishing community aspirations and intentions through public investments, land use regulations and other implementation programs. The plan covers a broad range of topics relevant to the future of Bolton, including but not limited to, areas designated for growth, and other areas designated for preservation for rural character and protection of natural resources, steps to advance economic wellbeing in the town, and calls for the availability of safe and affordable housing. The Town Plan is used by a variety of entities for a variety of reasons.

- » The Select Board uses the town plan as a guiding document when deciding policy for the town, including but not limited to town ordinances and budgets, Capital Improvement Plan updates for facility, road and infrastructure improvements and acquisitions, staffing needs and the creation of new boards and committees.
- » The Planning Commission uses the town plan to update and revise the Bolton Land Use and Development Regulations (BLUDRs). The BLUDRs are unified bylaws that include zoning, subdivision and hazard area regulations; the purpose of which is to regulate development proposals. The Planning Commission also uses the town plan to guide other planning and development activities.
- » The Development Review Board uses the town plan to understand the reasoning behind the BLUDRs and the town’s priorities for the protection and preservation of natural, scenic and historic resources.
- » The Conservation Commission uses the town plan’s discussion and prioritization of natural resources and recreation opportunities to inform their work.
- » The Economic Resources Committee uses the town plan to identify economic development priorities and strategies for Bolton.
- » Residents, developers and property owners use the town plan as a source of information about the town’s history, its present state and its vision for the future, including its plan for future regulation and development. The information in the plan provides information about the town’s function, opportunities for development and resources that need protection.
- » State departments and officials use the town plan to determine whether Bolton is eligible for state grants and project funding.
- » The Public Service Board gives the town plan “due consideration” during Section 248 proceedings to ensure certificates of public good applications “do not interfere with orderly development” as described in the plan. See the [IMPLEMENTATION](#) section for further discussion.
- » The District Environmental Commission uses the town plan during Act 250 proceedings to ensure development applications conform with the plan. See the [IMPLEMENTATION](#) section for further discussion.

Plan Organization

This plan is split into three chapters based on the vision statement (discussed in the next section). The People chapter describes the people who live in Bolton and discusses the issues most relevant to their day-to-day lives—the town’s neighborhoods, how the town is financed and governed, and how residents access the services they depend on. The Prosperity chapter describes the economy of Bolton as well as issues that are integral to a thriving economy: facilities and utilities in the town, housing for residents, the town’s transportation system and energy use and production. The Place chapter describes Bolton’s physical features, ranging from archaeological resources to wildlife habitat, and how the town intends to protect and manage them. The Place chapter concludes with the description of the town’s plan for land use and specifically identifies areas designated for growth, and other areas designated for preservation for rural character and protection of natural resources.

Each plan has a series of goals, objectives and actions. Goals are very broad, intended to show what the town will strive for over the life of this plan. Objectives identify more specific issues, and are often policy statements about what the town will or will not support. Actions are intended to be “SMART”—specific, measurable, actionable, relevant and time-bound. They form a to-do list for the town and its boards and commissions. This list can be found in the Implementation chapter of this plan.

There are a number of documents incorporated by reference into this plan. The entire list is included in Appendix 3. Of specific note is the Community Data Profile, which includes the supporting data and information about the past and present. Discussing most data in a separate document shortens the discussion of the past in this plan and allows it to focus on the future. This profile is incorporated by reference so that it can be separately updated and maintained.



CHAPTER 1 | **VISION**

Community Engagement

Between September 2015 and March 2016, the Planning Commission reached out to the community and engaged almost 150 people in a conversation about the future of Bolton. Through a series of events, meetings and surveys, Bolton residents were asked what they valued about Bolton and what they envisioned for the future of the town. Based on the results of these community engagement efforts, the Planning Commission drafted a statement describing what Bolton residents value and how those values translate into a vision for the future of the Town. The Planning Commission was recognized as the 2016 Vermont Planners Association Citizen Planning Commission of the Year for this extensive process.

Community Kickoff Event and Pizza Party. On September 30, 2015, over 50 residents heard a presentation about the purpose of the Town Plan and then walked around the Smilie School auditorium with their neighbors, answering four questions:

1. What is the best thing about Bolton and what do you value about the town?
2. What do you hope will stay the same?
3. What do you hope will change?
4. What ideas do you have for the future of Bolton?

Meeting attendees wrote down answers and left comments on what had already been written. The Planning Commission also introduced the [Maintain-Evolve-Transform Map](#), discussed later in this section.

Neighborhood Forums. Recognizing the distinct separation between different areas of Bolton, the Planning Commission hosted four neighborhood forums to ensure that every resident would have a chance to discuss the issues that mattered most to them and their neighbors. Discussion at the forums was guided by the four questions from the kickoff event, as well as the [Maintain-Evolve-Transform Map](#). From the conversations at each forum, Planning Commissioners gained an understanding of important issues for each neighborhood and for Bolton as a whole.

Smilie School Student "Plans." Bolton's youngest residents also contributed their thoughts about the future of the town. Teachers Steve Menz and Helen-Anne Cafferty incorporated town planning into their curriculum. After discussions based on the forum questions, 30 third and fourth grade students wrote and presented mini-plans related to the future of small business, wildlife, recreation and Wheeler Field. These mini-plans are available with this plan's community engagement materials in [Appendix 2: Documents Incorporated by Reference](#).

MORE INFO

September 30, 2015: Community Kickoff Meeting at Smilie School

October 1, 2015: Duxbury Road Forum in the Kilpeck's Horse Barn

October 6, 2015: Bolton Valley Forum at the Bolton Valley Ski Resort

October 15, 2015: Route 2 Forum at Smilie School

October 20, 2015: West Bolton Forum at the West Bolton Golf Club

November 19, 2015: Bolton Valley Economic Discussion

January 26, 2016: Business Forum

February 6, 2016: Senior Forum

February 29, 2016: Bolton Town Meeting and Art Contest Gallery

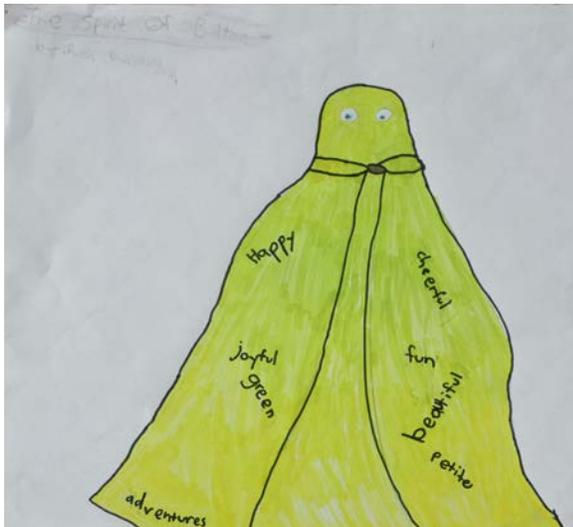
December 5, 2016: Town Priorities Event

February 9, 2017: Planning Commission Hearing

April 26, 2017: Select Board Hearing

Focus Groups. The Planning Commission also held several meetings to ensure that business owners and seniors had the opportunity to give input to the town plan. The responses from business owners informed the **Economy** section of the plan, while input from seniors helped shape the People chapter of the plan.

Survey. A survey was distributed to meeting attendees, mailed out with the Bolton Gazette and made available online. Respondents were asked to identify what they valued about Bolton, why they chose to live in Bolton, and to rank possible goals for the town. The prioritization of goals and the Vision Statement in this Plan reflect their feedback. Respondents were also asked to choose five words to describe Bolton, intended to capture the “Spirit of Bolton” (see below).



“The Spirit of Bolton” by Rosa Ricketson, Spirit of Bolton Art Contest

“Spirit of Bolton” Art Contest. Artwork that captures the “Spirit of Bolton” was solicited through an all-ages art contest with prizes sponsored by Artists’ Mediums in Williston. Twelve submission in three age categories were received and judged. The judges’ favorite pieces are included throughout this plan.

Town Meeting Day 2016. At Town Meeting Day, the Planning Commission presented the Bolton Vision Statement and the goals for the Town Plan to residents and asked for feedback. Residents prioritized goals and approved/offered suggestions for changes in the Vision Statement. The prioritization of goals and the Vision Statement in this Plan reflect their feedback.

Town Priorities Event. In December 2016, most of the Town Plan was drafted, but it included over 75 objectives and over 200 actions. Recognizing that

only a fraction of these could be accomplished over an eight-year period, the Planning Commission hosted another public forum to determine the town’s priorities. Attendees participated in a round-table discussion and ranked the objectives based on perceived feasibility and the town’s values. The ranking of action items in the Implementation chapter of this plan reflects the views expressed by town residents at this event, as well as the priorities of town boards and commissions.

Public Hearings. The Planning Commission held a duly warned public hearing on the 2017 Bolton Town Plan on February 9, 2017 at 6pm in Smilie School. 15 residents attended the hearing, and asked a number of questions about the content of the plan. Most of the questions were answered during the hearing, but residents requested that the Planning Commission develop more specific actions related to improving the relationship between the town and Bolton Valley Resort. These new actions can be found in the **Economy** section of the plan.

A number of parties were asked to review the plan in advance of the public hearing. The Bolton Conservation Commission, Development Review Board and Board of Civil Authority, the Chittenden County Regional Planning Commission Planning Advisory Committee, and the Vermont Department of Housing and Community Development all provided written comments, which were addressed by the planning commission.

To see all written comments provided before the Planning Commission public hearing, as well as documentation of how all comments were addressed, please see the Community Engagement Documents referenced in [Appendix 2: Documents Incorporated by Reference](#).

The Select Board held a duly warned public hearing on the 2017 Bolton Town Plan on April 26, 2017 at 7pm in the Bolton Town Office. After discussing the document with members of the Planning Commission, the Plan was adopted.

Vision Statement

The Bolton Planning Commission, in surveys and community meetings, asked town residents what they value most about Bolton, and what they envision for its future. These discussions highlighted what is special about Bolton: its natural landscape, rugged scenic beauty and wildlife, working farms and forests, distinct neighborhoods, ski area and easy access to outdoor recreation, and its convenient location halfway between Burlington and Montpelier. When residents talk about the future, they unite around the following shared vision:

People. Our vision is to foster community connections, vibrant neighborhoods, and gathering places where residents and visitors can meet, socialize, and celebrate.

Prosperity. Our vision is to cultivate a fiscally sustainable community that promotes local businesses, encourages options for affordable housing, energy and transportation, and provides the necessary infrastructure and services needed for the safety, health and well-being of our residents.

Place. Our vision is to responsibly steward our natural resources and working farms and forests, and to preserve the health and beauty of our mountains, waterways and wildlife, and access to the outdoors.

This plan identifies the key issues and challenges surrounding these issues and identifies goals, strategies and actions to advance these values.



photos:
2016 Town Meeting, Town of Bolton (top)
Bolton Valley, Mike Wood/Bolton Valley Resort (center)
Bryant Cabin, Natasha Bogar, Spirit of Bolton Art Contest (bottom)

Maintain-Evolve-Transform Map. During community engagement activities, the Planning Commission used the [Maintain-Evolve-Transform Map](#) (Map 13) to give Bolton’s residents an opportunity to identify specific places on a map of Bolton that should:

1. Remain as they are (Maintain)
2. Change for the better (Evolve)
3. Be completely reinvented (Transform).

This plan’s actions are also categorized by the Maintain-Evolve-Transform theme. Each action is intended to either maintain, evolve or transform something about Bolton, for the purposes of meeting the goals and objectives of this plan.



Our vision is to foster community connections, vibrant neighborhoods, and gathering places where residents and visitors can meet, socialize, and celebrate.

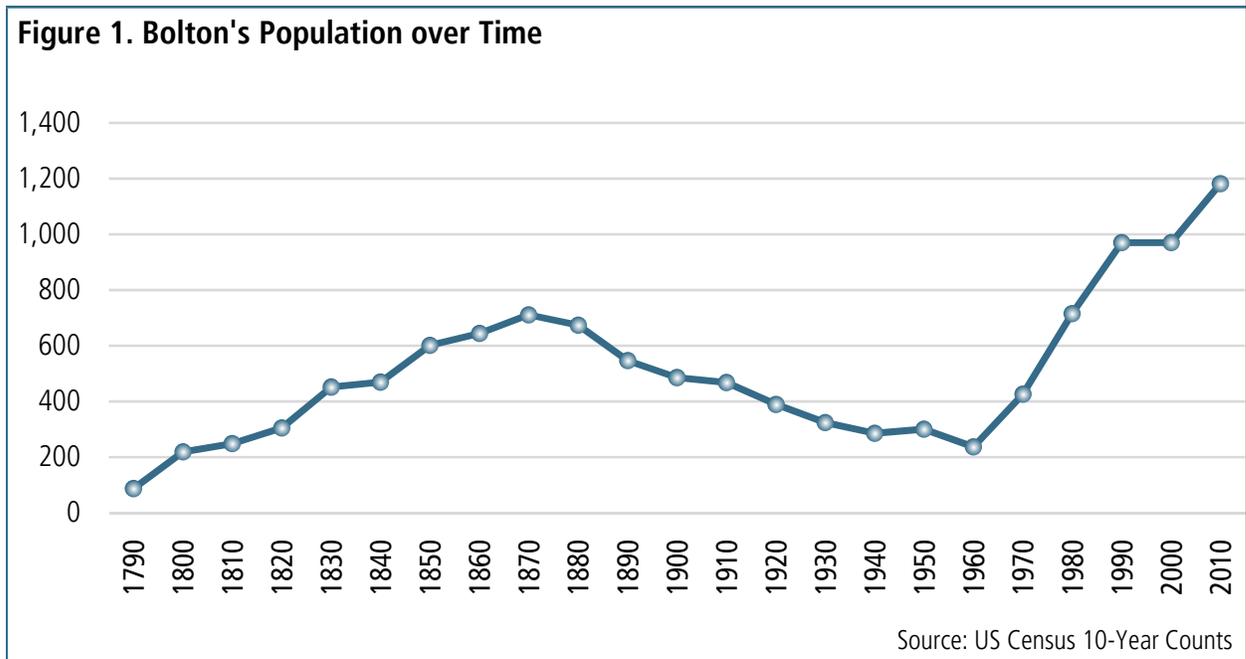
CHAPTER 2 | PEOPLE

The key issues/concerns in the People chapter include:

- » Bolton’s population is projected to continue to grow at the slow and steady rate of 1.1% annually, reaching an estimated 1,250 to 1,400 people by 2030.
- » During the community engagement completed for this plan, residents expressed a need for a greater sense of town-wide community. More opportunities are needed for community connection for all ages and family types.
- » Providing services to residents while maintaining a tax rate that is acceptable to residents is one of the key issues facing Bolton over the life of this plan. Bolton’s town government will meet the required and desired needs through coordination with outside entities, not on its own.

Residents

Bolton has a small population, but a big sense of community. The population is projected to keep growing at a small rate, but there are opportunities for residents to increase their connection with one another.



Population. With a 2010 population of 1,182 residents, Bolton is one of the smallest towns in Chittenden County. Bolton’s population is distributed throughout the town, rather than concentrated in a defined village area. The town’s low population density makes it one of the most rural municipalities in the county and the state.

Interstate 89 was constructed through Bolton between 1961 and 1964, and Bolton Valley Resort was founded in 1966. This led to a population boom that continued through the 1980s. Population growth has slowed in recent decades. Since 1990, the town has grown at a slow but steady rate of 1.1% annually—about 11 people every year. Bolton’s population is projected to continue growing at this rate, reaching an estimated 1,250 to 1,400 people by 2030.

“Paradise, populated by very special people.”

“Warm, loving environment.”

Residents, asked to describe Bolton in 5 words or less

Community Connection. Bolton residents are more likely to relate to their neighborhood (Route 2 area, West Bolton, Bolton Valley or Duxbury Road) than to the community as a whole. During the engagement completed for this plan during the fall of 2015, residents expressed a need for a greater sense of town-wide community. Residents with children in Smilie School find school events to be an enjoyable way to connect with neighbors. However, more opportunities are needed for community connection for all ages and family types. Continuing and expanding existing town events, and creating and funding a Community Committee to plan new town-wide gatherings, will help build this community connection.

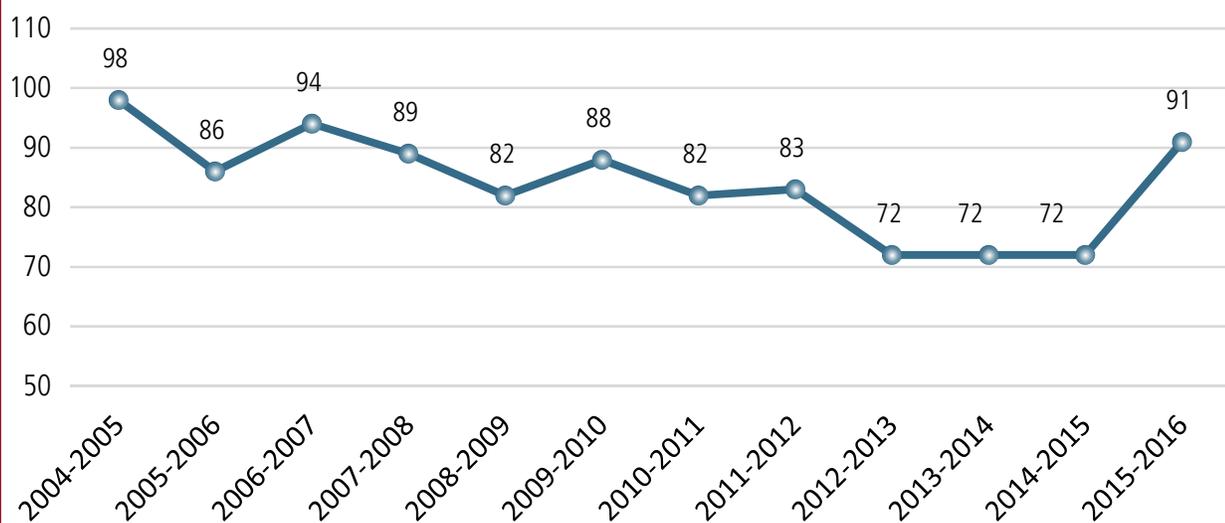
Community Services

Providing services to residents while maintaining a tax rate that is acceptable to residents is one of the key issues facing Bolton over the life of this plan. Ensuring that the town has enough capacity to complete the actions required of it by the state and desired by residents will be a challenge. However, Bolton’s town government cannot and should not provide all the services needed by residents, and coordination with outside entities is necessary. Services like education are made possible by town support of multijurisdictional entities. Town residents also benefit from services available from other public or private organizations, such as senior services and childcare, some of which are supported monetarily by the town’s budget.

Education. Bolton residents of all ages have the opportunity to access quality educational opportunities. Adults in Bolton have access to a wide range of technical training opportunities, colleges, universities and community education events throughout the region. Students under the age of 26 seeking post-secondary education can apply for one of up to five annual Wheeler Trust Scholarships, which are administered by the town.

Children in Bolton attend the Smilie Memorial School from pre-kindergarten through Grade 4, then attend Camels Hump Middle School and Mount Mansfield Union High School.

Figure 6: Smilie School Enrollment



Source: Vermont Department of Education

Enrollment at Smilie School, Bolton's elementary school for pre-kindergarten to fourth grade, has been on a downward trend from 2005-2015, but future enrollment levels at the school remain uncertain. Because of the small student population, a few young families can lead to a large enrollment increase (as occurred in 2015-2016). Although Smilie School has fewer than 100 students in any given year, and its future enrollment is uncertain, it plays a large role in the social fabric of Bolton. Bolton residents feel a great deal of pride in the school and hope that it remains open.



Buddy Dubay performing at the Smilie School (photo by: Smilie School)

In November 2014, Bolton voted to join the newly formed Mount Mansfield Modified Union School District with Richmond, Jericho and Underhill. MMMUSD is a single entity governing all education in the four communities. As part of the school consolidation process, ownership of the Smilie School building was transferred to the Mount Mansfield Modified Union School District. If the District chooses to close the school in the future, the town will have the right of first refusal to purchase the building for a nominal fee. The town would be required to use the property for “community and public purposes for a minimum of five years.” If the town sold the property within five years, it would have to reimburse the district for improvements and renovations between the creation of the district and the sale to the town.

During community engagement events, Bolton residents of all ages were asked what Smilie School should become if it closed. The answers varied widely. However, one thing was clear: if the building became available, finding a creative solution that allows for combined public and private use, encourages investment in the town and maintains the building's role as a community center is key. [Map 7](#) shows the location of Smilie School.

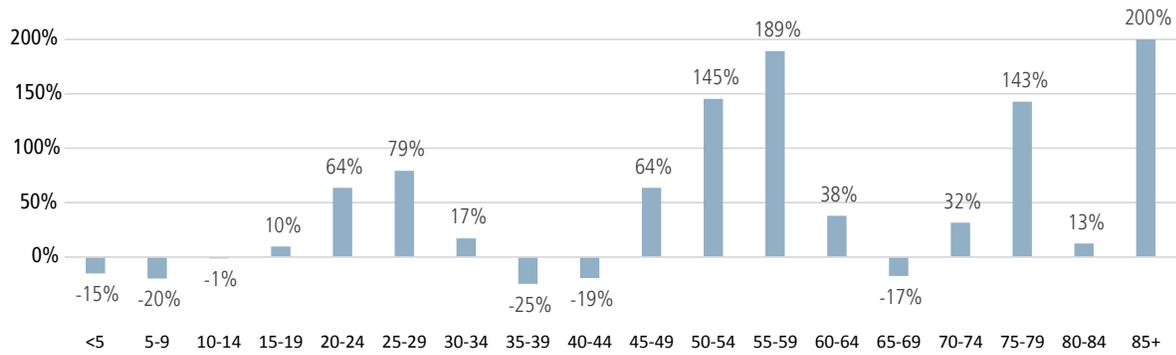
Childcare. For families with working parents, quality childcare is important for the safety, wellbeing and education of their children. Data on childcare needs in Bolton are not available, but in Chittenden County as a whole, the majority of families rely on out-of-home-care for their youngest children. In 2016, it is estimated that there were at least three children under 5 years old in Bolton for every one childcare spot in the town—and all of the available spots were claimed, leaving no vacancies. [Map 7](#) shows the location of childcare facilities in Bolton.

For school-aged children, school-based childcare is available for enrolled students before and after school through the Part 2 program. However, students older than kindergarteners must be bussed to Richmond for care. Summer childcare for students is a challenge as well. The Part 2 program, Our Community Cares Camp and the Jericho Summer Recreation Camp offer summer care, but



2016 Senior Christmas Dinner (photo by: Janet Metz)

Figure 9: Change in Bolton Age Cohorts, 2000-2010



Source: US Census, Age Groups and Sex, 2000 and 2010

WHAT WE HEARD FROM YOU

In February 2016, the Bolton Planning Commission reached out to seniors to learn about their needs. While most seniors love the community and natural beauty of Bolton, some said that they were challenged by transportation, home maintenance and the lack of a senior center. For more information on the Planning Commission’s senior forum, click [here](#).



2017 Citizen Board of the Year

photo by: Sarah McShane

due to fixed schedules, working parents may still face a challenge finding care for the hours it is needed.

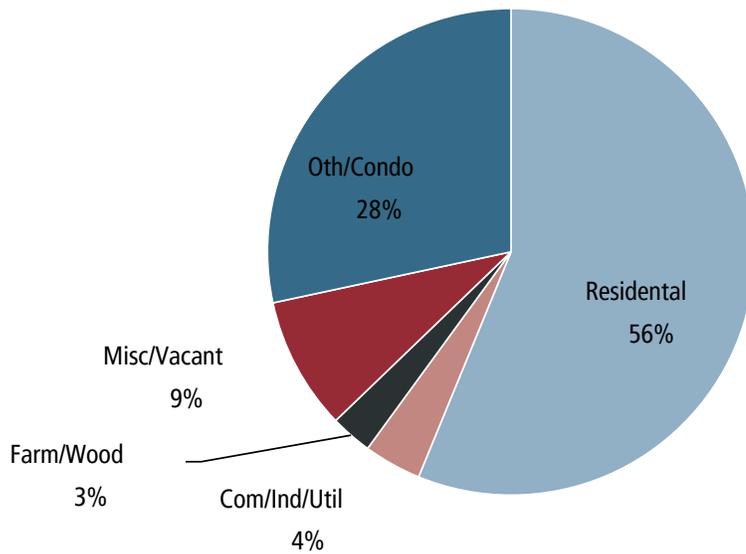
Social Services and Community Health. Bolton’s rural nature is prized by its residents, but it may present challenges to aging residents or residents with disabilities, including difficult driving conditions and long distances between home and necessities. Like most towns in Vermont, Bolton’s population is getting older. The number of residents over 65 years of age is projected to more than double by 2030, when residents over 65 years of age are projected to make up 20 to 30% of Bolton’s population.

Outside service organizations can help with medical and transportation needs. For example, the Visiting Nurse Association can provide medical care to patients with mobility issues, and the Special Services Transportation Agency and the Champlain Valley Agency on Aging’s Elderly and Disabled Transportation program provide rides to appointments and errands for seniors and others with limited mobility. A number of nonprofit and volunteer programs are also available to Bolton’s seniors, including the Waterbury Senior Center, which provides social and educational programs and meals; Bolton’s monthly senior dinners; Meals on Wheels; and the Champlain Valley Agency on Aging’s Elderly and Disabled Transportation program. However, these services may not be sufficient for the needs of all residents, and greater volunteer capacity is needed to ensure that these programs are successful.

Town Governance. Bolton has four full time employees and several part time employees. The town’s current level of staffing is barely adequate. While staffing is adequate to complete all required tasks,

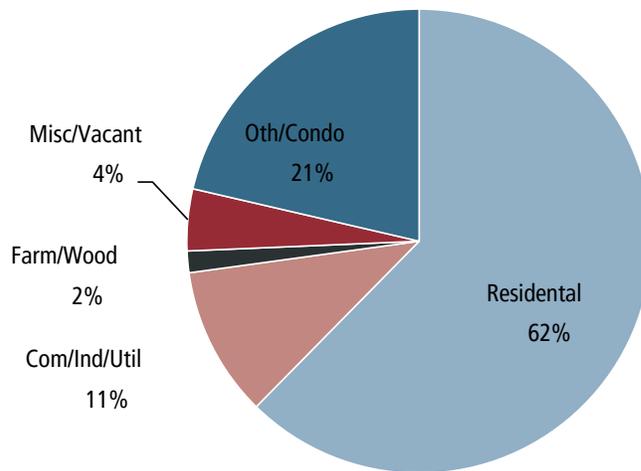
staff are stretched thin and the addition of new requirements for town work, such as the Municipal Roads General Permit (as discussed in the [Transportation](#) section) will likely be beyond the town’s current capacity. The town relies heavily on volunteers and contracted services. A tally in 2016 showed that the town is assisted by at least 30 volunteers filling 50 positions every year, meaning that many

Figure 11b: Grand List Properties, 2014



Note: Land owned by the State of Vermont (38% of Bolton's land area) is not included in the Grand List.

Figure 12b: Grand List Value, 2014



Note: Land owned by the State of Vermont (38% of Bolton's land area) is not included in the Grand List.

Figure 18: Tax Rates

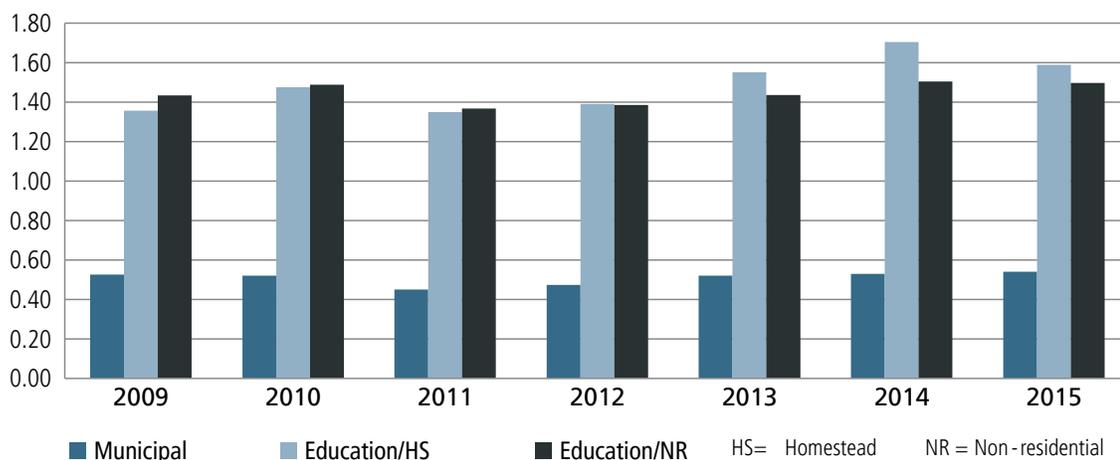
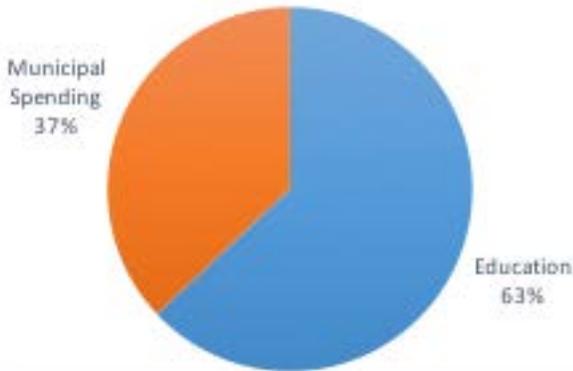


Figure 21: Bolton's Budget, Municipal Spending vs. Education Spending

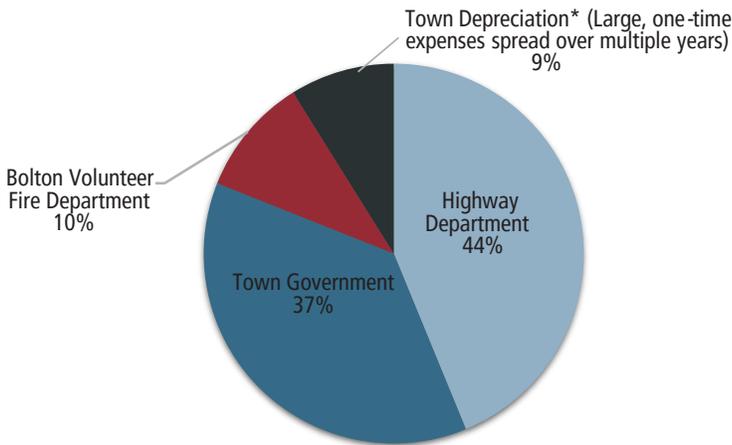


volunteers serve in multiple roles. Bolton is governed by 7 boards and 2 committees, with a wide range of responsibilities. Ensuring that there are sufficient numbers of volunteers, and that those volunteers are well-supported, is key to the town's future.

Town Budget and Capital Improvement Plan. Bolton faces a two-part challenge of a limited tax base and increasing demand for services and facilities. The vast majority of Bolton's development is residential—only 4% of the buildings on Bolton's grand list are commercial, and they make up only 11% of the assessed grand list value. In addition, almost 60% of the land in Bolton is conserved. The number and values of taxable acres have dropped from 2005-2015.

Property taxes are already relatively high for Bolton residents: Bolton's homestead education tax rate is the second highest of all municipalities in Chittenden County, and the municipal effective tax rate is the sixth highest. However, the average tax bill in Bolton is lower than neighboring towns, due to lower residential property values in Bolton. During community engagement for this plan, Bolton residents strongly expressed their desire for tax rates not to increase. Bolton must develop creative solutions to provide the facilities and services that residents want while maintaining a rate of property taxation that is acceptable to residents.

Figure 22: Municipal Spending (without Education)



Bolton Volunteer Fire Department

photo by: BVFD

As Bolton's population continues to slowly grow, demand for services will increase. In addition, new state requirements will stress the town's budget. The passage of Vermont's Clean Water Act (Act 64) in 2015, which aims to reduce stormwater runoff from roads, will likely lead to higher costs for road maintenance and require some road reconstruction. With these existing future budgetary challenges in mind, Bolton began to prepare a Capital Improvement Program (CIP) in 2016. The purpose of the CIP is to responsibly plan for the town's future spending and saving. The CIP creates a capital budget, determines when equipment and facilities should be replaced or upgraded, determines how much the town should save in reserve funds, and how much it should spend on debt payments. This helps the town predict how much money will need to be spent every year, and puts policies in place to guide town spending. The Capital Improvement Plan, as adopted by the Select Board, is incorporated by reference into this plan.

Public Safety. Bolton is served by the municipal Bolton Volunteer Fire Department (BVFD), supplemented by mutual aid agreements with fire and rescue groups in other towns. The BVFD faces a number of challenges, especially retaining and training volunteers, ensuring access to water sources in some parts of town, and being unable to recover the costs of calls. The number of firefighters has decreased—in 2016, there were eight firefighters, only three of whom were available during the day. However, recruitment is ongoing. The installation of more dry hydrants and fire ponds may be necessary for fire protection, as well as continuing to ensure adequate fire truck accessibility in new developments, for the best interest of BVFD and property owners for homeowners’ insurance. Additionally, finding ways to gain more revenue or reduce costs is key to the department’s future financial viability.

There are no local law enforcement or emergency medical services in Bolton. The town pays for contract services through outside organizations: Shelburne provides dispatch services, the Vermont State Police respond to 911 calls about violent crimes, and Richmond Rescue provides emergency medical services. The majority of Richmond Rescue’s calls to Bolton originate from snow sport activities at Bolton Valley Resort and accidents on I-89.

The large numbers of winter visitors to Bolton Valley Resort means that the population that must be served by public safety service providers is larger than that of Bolton residents. This is an issue that the town and other service providers must take into account when considering demand for services.

Details of public safety operations in Bolton are described in greater detail in the Bolton Local Emergency Operations Plan (LEOP)([link](#)). The LEOP outlines the procedures that would be taken by the town in the case of an emergency, such as opening an emergency shelter. It also identifies key contacts and establishes a chain of command. The Bolton Local Emergency Operation Plan, as adopted by the Select Board annually, is incorporated by reference into this plan.

People Goals, Objectives and Actions

GOAL 1. Bolton residents will feel a strong sense of community, both within their local neighborhoods and town wide.

Objective 1.1. Build community by increasing the number of town residents who attend a town wide event, such as Town Meeting or Bolton Market Day, every year.

Objective 1.2. Promote recreational, social and continuing education activities available to residents.

Action 1. Leverage resident interest in community building events by re-establishing and funding a Bolton Recreation or Community Committee.

Action 2. Host at least one additional community event every year, in addition to existing events such as Town Meeting Suppers and Green Up Day.

Action 3. Host a Bolton Volunteer Fire Department Fundraiser.

GOAL 2. Bolton will support the provision of health care, childcare, educational and social opportunities needed by residents.

Objective 2.1. Ensure that Smilie Memorial School remains available for town use.

Objective 2.2. Bolton will be an appealing town for young families.

Action 4. Maintain annual allocations for organizations serving Bolton residents in annual town budgets, including for Our Community Cares Camps.

Action 5. Continue to offer childcare at Bolton Town Meeting and other town-sponsored events.

Action 6. In the event that Smilie School is closed and ownership reverts to the town, develop a plan to ensure that the facility remains a community center, which may also be creatively developed to include compatible private uses (e.g., a local day care facility) that help offset facility operation and maintenance costs.

Action 7. Educate residents about the services provided by municipal, state and regional agencies, such as Age Well, and increase senior services and community connection by recruiting volunteers to provide services for town residents to volunteer to meet those needs.

GOAL 3. Bolton will plan for, finance and provide an efficient and cost-effective system of public services to meet existing and anticipated needs, in relation to the town’s planned rate of growth and development.

Objective 3.1. Improve the capacity and function of Bolton’s boards and committees to govern by increasing the number of volunteers involved in town governance and examining options for increased future staffing.

Objective 3.2. Provide public services while maintaining a property tax rate that is acceptable to residents, and seek revenue sources beyond property taxes.

Objective 3.3. Update Bolton’s Capital Improvement Plan, as adopted by the Select Board, as necessary, and use it to provide the basis for capital expenditures.

Action 8. Provide all volunteer committees with adequate administrative support, through staff or contracted services, particularly as needed to ensure that open meeting law requirements are met.

Action 9. Evaluate short term and long term town staffing needs on an annual basis to ensure that there is sufficient support for town administration and for the administration of any new programs, taking into account operating budgets, program requirements, existing staffing, and the cost of contracted services.

Action 10. Coordinate with the Towns of Jericho and Underhill, and with Vermont’s Congressional delegation, to gain federal Payment in Lieu of Taxes (PILOT) for the Ethan Allen Firing Range.

Action 11. Seek additional sources of revenue and funding, including grants, donations, fundraising, and service payments where allowed, to help offset municipal operating expenses, and to purchase needed equipment.

GOAL 4. Bolton’s residents and properties will be safer during emergencies, and the town will be prepared to address likely hazards.

Objective 4.1. Increase the town’s existing capacity to quickly and effectively warn the public about and respond to local emergencies, including accidents, crimes, fires and natural disasters.

Objective 4.2. Work with CCRPC to draft, review and implement Bolton’s Local Emergency Operation Plan.

Action 12. Track communications from Vermont Emergency Management and the National Weather Service in Waterbury and Burlington to ensure that the town receives up to date and accurate information prior to and during severe storms and flood events.

- Action 13. Annually update the town's Local Emergency Operations Plan (LEOP) by May 1st, for use in emergencies and disasters and to ensure the appointment of qualified individuals to serve in key public safety positions.
- Action 14. Provide emergency response, hazardous materials response and fire training as resources permit, particularly for appointed positions, Select Board members, volunteer firefighters and other emergency responders – including Incident Command System (ICS) training as required for local officials.
- Action 15. Actively recruit volunteer firefighters, and provide necessary training and equipment to ensure their safety.
- Action 16. Continue to fund Richmond Rescue for emergency medical services.
- Action 17. Evaluate the need for additional police coverage, in relation to local crime rates, through contracted or administrative service agreements with existing law enforcement agencies.
- Action 18. Provide information to local residents interested in establishing a Neighborhood Watch Program.
- Action 19. Identify locations with suitable access to surface water for the installation of additional dry hydrants in portions of town that currently do not have adequate supplies; and negotiate necessary access easements with willing landowners.
- Action 20. Review the status of the Bolton Volunteer Fire Department and existing coverage, including ongoing department needs for equipment, volunteers and training, in relation to available municipal resources, including annual capital and operating budgets, reserve funds, and existing mutual aid agreements. Investigate options under existing or proposed aid or service agreements with neighboring communities to increase local coverage, and to share complementary equipment and services in the most cost-effective manner.
- Action 21. Explore the feasibility of creating a Community Resilience Organization (CRO) or similar organization for Bolton, to develop a town-wide notification and warning system in the case of emergencies, plan to reposition equipment during a flood event to ensure it is available in all parts of town, and develop neighborhood-specific emergency plans.
- Action 22. Encourage residents to sign up for VT Alert notifications about emergencies.
- Action 23. Create an emergency and public safety web page for the town.



Rainbow, Harper Oliver, Spirit of Bolton Art Contest



Bolton Valley, Levon Ware, Spirit of Bolton Art Contest



Our vision is to cultivate a fiscally sustainable community that promotes local businesses, encourages options for affordable housing, energy and transportation, and provides the necessary infrastructure and services needed for the safety, health and well-being of our residents.

CHAPTER 3 | PROSPERITY

The key issues/concerns in the Prosperity chapter include:

- » Bolton has a relatively limited economic base currently, and therefore it is imperative to support Bolton Valley and other recreation related businesses, and the variety of home based businesses in Bolton.
- » The continued availability of affordable housing will require new and rehabilitated units within the growth confines of this plan.
- » Maintaining a safe and reliable road network and finding funding to comply with the new Municipal Roads General Permit will be the town's biggest challenges during the life of this plan.
- » Bolton's town government cannot and should not provide all the facilities and utilities needed by residents, and coordination with outside entities is necessary.
- » This plan establishes solar and wind generation facilities as development just like any other, and therefore any renewable energy project in Bolton must comply with the goals and objectives related to land conservation as outlined in the [Natural Resources, Natural Hazards and Resilience](#) and [Land Use](#) sections of this plan. The plan also identifies the possible goal of revising the plan in the future to gain a Determination of Energy Compliance from CCRPC.

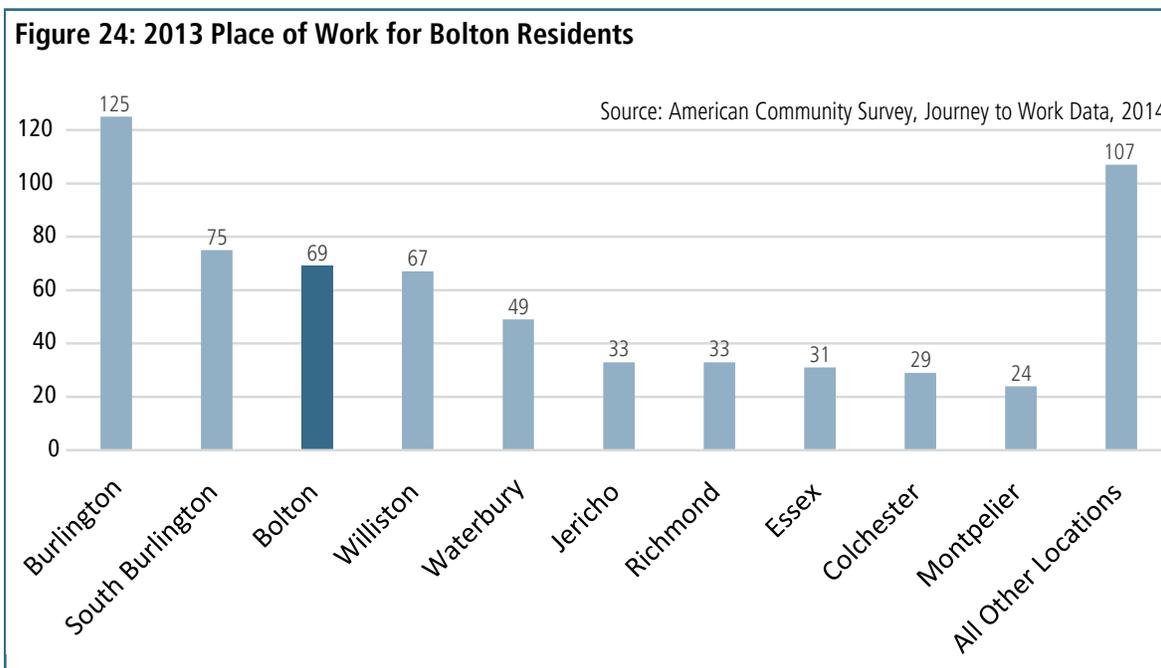
Economy

The largest employer in Bolton, and the cornerstone of the town's economy, is Bolton Valley Resort. The town's economic growth depends on ensuring the success of the resort as a four-season enterprise. The town also encourages new businesses that are able to capitalize on our numerous recreational opportunities while meeting the goals of this plan. Finally, we recognize the importance of other local businesses, especially home businesses.

Economic Conditions in Bolton. Unemployment in Bolton is very low, and though it increased from 1.2% to 2.3% from 1990-2014, it remains lower than the Chittenden County and Vermont unemployment

	Bolton	Chittenden County
Median Household Income	\$75,568	\$63,243
Median Household Income	\$83,278	\$83,432

Source: American Community Survey 2009-2014 Estimates



rates. The American Community Survey reports that the median income in Bolton is higher than the Chittenden County average. However, the average wages paid for jobs located in Bolton are significantly lower than the county average (Bolton residents who are self-employed are not included in this statistic). Therefore, the town supports the expansion of jobs paying a livable wage within Bolton, as well as varied and reliable transportation for workers who commute to jobs outside of Bolton.

Businesses in Bolton. Over 80% of Bolton’s workforce commutes to work in other municipalities, most in the urban core of Chittenden County. The remaining 20% of the workforce works at one of the more than 60 businesses located in Bolton. Most of these businesses are based in the homes of residents. While formal data collection may not show all local, home-based businesses, surveys by Bolton’s Economic Resources Committee show that the number of home-based businesses in a variety of sectors is expanding throughout Bolton. These home-based businesses are a key form of economic development that is compatible with Bolton’s rural nature.

MAKE THE CONNECTION

See the [Utilities and Facilities](#) section for more details on internet and phone service.

High-speed, reliable internet and strong telecommunications access is essential for residents who own their own businesses, or who have the opportunity to work from home. Improving internet and cellular service will enable faster connections between people around Vermont and around the world. Bolton’s Economic Resources Committee is working to determine the other needs of businesses and entrepreneurs in town, and to develop strategies to meet those needs.



West Bolton Golf Course (photo by: West Bolton Golf Course)

Recreation and the Economy. Recreational opportunities abound in Bolton. Bolton’s many visitors may represent an opportunity for businesses that cater to outdoor recreationists, visitors and residents alike, but very few such businesses exist currently. It is difficult to pinpoint the exact reason for this, but it is likely because Bolton is relatively difficult to access, due to its lack of freeway exits. Still, recreation businesses may be a source of economic growth for the town in the future. The town supports the establishment and success of

MAKE THE CONNECTION

See the [Recreation](#) section for more information on recreation in Bolton.

more businesses that rely on Bolton’s natural resources and conform with the goals of this plan.

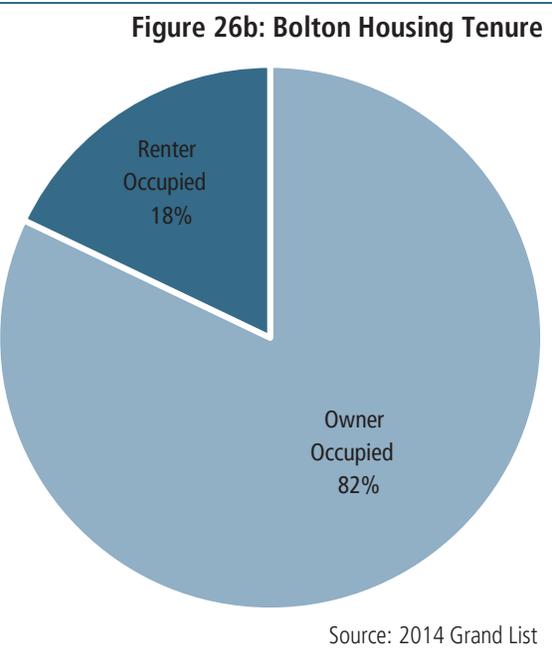
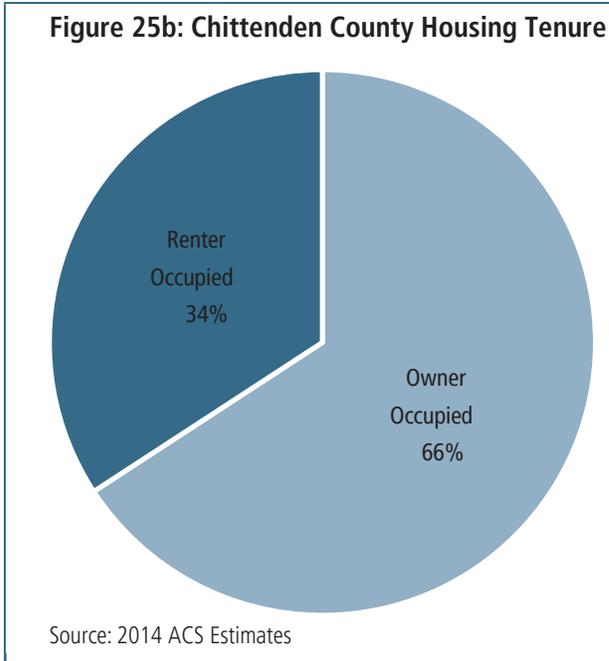
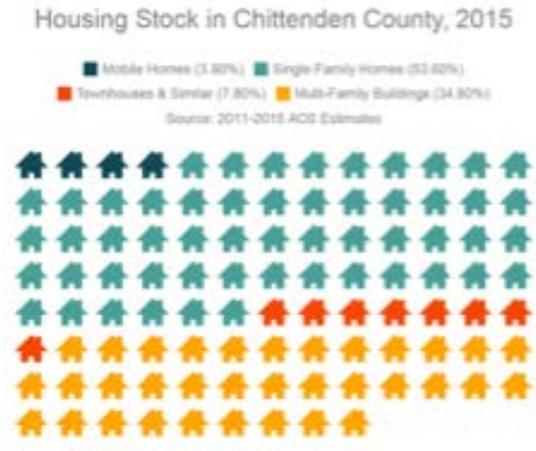
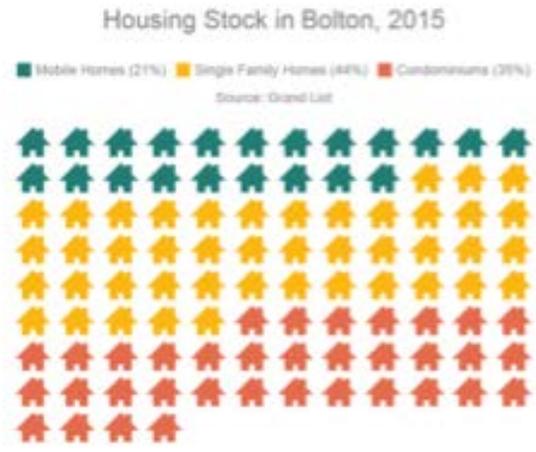
Founded in 1966, Bolton Valley Resort is a prime example of a recreation business that relies on Bolton’s natural resources. In the past decades, the Resort has faced many challenges, including limited capital for investment and a lack of water source for making snow. Additionally, the Resort will be challenged by the unpredictability of climate change. In response to these challenges, the Resort hopes to broaden its focus to become a four-season attraction, with recreation activities that take advantage of Bolton’s natural wonders during spring, summer and fall, in addition to winter. The Resort’s ability to remain viable and to successfully transition to a four-season establishment is key to the survival of the Resort. Many residents work at the Resort, especially during the winter. The Resort does not have a master plan in place for future development, which has caused conflict between the town and Resort in the past. The town, and Act 250 requirements, both still require a master plan. However, this plan recognizes the need for collaborative relationship with the resort, and the need for the town and the Resort to work together to ensure that the Resort’s future development meets the goals of the Town Plan. The future success of the Resort is key to the economic future of the town.

Housing

Bolton is well situated between the large employment areas of Burlington and Montpelier, and has a relatively low cost of housing for the region. As a result, Bolton is an affordable bedroom community. Maintaining this status will require rehabilitation of existing affordable housing stock, as well as developing additional housing to keep up with demand over time.

Housing Stock. Bolton has relatively low housing costs and slow turnover rates (meaning that homes in Bolton remain on the market for twice as long as the county average). This indicates that Bolton has less of a housing supply problem than the urban areas in the County are experiencing. In fact, sales of homes, new construction and prices have all stagnated in Bolton since 2008. However, there are housing stock challenges that face Bolton – decreasing household size which will result in the need for more homes for the same amount of people; and an aging housing stock that will require rehabilitation. Therefore, Bolton will need to be diligent in keeping up its housing stock in order to maintain a healthy housing market.

Most homes in Bolton are occupied by one or two people, and these small households are the fastest growing in town. Because of this, it is likely that by



MAKE THE CONNECTION

See the [Land Use](#) section of this plan for a discussion areas planned for future development, including housing development.

2030, the town will need about 50-80 more homes for new residents. One method to handle this demographic shift is a diverse housing stock.

Bolton already has a higher percentage of mobile homes and condominiums than most Chittenden County towns (see right). Most of the condominiums in

Bolton are located around Bolton Valley. While these condominiums have largely been seasonal housing for skiers in the past, most of them are now used by permanent residents. In 2014, seasonal properties made up only 3.4% of the town's Grand List.

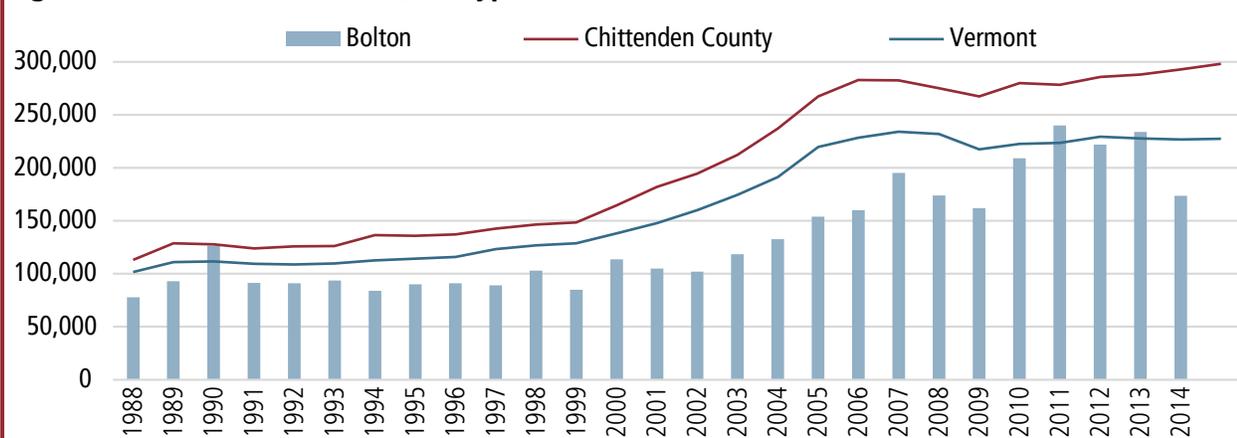
Another future consideration is maintenance of Bolton's older housing stock. Most of Bolton's homes were built in the 1970s and 1980s, meaning that they are likely not energy efficient and may have lead paint. Finding appropriate areas for developing new homes can be challenging in Bolton, because of the town's steep topography, amount of conserved land and flood plains. As the town continues to grow, the greatest opportunity for future housing development will be in West Bolton, due to its good septic soils and few natural development constraints. If infrastructure improvements allow, Bolton Valley may become a site for new development as well.

Affordability. An estimated 82% of Bolton residents own their homes, compared to 66% in Chittenden County as whole. This is likely because housing in Bolton is more affordable than housing in Chittenden County, due to the relatively high percentages of mobile homes and condominiums. This high rate of ownership helps build the town's sense of community, and is a source of pride for the town. Condominium prices in Bolton have decreased in recent years, compared to the county, and Bolton's median price for a single-family home (\$300,000 in 2016) is in what local realtors consider the "sweet spot" for Chittenden County homebuyers.

These trends will help maintain Bolton as an affordable place to live in the region, however Bolton residents may still have difficulty affording their housing costs. A Bolton resident who also works in Bolton would have an especially difficult time, due to low wages, and a relatively low percentage of rental housing.

Another consideration for housing affordability in Bolton is transportation costs. Most residents commute to jobs outside of Bolton and must travel to other towns for necessities, and transportation costs are consequently high (further described in the [Transportation](#) section). This is not an insignificant cost, and could impact a person's ability to live in Bolton, speaking further to the need for Bolton to increase the number of safe and affordable homes.

Figure 28: Median Home Cost, All Types



Transportation

The Town of Bolton maintains 20.5 miles of road, and it requires 44% of Bolton’s municipal spending. Maintaining a safe and reliable road network and finding funding to comply with the new Municipal Roads General Permit will be the town’s biggest challenges during the life of this plan. Considering the recreation industry is the core of Bolton’s economy, it is also critically important to maintain the road network for both residents and visitors alike. Transportation infrastructure is shown on [Map 10](#).

Getting Around in Bolton. Residents of Bolton are by necessity very car dependent, given the town’s rural location. Almost all Bolton residents drive alone to work, which contributes to high transportation costs and high energy use for driving. The American Community Survey (2010-2014) estimates that over 87% of workers living in Bolton drove 10 or more miles to get to work, compared to 45% of Chittenden County residents. A median income household living in Bolton is estimated to drive 31,360 miles annually and to spend 23% of their income on transportation, compared to 26,368 miles and 19% for a median income household living in Chittenden County, according to the US Department of Housing and Urban Development. The American Community Survey estimates that 90% of residents who work outside of their homes drive to work alone, while 7% carpool (2011-2015). Residents have very limited access to public transportation, and only 1% of those working outside the home are estimated to use public transportation. The nearest park and rides are located in Richmond and Waterbury, and offer service only to Burlington and Montpelier. Past attempts to build a park and ride in Bolton have been unsuccessful both because of Select Board opposition and because of a lack of interest on the part of bus operators, but the idea should be re-examined.

Road Network. Because of Bolton’s mountainous terrain, many local roads have very steep grades and are prone to erosion.

MAKE THE CONNECTION

For more information on transportation and where Bolton residents work, see the [PROSPERITY](#) chapter.

Figure 33: Percentage of Income Spent on Transportation

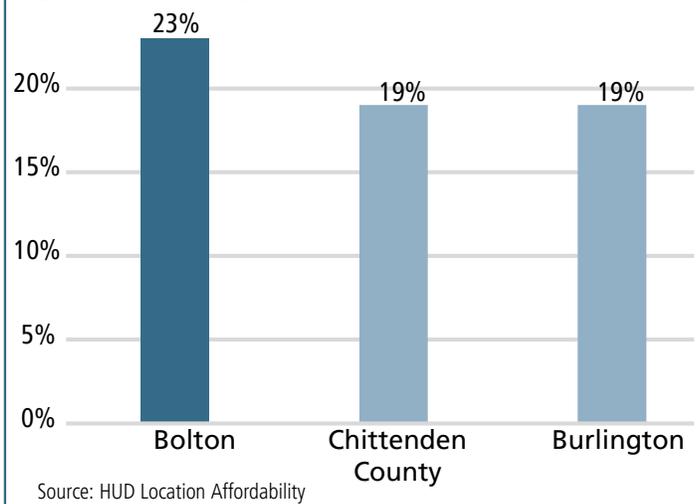


TABLE 27: COMMUTING DISTANCES FOR WORKERS

	Bolton		Chittenden County	
	Workers	Percentage	Workers	Percentage
Less than 10 miles	65	12.40%	5,4759	55.00%
10 to 24 miles	435	82.70%	2,2139	22.20%
25 to 50 miles	26	4.90%	1,2481	12.50%
Greater than 50 miles	0	0.00%	1,0244	10.30%

Source: US Census, American Community Survey OnTheMap 2014



New Ditching on Notch Road (photo by: Bill Atwood)

TABLE 28: TOWN HIGHWAY MILEAGE BY CLASS

Class 1	Class 2	Class 3	Legal Trail	Fed Hwy	Interstate	Total 1, 2, 3 & Highways
0	8.58	12.01	0.3	5.669	5.637	31.896

Source: data derived from VTrans TransRDS GIS data – surface class and arc length

TABLE 29: TOWN HIGHWAY SURFACE TYPES

Total Known	Total Unpaved	% Paved	% Unpaved
32.896	10.73	66.60%	33.30%

Source: data derived from VTrans TransRDS GIS data – surface class and arc length

The majority of local roads are also gravel, rather than paved. Therefore, the issue of stormwater management and erosion control on the roads is not only the biggest concern facing Bolton’s road network, but one of the biggest challenges facing the town. During

periods of heavy rain and spring melting, road, culvert and ditch washout is a common and expensive problem. These occurrences are increasingly frequent as severe storms become more common, and also during “mud season,” when heavy rains and snow melt in the spring create extensive areas of mud on dirt roads. Road network improvements have been identified. However, ongoing road network maintenance and the town’s ability to budget for it are key concerns for the town.

The town is in the process of drafting its first Capital Improvement Plan, which will help the town better plan for and finance needed purchases of highway maintenance equipment in the future. The Capital Improvement Plan does not currently include transportation infrastructure costs such as bridge and culvert replacements, but it likely will in future iterations. Due to the high cost of road maintenance, the town will continue its long-standing policy not to take over private roads. Bolton’s Road Crew does not have the capacity to care for more roads, and the town’s budget cannot accommodate the additional road maintenance costs from private roads. Additionally, Bolton must plan for a significant increase in road maintenance costs due to the Municipal Roads General Permit (below). However, maintenance of US 2, a state road, and I-89, a federal highway, are not the responsibility of the town. Projects to be completed on these roads are indicated in the Chittenden County Regional Planning Commission Transportation Improvement Plan (TIP) and the State of Vermont Transportation Improvement Plan (STIP). The TIP and STIP are incorporated by reference into this plan.

Road Standards. Road construction in Bolton is currently governed by the Bolton Public Works Specifications, adopted in 1991, which define standards for the design of all public and private roads in Bolton. In addition, development that will require access to a public road, or projects where work would take place within a town right of way, require separate permits. The town has not adopted the 2013 Vermont Town Road and Bridge Standards, which are intended to prevent damage to roads and bridges during flooding or heavy rain events. If the Town adopted these standards, the Vermont Emergency

Relief and Assistance Fund (ERAF) would pay for a higher percentage of the cost of a disaster. However, due to Bolton’s steep topography, the cost of maintaining the roads to the 2013 Vermont Town Road and Bridge Standards would be higher than the cost of repairing the roads after washouts, regardless of the percentage paid by ERAF. Adopting a revised version of the standards appropriate for Bolton’s topography would increase the resiliency of the town’s road network, and may enable Bolton to receive more state funding to recover from disasters. It should be noted that the 2013 standards will be updated and expanded during the creation



Town Highway Department
(photo by: Amy Grover)

of the Municipal Roads General Permit, as discussed below. Finally, the town's policies for clearing roads during winter storms is outlined in the Winter Operations Plan and Policy, as amended in 2015.

Municipal Roads General Permit. The Vermont Clean Water Act (Act 64) was signed into law in 2015, and was intended to address water pollution in Lake Champlain, particularly the EPA's determination that Lake Champlain has an unacceptably high phosphorous level. Road erosion is a source of phosphorous and other contaminants. Consequently, Act 64 established a Municipal Roads General Permit. All Vermont municipalities will be required to comply with the permit, which will establish standards for road maintenance and upgrades that will reduce road erosion. The permit is still in development as of the writing of this plan and will be released in 2019. However, it is anticipated to require inventories of road erosion on all sections of road that drain into bodies of water, and a schedule to bring non-complying segments up to standards over 20 years. To receive a permit, the town will also have to pay significant annual permit fees, which have not been finalized at the time of this writing. Complying with the regulations of this permit will present a significant financial challenge to the town. The town will not be able to afford to maintain roads to these standards without ongoing state assistance or increases in revenue from property taxes or other sources.



Notch Road Washout, 3 June 2015

photo by: Bill Atwood

Active Transportation and Complete Streets. While there are many trails in Bolton, the town has no sidewalks or bike paths. This forces pedestrians and bicyclists onto narrow and steep roads with minimal shoulders, which often have sharp curves creating blind turns. In fact, several key Vermont trails, including the Cross-Vermont bicycle trail and the Long Trail, run along Bolton roads. The Long Trail crosses I-89 in Bolton, where hikers must walk through the same culvert that carries the Notch Road. Due to the culvert's small size and limited visibility, combined with the fact that wildlife use the culvert to cross underneath I-89 as well, this creates danger for hikers and drivers alike. The Chittenden County Regional Planning Commission's Transportation Improvement Program indicates that the replacement of this culvert is a funding priority for the region, with construction to occur in fiscal year 2019. However, the planned replacement of this culvert does not address pedestrian safety to the satisfaction of the town.

Because most Bolton residents work outside of the Town, only a few residents use non-motorized transportation to get to work. However, residents and outside visitors regularly walk and bike along the roads for recreation. Bolton's roads, especially Duxbury Road, are also commonly used by cycling and hiking groups. Ensuring that roads in Bolton are safe for all users, including drivers, walkers, bicyclists and equestrians, is key. The Chittenden County Regional Planning Commission's Active Transportation Plan recognizes US 2 as a significant bicycling route as well, and indicates that VTrans should improve the road's safety for bicyclists when it is next repaved.

MAKE THE CONNECTION

To learn more about Bolton's trail network, see the [Recreation](#) section.

Railroad. Although railroad tracks run along Route 2 throughout the length of Bolton, the nearest passenger rail station is in Waterbury. The railroad tracks also create a barrier between most of Bolton and the eastern bank of the Winooski River. Only two recognized legal pedestrian railroad crossings to the river exist, one where the Long Trail crosses the tracks and one near Lot #02-030.000. The limited number of places to cross decreases access to the Sara Holbrook Property and the Winooski River, one of the town's prime natural resources.

Railroad cars also present a potential hazard. They may be carrying hazardous materials, and local emergency response teams such as the Bolton Volunteer Fire Department must be prepared to respond to any spills, either when the cars are traveling through the town or when they are parked for long periods of time on the tracks. The response to such a spill is discussed in the Bolton Local Emergency Operations Plan (LEOP).

Utilities and Facilities

While the [Community Services](#) section describes the services provided to residents, this section describes the 'bricks and mortar' and equipment assets of the town, as well as the utilities that serve residents. As described in the [Community Services](#) section, ensuring that the town has enough capacity to complete the actions required of it by the state and desired by residents will be a challenge. However, Bolton's town government cannot and should not provide all the facilities and utilities needed by residents, and coordination with outside entities is necessary. For example, solid waste management is made possible by town support of multijurisdictional entities. Residents are served by utilities available within the town, for telecommunications, energy and in some cases, water and sewer service.

Town Facilities. The town of Bolton owns three buildings—the town office, the town garage and the fire station—and 469 acres of land, including Preston Pond and the town cemeteries, including one in West Bolton, which is still in active use. The town is also responsible for maintaining records of development and life events, including cemetery records. Due to the town's long period without a formal town office, not all records are consolidated in the town vault. Bolton's fire station was recently renovated to serve the town more effectively. In 2007-2008, the town office was torn down and reconstructed. The town garage is in need of major renovations, including flood-proofing, due to its location in the floodplain.

Bolton also owns four trucks for use by the highway department, a loader, a grader, and three fire department trucks. The town's capital improvement plan (CIP), currently in development, defines a maintenance and replacement schedule for the equipment. [Map 7](#) shows the location of Bolton's town facilities.

Water and Wastewater. Bolton does not have any town- water or wastewater systems, but several privately-owned community systems provide water and wastewater service to local neighborhoods and facilities such as Smilie School, Bolton Valley, Fernwood Manor and the Country Club Condominiums. While encroachment on the water sources for the wells serving these communities is restricted from new development by Bolton's Land Use and Development Regulations, these regulations do not address existing water quality and supply concerns. While costly to the users, water supply concerns were addressed in Bolton Valley by drilling new wells. This lack of centralized water and wastewater is a major constraint on development, and community-scale water and wastewater systems may be necessary to support growth areas. However, these systems should remain in private ownership unless the development and long-term maintenance can be covered by user fees from the residents and businesses hooked into the system. [Map 7](#) shows the location of private community water and sewer systems currently in Bolton.

Solid Waste. The Town is a member of the Chittenden Solid Waste District, which allows residents to drop off trash, hazardous waste, recycling and compost at designated transfer stations and drop off sites throughout Chittenden County, or to contract with private haulers who utilize these sites. Per Act 148, the Universal Recycling Law, the town must provide recycling bins anywhere that public trash cans are available. The Act also bans food scraps from landfills, effective in 2020. Any solid waste facilities proposed in Bolton must be consistent with both local and district plans.

Telecommunications. While all homes and businesses in Bolton have access to telephone and internet service, Bolton’s topography means that the speed of available internet, quality of cellular service and availability of television service varies greatly depending on location.

Telephone Service. There have been three Certificates of Public Good granted for projects relating to increasing cell phone coverage in Bolton since 2008. Most recently, several new cellular antennae were approved to be added to an existing tower on Bolton Valley Access Road in 2016. These new facilities may increase the quality and availability of cellular voice and data coverage.

The Public Service Board (PSB) has jurisdiction over telecommunication towers. In these proceedings, the Town Plan is given substantial deference. Bolton should participate in these procedures to balance the need for improved communications with scenic and wildlife habitat protections.

Internet. 98.8% of buildings in Bolton have broadband internet available, allowing users to access the internet much faster than if they had “dial-up” internet. However, about half of buildings in Bolton (along Stage Road, the lower portion of Notch Road and most of Route 2) are served by the slowest internet speed considered “broadband” by the FCC (4/1 Mbps internet service). The other half of buildings have access to relatively fast speeds (25/3Mbps), and about 1/3 of Bolton buildings, those located on portions of Notch Road, Route 2 and Bolton Valley Road, have extremely high speed “fiber” connections of 100/100Mbps or faster, providing Bolton with a unique business and telecommuting advantage over other rural towns in Vermont.

Energy

Bolton’s energy use has been declining over the past ten years, largely because of increasing efficiency. Bolton’s planning surrounding energy issues must take Vermont’s energy goals into account. The State of Vermont has a series of ambitious energy goals, as laid out in the state’s [2016 Comprehensive Energy Plan](#). These goals include a 1/3 reduction in total energy use by 2050 and for 90% of all energy used in Vermont to come from renewable sources by 2050. Bolton’s current patterns of energy usage are not in line with these goals, but local and

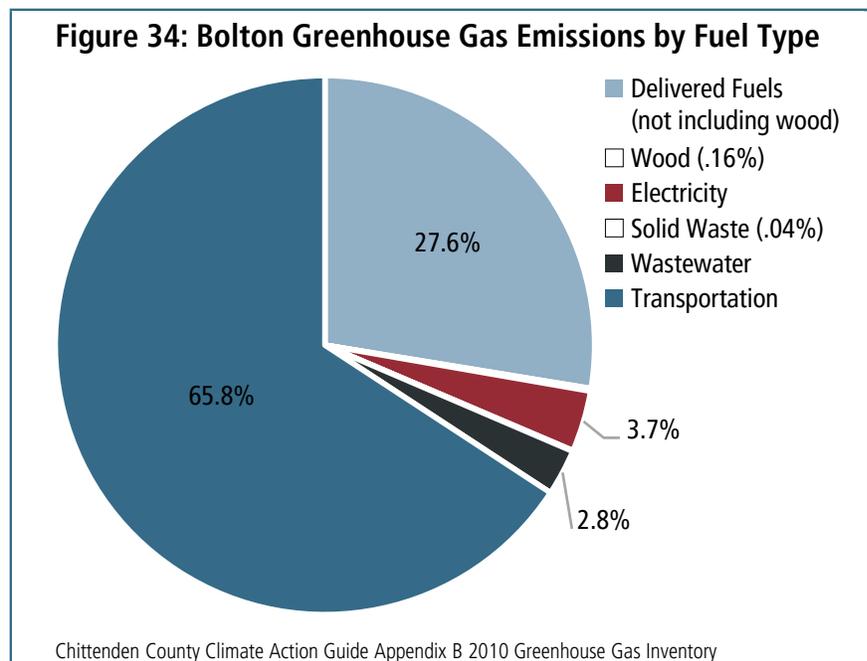
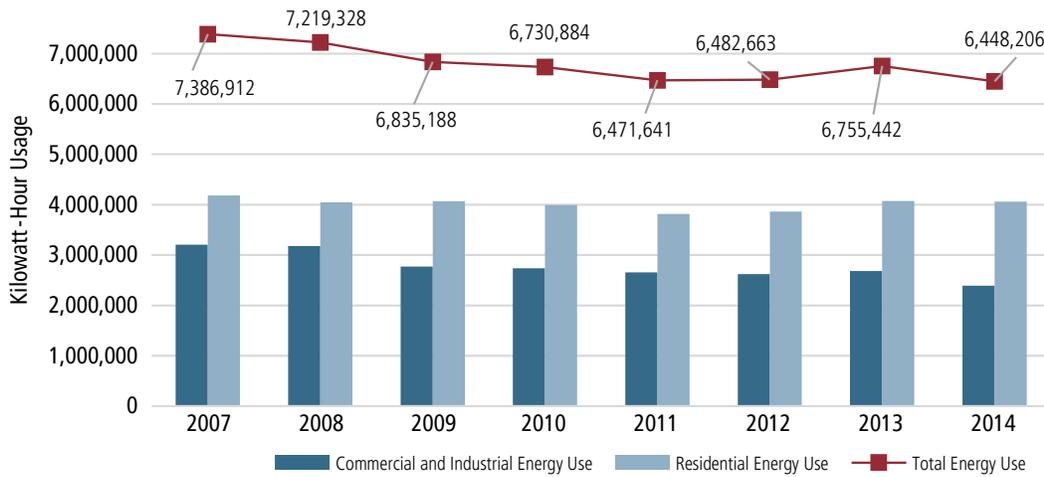


Figure 35: Total Energy Use in Bolton



regional planning efforts aim to change that. Developing clear policies for the siting of renewable energy is also a key related issue.

Energy Use. Throughout the State, the biggest energy usage and contributor to greenhouse gas emissions is transportation, mostly gasoline use by personal vehicles. Bolton is no exception. After transportation, residential energy use, largely for electricity and home heating, is the largest energy use in Bolton. Most residents heat with fuel oil, delivered propane gas or wood; with the first two sources sometimes acting as backup for the latter. Electricity in Bolton is provided by Green Mountain Power or Vermont Electric Coop (VEC). A major VELCO transmission corridor runs through Bolton north of Route 2 and I-89.

Energy Efficiency. The State of Vermont’s energy goals plan for a 1/3 reduction in total energy use by 2050.

Energy usage in all sectors has decreased 13% in Bolton since 2007, largely due to increases in energy efficiency. Bolton has budgeted for energy audits of town-owned buildings, which will result in a list of possible improvements to save energy and money. Most equipment the town owns is heavy machinery and trucks for road work and plowing. That equipment will not likely be replaced solely for the purpose of energy efficiency, but energy efficiency is increasing across all vehicle types, and certain steps can be taken to increase the efficiency of all machinery. Consequently, when the equipment needs to be replaced, the Town will gain the efficiencies inherent to newer equipment. Increased energy efficiency represents the greatest cost savings and greenhouse gas emissions reduction potential for Bolton.

However, as efficient buildings and appliances become more common, energy efficiency gains will slow. How Chittenden County municipalities will reach the state’s energy goals is the subject of a major region-wide planning effort at CCRPC as of the writing of this plan.

Energy Production. To meet the state’s goal of having 90% of energy used in Vermont produced from renewable sources by 2050, the amount of renewable energy produced and used in Bolton

TABLE 39: RENEWABLE ENERGY PRODUCTION

	Number of Sites	Total Capacity
Ground Mounted Solar	3 residential	13.4 KW
Roof Mounted Solar Panels	9 residential	46.18 KW
Small Wind	1 commercial 1 residential	101.8 KW*

**Reported capacity, but Bolton Valley Wind Turbine is currently not producing energy*

Source: Vermont Energy Dashboard, 2016

will need to increase significantly. Currently, there are 12 solar projects and one small wind turbine producing electricity for homes of Bolton residents. Assuming these projects meet all of a household's energy needs, this equals only 3% of Bolton's homes being served by renewable energy as of 2017. Existing energy facilities in Bolton can be seen on [Map 8](#).

Analysis by CCRPC shows that the potential for solar panels is relatively limited in Bolton, due to the town's steep slopes, which shade much of the town for large parts of the day. However, there is potential for small residential or community-scale projects, especially in West Bolton and along Route 2. There is a greater potential for wind energy in Bolton, given the town's mountains and ridgelines. This analysis can be seen on [Map 9](#). However, community engagement has shown that Bolton residents are generally divided on the building of large-scale wind energy projects in the town, due to the impact on Bolton's scenic views and ridgelines. Energy generation facilities are considered to be development, and any renewable energy project in Bolton must comply with the goals and objectives related to land conservation as outlined in the [Natural Resources, Natural Hazards and Resilience](#) and [Land Use](#) section of this plan.



Bolton Valley Wind Turbine (photo by: Lee Krohn)

Bolton's landscape is largely forested and therefore its greatest renewal energy resource potential is from biomass. It is imperative to maintain Bolton's forests for biomass purposes, rather than clearing the forests to make way for solar fields and wind turbines. This harvesting must take the form of responsible forest management, as discussed in the [Natural Resources](#) section of this plan.

Enhanced Energy Planning. In 2016, Act 174 was signed into law. The intention of the law is to integrate land use and energy planning. While regions and towns have always had an obligation to include energy in their planning processes, there are now more specific and detailed standards for analyzing energy use, planning for future energy generation needs and determining potential sites for energy generation. The act mandates regional planning commissions to create Regional Energy Plans to meet these standards. As of the writing of this plan, CCRPC is in the process of writing a regional energy plan, which will

- » Establish projected energy needs for future years,
- » Define strategies for switching to renewable energy sources and decreasing energy use,
- » Determine how much of that energy will be generated via solar, wind or other renewable sources within Chittenden County,
- » Define possible areas for future generation projects, based on GIS analysis of wind speeds and solar potential, as well as analysis of state and local regulations that prevent development in certain areas.



West Bolton Mushroom, Zera May Westie, Spirit of Bolton Art Contest

Once the regional energy plan is approved by the Department of Public Service, CCRPC will receive a Certificate of Energy Compliance. While towns are not obligated to use these standards to develop their own “enhanced” energy plans, towns that do so will also receive a Certificate of Energy Compliance. This means that the land conservation policies of the town or region will receive “substantial deference” when energy generation projects are being considered by the Public Service Board. This means that the town or region’s policies will be given stronger consideration in the process. Amending this plan to meet the state’s standards and seeking a Certificate of Energy Compliance may be

beneficial to the Town of Bolton, as it would allow the town to ensure that solar and wind generation was compliant with all relevant town policies. While this plan meets many of the new standards, the town should initiate a more in-depth community discussion on how to meet the state’s energy goals, particularly in regards to renewable energy siting.

Prosperity Goals, Objectives and Actions

GOAL 5. Bolton will support economic development that is compatible with its small town, rural nature.

Objective 5.1. Bolton’s Economic Resources Committee will work to develop strategies to promote and support economic development in the town.

Objective 5.2. While economic development is important to the Town of Bolton, the goals and objectives of the Town Plan need to be met for all development, especially the goals of this plan related to natural hazards and resilience, natural resources and land use.

Objective 5.3. Support the creation and growth of local businesses, including home-based businesses, that meet the goals of the Town Plan.

Objective 5.4. Encourage the establishment and continuation of recreational businesses and events that utilize and support the town’s scenic beauty and recreational opportunities and contribute to the town’s attractiveness as a recreational destination.

Objective 5.5. Encourage Bolton Valley Resort to become a successful four-season resort able to thrive during an era of warmer weather and less snow.

Action 24. Complete and maintain an inventory of all businesses in Bolton and make the list of interested businesses available as a community resource on the town website.

Action 25. The Town of Bolton and Bolton Valley Resort will work together to improve the relationship between the two entities, by initiating quarterly discussions to establish a dialogue regarding long term planning in and around the Resort, and by investigating changes to the BLUDRs as necessary and appropriate.

Action 26. Undertake a survey to quantify the number of abandoned buildings in Bolton and adopt an ordinance regarding the definition and treatment of abandoned buildings.

GOAL 6. Bolton will increase safety and affordability of housing for residents.

Objective 6.1. Make residents aware of programs and funding sources for the rehabilitation of homes to address safety issues and energy inefficiency.

Objective 6.2. Increase the number of safe, affordable housing opportunities in Bolton.

Action 27. Educate residents about eligibility for homestead declarations.

GOAL 7. Bolton will improve the resilience and maintain the quality of its road network through cost-effective methods that are appropriate for the town's steep topography.

Objective 7.1. Continue the Town of Bolton's long-standing policy to not take over private roads.

Objective 7.2. Develop an adequate budget for the Bolton Road Crew, ensuring an appropriate level of spending for necessary road maintenance and for compliance with changing state regulations.

Action 28. Ensure that town highway department personnel, including the Highway Foreman, receive training on and are aware of relevant state standards, including the requirements of the Municipal Roads General Permit.

Action 29. Increase the Highway Department's capacity within the limits of the town's annual operating budgets as necessary to maintain and update paving, culvert and erosion inventories, identify priority projects, and seek funding as necessary to comply with Municipal Roads General Permit requirements.

Action 30. Work with VTrans and CCRPC to develop management practices and road and bridge standards for mountainous terrain and adopt standards that will lead to an increase in the town's ERAF match rate after disasters.

Action 31. Continue to coordinate with VTrans on issues involving development on and access to Route 2.

GOAL 8. Bolton will increase the safety of its roads for all users.

Objective 8.1. Address the safety of all road users, including motorists, bicyclists, public transportation users, and pedestrians of all ages and abilities, when designing and scheduling needed highway improvements.

Objective 8.2. Increase car-sharing and ride-sharing opportunities and access to existing public transit services.

Action 32. Advocate for options to increase pedestrian and motorist safety, and wildlife crossing connections in association with the replacement of the Notch Road tunnel (Culvert 51-3) under I-89, which also accommodates the Long Trail.

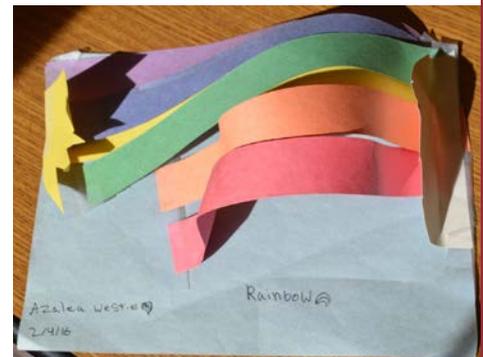
Action 33. Develop a Complete Streets Policy.

Action 34. Administer and enforce the town's traffic ordinance through contracted services with existing law enforcement agencies (Vermont State Police, Chittenden County Sheriff) and/or through shared service agreements with neighboring municipalities.

Action 35. Identify road locations where guard rails might be needed.

Action 36. Investigate a municipal Park and Ride in Bolton.

Action 37. Provide local residents with information about Go! Vermont and carpool, vanpool, ridesharing, and public transit opportunities coordinated through the program.



Rainbow, Azelea Westie, Spirit of Bolton Art Contest

GOAL 9. Bolton will plan for, finance and provide an efficient and cost-effective system of public facilities and utilities to meet existing and anticipated needs, in relation to the town’s planned rate of growth and development.

Objective 9.1. Work to improve the layout and functionality of town buildings and property.

Objective 9.2. Consolidate, update and ensure public availability of town records to continue making information on town governance available to the public in accordance with state law.

Objective 9.3. The Town of Bolton will not take over privately owned and operated water or wastewater systems.

Objective 9.4. The Town of Bolton supports the expansion or creation of privately owned and operated community water and wastewater systems that meet all relevant state and municipal standards and regulations for water supply and wastewater systems, and that are:

- Designed and installed by private developers to serve private development, and where the cost of maintenance is borne by those homes and/or businesses served by it, or
- Established to serve a fire or water district, where the cost of maintenance is borne by the members of the district.

Objective 9.5. Continue to support the Chittenden Solid Waste District through dues and board membership, and comply with state regulations related to solid waste management.

Objective 9.6. Collocate new or expanded wireless communications facilities at locations currently used for such purposes on Ricker Mountain and on Robbins Mountain, with the exception of sites which provide access to currently unserved or underserved areas. In these areas, new facilities should be considered under Bolton development regulations, with a preference for technologies that are capable of serving residents in the town’s mountainous terrain and have limited environmental impacts.

Objective 9.7. Increase wired high-speed internet access on roads currently without broadband access.

Action 38. Continue to investigate options to ensure that Bolton has a flood proof Town Garage.

Action 39. Centralize all town records in the Bolton Town Office for safekeeping and public inspection, and allocate funds to continue to archive, digitize, index and update town land records, permit records, cemetery records and grand lists in formats appropriate for access and use; and develop interactive town maps with the assistance of the Chittenden County Regional Planning Commission.

Action 40. Conduct a cost of service analysis for each town department to increase understanding of expenses and identify areas that may need budgetary changes in the future.

Action 41. The Capital Planning Committee will maintain a current Capital Improvement Plan by revising the document annually, in conformance with the municipal plan.

Action 42. Work with the Vermont Geological Survey to complete detailed groundwater mapping, to determine possible sources for future privately-owned community water systems.

Action 43. Work with service providers to increase wired high-speed internet infrastructure on Bolton’s currently underserved roads. Increase connectivity and quality of telecom services locally, focusing on underserved areas of town and technology adapted for use within mountainous terrain.

GOAL 10. Bolton will work to increase energy efficiency and to decrease the consumption of fossil fuels.

Objective 10.1. Seek opportunities to decrease energy use in publicly-owned buildings and equipment.

Objective 10.2. Educate Bolton residents on ways to increase personal energy efficiency.

Objective 10.3. Areas that have the potential to be used for forestry, such as parcels in Current Use (Use Value Appraisal Program), shall not be deforested for other renewable energy projects, as the town's greatest potential for renewable energy production is from biomass.

Objective 10.4. Energy generation facilities are considered to be development, and therefore the siting of the facilities shall not have an adverse impact on the resources identified for protection in the **PLACE** chapter of this plan, and shall not be permitted in areas where other development is prohibited in the **PLACE** chapter of this plan.

Objective 10.5. The siting of solar facilities in Bolton shall comply with the screening and setback requirements for commercial development in the district in which they are proposed.

Action 44. Partner with Efficiency Vermont to complete energy audits of town buildings and implement identified strategies.

Action 45. Evaluate options for installing renewable energy systems to power and heat municipal buildings.

Action 46. Recruit and appoint an Energy Coordinator for the town.

Action 47. Educate Bolton residents about the energy siting plan developed for the town during the CCRPC Regional Energy Plan process, and ensure that residents know about the potential for individual renewable energy projects on their own land.

Action 48. Continue to provide information to permit applicants regarding building energy efficiency requirements for new residential and commercial buildings.

Action 49. Provide information to Bolton residents and property owners regarding available energy efficiency, weatherization and renewable energy installation programs, such as those offered by Efficiency Vermont and the Vermont Community Energy Dashboard.

Action 50. Bolton will review any necessary changes and may update/amend the town plan to incorporate local renewable energy siting policies and maps that recognize local as well as regional priorities and constraints for the siting of renewable energy generation projects in town, in conformance with state energy goals.



Our vision is to responsibly steward our natural resources and working farms and forests, and to preserve the health and beauty of our mountains, waterways and wildlife, and access to the outdoors.

CHAPTER 4 | PLACE

Cover Art: "Bryant Cabin" by Natasha Bogar, Spirit of Bolton Art Contest

The Place chapter is a significant chapter of this plan. It describes Bolton's physical features, ranging from archaeological resources to wildlife habitat, and how the town intends to protect and manage them. The Place chapter concludes with the description of the town's plan for land use.

The key issues/concerns in the Place chapter include:

- » Bolton's natural resources are the defining feature of the town, and the thing that the town's residents value most about living here. Therefore, this plan calls for the continued protection of historic and natural resources as currently protected in the BLUDRs; and for additional protections for wildlife travel corridors and river corridors.
- » Managing steep slopes is a key issue for the town, due to the frequency of erosion of roads, driveways and hillsides during rain storms.
- » The plan calls for future growth concentrated in the Route 2 village area, Bolton Valley Resort and the proposed West Bolton Hamlet.

Historic Bolton

The range of historic sites in Bolton exemplifies and documents the way the land has been settled and used over several thousand years, including Bolton's 250+ year history as a town. Much of the town's history is no longer evident on the land – many former mills, homes, commercial and civic buildings were destroyed in floods, removed following purchase by the federal government (for the Ethan Allen Firing Range), or torn down after abandonment. Protection of the historic resources that remain is therefore of great value to the town. Bolton must ensure that the town's historic resources are inventoried and preserved. Bolton's historic resources can be seen on [Map 5](#).

Archaeological Resources. Numerous archeological sites and historic landscape features, ranging from Native American rock shelters and camp sites to old cellar holes and stone walls, are also found in Bolton. Most prehistoric sites identified to date are located in the Winooski River valley – a major travel route through the Green Mountains. In order to protect these sites, their locations are not identified on plan maps.

Listed Historic Sites and Districts.

Bolton currently has two sites listed on the National Register of Historic Places – the Preston-Lafreniere Farmstead and Honey Hollow Camp – and fifteen on the Vermont State Register of Historic Places. These historic sites were inventoried in 1976 and are shown on [Map 5](#) and listed in the Town Profile. Register listings have not been updated. The Stevens Mill Historic District, consisting of four buildings used to house workers at the C. P. and G. W. Stevens Lumber Mill, is the only historic district currently listed in Bolton.

WANT TO LEARN MORE?

You can learn more about Bolton's history by looking at historical accounts, resources, photos and register listings on Bolton's [town website](#) – including local histories authored by town historian Gardiner Lane; and by taking a walking tour of West Bolton's former historic hamlet, documented by UVM for the Ethan Allen Firing Range.



Preston-Lafreniere Homestead (photo by: Amy Grover)

Other Historic Resources. There are other known historic sites and features that are significant and old enough to qualify for listing:

- » The town has two historic cemeteries, dating from the 1820s;
- » Inventories of existing historic sites in West Bolton and Honey Hollow were initiated in recent years, but never completed, as required for historic district nomination;
- » UVM conducted a census of Bolton’s historic barns in 2010;
- » The locations of two Irish railroad worker camps (“Dublin” and “Cork”) on Bolton Flats –associated with the 1846 “Bolton Riots” – are also generally known, but have yet to be fully documented.
- » Two historic Green Mountain Club shelters exist along the Long Trail;
- » Bolton Valley Resort is also now more than fifty years old and retains much of its character as a 1960s-ski resort.

Natural Hazards and Resilience

Because Bolton encompasses the Winooski River Valley and the steep mountains on either side of it, the town faces multiple natural hazards, most notably flooding, fluvial erosion and hazards related to stormwater runoff, including landslides. As Vermont’s climate changes, it is predicted that heavy rainstorms will become more frequent, increasing the risk of these hazards. Ensuring that the town is fully informed of risks from these hazards and able to protect residents from harm is key. These natural hazards can be seen on [Map 6](#).

NATURAL HAZARDS AND RESILIENCE IN BOLTON		
What’s the hazard?	Where does it occur?	How is Bolton increasing resiliency?
Flooding	Floodplain (See Map 6)	Floodplain Regulations National Flood Insurance Program Bolton All Hazards Mitigation Plan
Fluvial Erosion	River Corridors (See Map 6)	Stream and River Setbacks River Corridor Plans Bolton All Hazards Mitigation Plan
Stormwater Runoff and Landslides	Roads, driveways, steep slopes (see Map 6) and other areas	Steep Slope Development Regulation Municipal Roads General Permit Bolton All Hazards Mitigation Plan Landslide Inventory
Snowstorms	Everywhere	Bolton All Hazards Mitigation Plan Local Emergency Operations Plan Winter Operations Plan
Wildfire	All forested areas	Bolton All Hazards Mitigation Plan Local Emergency Operations Plan

Bolton All Hazard Mitigation Plan.

The hazards discussed below are described in greater detail in the [Bolton All Hazards Mitigation Plan](#) (AHMP). The AHMP also identifies a number of strategies for the town to take to mitigate against hazards and increase resilience. The [Bolton All Hazards Mitigation Plan](#), as adopted by the Select Board every 5 years, is incorporated by reference into this plan.

Flooding. The Winooski River and its mapped floodplain bisect Bolton near Interstate 89 and Route 2. The Federal Emergency Management Agency (FEMA) has identified two “levels” of floodplain in Bolton, the Special Flood

Hazard Area (SFHA), which has a 1% annual chance of being flooded, and the .2% Annual Chance Flood Hazard Area. The hazard in these areas is inundation flooding, in which water rises above its banks and spills across the floodplain.

Bolton faces an additional risk of flooding because of the upstream damming of the Winooski River and its tributaries. The Waterbury Dam impounds the Little River to create the Waterbury Reservoir. The Little River flows into the Winooski River two miles east of Bolton. In addition, Green Mountain Power’s Bolton Falls Dam in Duxbury impounds the Winooski upstream of the Bolton town line. While

these dams provide some measure of flood control, there is a possibility of dam failure or the need for the dam to be released during a major flood event. In the event of a Waterbury dam failure, most of Bolton's lowland areas around Route 2 would be inundated within 2.5 hours.

Bolton is protected against damage from flooding in several ways. The town has participated in the National Flood Insurance Program (NFIP) since 1981. NFIP allows property owners with property in the mapped floodplain to purchase flood insurance. While this insurance is generally less expensive than that sold by private insurance providers, the high cost of flood insurance may be prohibitive for some households. Any buildings in the SFHA with a mortgage must have flood insurance. To participate in the NFIP, Bolton must ensure that new development in the town is safe from flooding. Bolton does this through the Bolton Land Use and Development Regulations, which limit development in all designated flood hazard areas (see [Hazards Summary table](#)). Following serious flooding in town from Tropical Storm Irene, Bolton successfully pursued a Hazard Mitigation Planning Grant to elevate a home in the floodplain above the base flood elevation, and may pursue other similar projects in the future. Additionally, a home along Route 2 was purchased through a FEMA buyout following flooding in 2011.

Fluvial Erosion and River Corridors. When flooding occurs in a floodplain, water rises, submerges the area, and dissipates. However, most of the flood damage in Vermont is caused by fluvial erosion. Fluvial erosion occurs when the flow of streams and rivers erodes sediment from segments of their banks and deposits it elsewhere. While this is a natural process that occurs in all rivers, it becomes a hazard when the erosion undermines banks, threatens buildings and washes away infrastructure. River corridors, as defined and mapped by the state, encompass the area next to a stream or river that is prone to fluvial erosion, as well as an additional buffer of 50 feet (see [Map 6](#)). For rivers and streams that do not have mapped river corridors (small streams that drain areas less than 2 square miles), the river corridor is defined as 50 feet from the top of the stream bank.

The BLUDRs offer some protection to river corridors through various setbacks from streams and rivers. However, these setbacks were not originally intended to address fluvial erosion, and further they may not cover all land areas within the river corridors as defined and mapped by the State of Vermont Agency of Natural Resources. Considering roads, bridges, culverts and even homes in Bolton are at risk of damage from fluvial erosion due to their location in river corridors, the town should develop adequate regulations to protect river corridors. In doing so, Bolton should consider the following issues:

- » River Corridor Plans (aka fluvial geomorphic assessments) were prepared for [Joiner Brook](#) and [Mill Brook](#) in 2009 ([link](#)); and therefore more accurate data on the fluvial erosion hazard areas exist for these brooks than is currently published in the state river corridor map. Before establishing additional

CLIMATE CHANGE AND RESILIENCE

Weather changes due to climate change will affect more than flooding and erosion. Milder winters with less snow coverage and more ice are predicted, which will affect businesses that depend on snow sports. See the [Economy](#) section for a discussion of economic resilience.

A longer growing season and more extensive heat waves and droughts in the summer are also predicted. This will affect the area's flora and fauna. Habitats have begun to migrate and invasive species are increasingly problematic. See the [Natural Resources](#) section for a discussion of strategies to increase the resilience of Bolton's plants and wildlife.



Irene Flooding on Route 2

photo by: Lars Gange and Mansfield Heliflight

regulations, the town should work with CCRPC and ANR to ensure the most accurate data is included in the river corridor map.

- » Currently, only River Corridor Protection Areas (the River Corridor minus the 50' buffer) are required for protection in order to maintain eligibility for the best funding scenario under the Emergency Relief Assistance Fund (ERAF - see [Transportation](#) section for more details). Bolton should review the implications of the full River Corridor on existing properties before establishing these additional regulations.

MAKE THE CONNECTION

For more information on steep slopes and road and driveway erosion, see the [Transportation](#) section.



Boulders and Bears, Julie Longstreth, Spirit of Bolton Art Contest

MAKE THE CONNECTION

See the Public Safety section of this plan for more details about fire protection in Bolton.

Steep Slopes. Much of Bolton is mountainous and characterized by steep slopes, and managing these slopes is a key issue for the town. 23% of the town's land has slopes with a grade of 15%-25%, and 60% has slopes with a grade of 25% or more. Because of its many steep slopes, Bolton often experiences erosion of roads, driveways and hillsides during rain storms. As discussed in the [Transportation](#) section, erosion of transportation infrastructure such as roads and culverts is a serious concern for Bolton. The [Transportation](#) section also identifies several strategies for lessening damage from stormwater runoff on steep slopes, including applying for a Municipal Roads General Permit in 2019.

Bolton's Land Use and Development Regulations also limit development on steep slopes of 15%-25% and require stormwater impacts to be minimized. Almost all development is prohibited on very steep slopes with a grade of 25% or higher. Finally, development is limited in areas above 1,500' in elevation, which protects upland forests that are key to absorbing and slowing storm water. Maintaining these protections is key to the town's resilience.

Other Hazards. Bolton's [All Hazards Mitigation Plan](#) also identifies a number of other hazards that may affect the town. Most significantly, the AHMP identifies winter storms and wildfires as natural hazards for which the town must be prepared. These hazards are largely beyond the control of the town to prevent, and so the town's role is preparing to keep residents safe during events and ensuring that the town is able to respond to damage after an event. Winter storms are simply a fact of life in Vermont, and may cause other hazards such as power loss and telecommunications failures. Several wildfires have occurred in Bolton in recent years. While these fires caused no property damage, fighting them took a great deal of time and resources from the Bolton Volunteer Fire Department.

Natural Resources

Development, transportation and recreation are all integral parts of the town's future; however, each and every change will have some impact on our natural resources. Bolton's natural resources are the defining feature of the town, and the thing that the town's residents value most about living here. This plan provides a basis to make well-informed decisions which will balance the need for change with the impact on natural resources in order to preserve the natural features, biodiversity, ecological health, aesthetics and rural character of Bolton for future generations. The resources discussed in this section can be seen on [Map 1](#), [Map 2](#), [Map 3](#) and [Map 4](#).

State-Identified Significant Natural Communities.

A natural community is an interacting assemblage of plants and animals, their physical environment, and the natural processes that affect them. A state-identified significant natural community is a natural community determined by the State of Vermont to be significant, either because it is a rare natural community without many occurrences in Vermont, or because it is an extraordinary example of a particular natural community type, due to large size or lack of past disturbance. There are 17 different state significant natural community types in Bolton, all various types of forest and cliff communities. For a full description of state significant natural communities in Bolton, see Section 4.1 of the [Science to Action Report](#).

Forests. When Bolton was founded, the land was almost completely forested. During the nineteenth century, demand for wood fuel and treeless farmland and pasture led to 70% of Vermont being deforested. Bolton was included in this trend. However, now almost 93% (25,000 acres) of Bolton is covered in forest. Healthy forests are of prime importance to the Town. Bolton is one of the few towns in Chittenden County that still has large areas of "Contiguous Habitat Units" (CHU), un-fragmented forests that only have occasional human presence. Bolton has six "Contiguous Habitat Units" (CHU) covering approximately 85% of the town. In fact, the Bolton Mountain CHU is one of largest CHUs in Vermont, and 15,000 acres of it are contained in Bolton (see [Map 1](#)).

Forests provide habitat for almost all of Bolton's diverse wildlife, as discussed below. Upland forests (forests outside the floodplain or wetlands) absorb, cool, filter and slow down water as it descends to the Winooski River and the more populated areas along its banks, lessening erosion and landslides and protecting buildings and infrastructure. Riparian forests (those located along the banks of the Winooski River and other bodies of water) have many important functions, including stabilizing banks, providing

Community engagement surveys conducted in the fall of 2015 showed that 90% of respondents valued Bolton's natural beauty and other natural resources.

SCIENCE TO ACTION REPORT

Bolton's Contiguous Habitat Units, wetlands, significant wildlife habitat and species and significant natural communities have been identified, studied and mapped. In 2013, Arrowwood Environmental conducted a four-town natural resources inventory for Bolton, Huntington, Jericho and Richmond as part of the region-wide ECOS project. This inventory and associated policy suggestions for protecting the resources became the Science to Action Report.

Rather than repeat the detailed description of those resources in this chapter, this plan incorporates the inventory, description and mapping of natural communities and habitat in the 2013 Science to Action Report by reference. Select management recommendations that the town wishes to pursue have been incorporated as goals, objectives and actions below. Readers who want to learn more about the resources discussed in the report are encouraged to look at a copy of the report and the associated maps, available online (<http://arrowwoodvt.com/STA/>) and in the Town Office.

WHAT DOES "DEVELOPMENT" MEAN?

According to the BLUDRs, it is "the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any building or other structure, or of any mining operation, excavation or landfill, and any change in the use of any building or other structure, land or extension of use of land." Development includes renewable energy facilities, which are subject to the same goals and objectives as all other development.



The Newt of West Bolton, Emma Locher, Spirit of Bolton Art contest

habitat and food for animals, and catching and filtering out pollution. Given the many services provided by riparian vegetation, preserving and strengthening existing riparian forests along the Winooski River, especially in the flood plain, is important to the town.

Wildlife. Over 50 unique wildlife species have been identified in Bolton, including elusive carnivores like bobcats and threatened and endangered species like the little brown bat and Bicknell's Thrush. Maintenance of the habitats that support these species is of utmost importance to Bolton, the region and the state. Bolton's wildlife habitats can be categorized as follows:

- » **Contiguous Habitat Units (CHUs)** are defined as areas of forested land with either no roads or low densities of unpaved roads, and little or no human development. As shown on [Map 1](#), CHUs cover the majority of Bolton's land. Therefore, many of the other identified wildlife habitats fall within these areas. Bolton's large Contiguous Habitat Units (CHUs) and their unbroken expanses of forest are particularly important for mammals which require extensive territories to roam, such as black bears and bobcats. Conservation of Bolton's forests is vital to conserving wildlife populations and biodiversity, not just in Bolton but throughout the Region and State. The habitat in CHUs is not affected by the changes in plant types, animal presence and microclimate that occur at the edge of an ecological community. This core habitat provides critical space for wildlife to mate, nest, feed and den.

CHUs are connected by wildlife travel corridors. These corridors are essential to wildlife survival because they connect habitat and allow wildlife to move to new locations and range freely between CHUs that are otherwise unconnected and noncontiguous, depending on their seasonal needs and life cycles. Wildlife travel corridors often cross roads in Bolton, leading to potential danger to both animals and humans. Planning can minimize the impacts of development on wildlife travel corridors. Bolton plans to further inventory wildlife travel corridors in Bolton and examine if further conservation is needed.
- » **Significant Wildlife Habitat** is defined as discrete significant habitats for fish, wildlife, and plants, which are necessary for the survival of those species that rely on them. It is critical to include these habitats in any conservation planning efforts where they occur. Significant wildlife habitat includes deer wintering areas, grassland habitat, forested riparian habitat, potential bear wetlands and hard mast stands (all shown on [Map 1](#)) and ledge/cliff/talus habitat (shown on [Map 2](#)).
- » **Mast Stands** are concentrated groups of trees, such as oaks, with abundant fruit and nut production. These stands are a critical supply of food for many types of wildlife. Mast stands that are intact and isolated from human contact are key to the survival of wildlife such as bears, deer and turkeys.
- » **Deer Wintering Yards** are conifer forests that provide winter habitat for deer and other animals. Bicknell's Thrush (and other breeding birds) in particular rely on these habitats in the winter.
- » **Ledge, Talus and Cliff Habitat** is made up of vertical rock structures that provide habitat for a few species, most notably nesting peregrine falcons. Broken ledges create habitat for a wider variety of animals, especially bobcats, coyotes, and fishers. Bolton also has an abundance of steep, rocky terrain which provides this habitat.
- » **Wetlands** are an important habitat type, and are discussed in the [Water](#) section below and mapped on [Map 2](#).

Rare Threatened and Endangered Species. According to the State of Vermont, there are 18 species and 21 reported occurrences of Rare, Threatened and Endangered plants and animals in Bolton. Because of the precarious nature and status of rare, threatened and endangered populations, the habitats that support these populations require conservation and protection.

"Boulders, bears, trees, outdoor recreation."

Resident asked to describe Bolton in 5 words or less

For example, the habitat of the Bicknell Thrush is considered to be of special importance to the Scientific Advisory Group on Birds of the Vermont Endangered Species Committee. According to Vermont Fish and Wildlife, the thrush's habitat is mainly forested high elevation areas above 2,800 feet, especially high elevation spruce-fir forests. The survival of this species depends on the availability of undeveloped and forested high elevations. This type of habitat naturally exists in Bolton and can be further enhanced by allowing fir trees to grow along the edge of downhill ski trails. The State of Vermont and the Town of Bolton required Bolton Valley Ski Area to set aside undisturbed acreage to support the Bicknell Thrush's survival. If wind development is to take place in Bolton, it must protect the habitat of the Bicknell Thrush and other rare, threatened and endangered species.

Invasive Species. Non-native, invasive species can quickly destroy native habitats and eco-systems. In the past, the Town has relied on the Conservation Commission and state agencies to help educate citizens about possible threats and to mitigate against them. Many invasive species can become established and spread quickly from disturbed sites or stressed environments, such as roadsides, stream banks and utility line corridors. Undisturbed areas and healthy organisms are less susceptible to harm from invasive species.

Water

Wetlands. Bolton contains 15 different wetland community types spread over approximately 450 acres. 255 acres of these wetlands are designated by the State of Vermont as Class II wetlands, as shown on [Map 2](#). Bolton's wetlands are important as a habitat to a wide variety of wildlife, ranging from amphibians and beavers to bears, and provide recreation opportunities, such as at Preston Pond. By capturing stormwater, slowing its flow and filtering it into the groundwater, upland wetlands play an important role in stormwater management and erosion control; as well as ground water recharge. The 120 acres of Bolton's wetlands that lie in the Winooski River valley are vital to flood control. The wetlands are made up of "floodplain forests" that retain floodwaters, lessening their effect on developed areas. The roots of the wetland trees also stabilize the banks of the Winooski River, preventing erosion. Arrowwood Environmental is in the process of completing a detailed inventory of floodplain habitat along the Winooski River as of the writing of this plan.

Vernal pools and woodland seeps are areas of wetlands that appear during wet times of year. When vernal pools emerge in the spring, they support unique ecosystems full of species that cannot live elsewhere, particularly amphibian habitat, as described in the Science to Action Report. Woodland seeps provide groundwater discharge which support the base flow of headwater streams.

Surface Waters. The Winooski River runs for approximately six miles through Bolton. Other surface waters include Duck, Gleason, Goose, Joiner, Mill, and Preston Brooks and Goose and Preston Ponds. Other bodies of water include smaller streams and ponds

MAKE THE CONNECTION

See the [Natural Hazards and Resilience](#) section for a detailed discussion of floodplains and erosion in Bolton.

created by beaver activity or seasonal run-off, man-made ponds for private use and snow making, and numerous unnamed permanent and intermittent mountain streams.

According to state statute, Vermont's water quality should be maintained and improved according to the policies and actions developed in the basin plans established under 10 V.S.A § 1253. Almost all of Bolton is within the Winooski River Basin. The Winooski River Basin Water Quality Management Plan was last adopted in 2012. In that plan, one strategy was recommended for Bolton: Assisting the town with road improvements to improve water quality. This strategy is addressed through Bolton's planned work to address the Municipal Roads General Permit and the Vermont Clean Water Act. The next basin plan writing process for the Winooski River will begin in 2018, and new strategies for Bolton will be determined at that time. A small part of the Ethan Allen Firing Range in Bolton is located in the Lamoille River Basin. The Lamoille Tactical Basin Plan describes Bolton as a town with "minimal coverage" and identifies no strategies for the town.

Ground Waters. Bolton residents depend on ground water as their drinking water source. Ground water serves as the source for residential single-family wells in Bolton as well as several multi-user systems, such as Catamount Bolton Water and Sewer (serving the Bolton Valley Resort area) and the systems serving Fernwood Manor, Smilie School and the County Club Condominiums. The continued protection of ground water, particularly limiting sources of contamination in mapped source protection areas, is key to maintaining potable water supplies

Working Lands

Farming. When Bolton was founded, Bolton's economy was almost completely dependent on forestry and farming. While agriculture and silviculture are still part of Bolton's economy, these businesses are not as prevalent. 11,142 acres of land are currently used for forest management, and only 2 farms remain in Bolton. Most of Bolton's prime agricultural soil is located in the Winooski River Valley, and it is unlikely to face future development pressures: most of it is owned by the State of Vermont and leased for farming. The protection of farm land is important both for Bolton's rural character and for local economic opportunity.

Forestry. Given the abundance of Bolton's forests, logging is, and should be, an important industry. Forestry in Vermont should be conducted in accordance with the Acceptable Management Practices for Maintaining Water Quality on Logging Jobs in Vermont (AMPs) to comply with the Vermont Water Quality Standards and discourage discharges from logging operations. Poorly managed logging can result in long-term changes in a forest's species distribution, as well as erosion and sedimentation problems. Property owners who are involved in forest management should consult a professional forester and abide by Vermont's Acceptable Management Practices. A useful program available to landowners is the Vermont Current Use Program, which requires a management plan and includes a significant tax incentive for enrolled property owners. In 2015, over 7,000 acres of forested land in Bolton had Current Use status.

Earth Resources. Soils in Bolton range from prime agricultural soils along the Winooski floodplain to cliffs. Bolton has one commercial and two large private gravel pits, as well as a number of small, limited use pits on private property. Extensive deposits of gravel soils are important enough to be considered by the Town for purchase to ensure supplies of road gravel in the future. However, correctly managed gravel extraction is key: poorly managed extraction and transport of gravel, as well as improper decommissioning of extraction pits, can cause runoff that leads to pollution and road deterioration.

Scenic Resources

It could be argued that every view in Bolton is scenic. Most town residents can identify a view that they prefer above all others – whether it’s the view of Camel’s Hump from their kitchen window, the fall foliage seen from Libby’s Look, the sunset on the Winooski River, or the panoramic view at the top of a ski lift at Bolton Valley. Bolton’s forested ridgelines and mountainsides, as viewed from I-89 and US 2, have been identified as scenic by the state. Currently, scenic resources are regulated on a case-by-case basis under the BLUDRs. However, to date there has been no formal inventory of scenic viewsheds or roads in town that have been identified for protection. As a result, the impact of development on the town’s scenic resources is not consistently addressed in local or state regulatory proceedings.

Recreation

Preserving Bolton’s recreational resources is critical to preserving the town’s identity and character, as well as maintaining the town’s tourism economy. The town must investigate strategies for managing Bolton’s myriad recreational resources in a way that creates a balance between recreation in the town and preserving Bolton’s fragile natural resources and peaceful, rural way of life. The town’s recreational resources can be seen on [Map 5](#).

During community engagement conducted in the fall of 2015, 62% of Bolton residents stated that one of the reasons they live in Bolton is “I like being close to outdoor recreation like hiking and skiing.”

Trails and Snow Sports. The town’s topography, proximity to urban areas and vast tracts of conserved land, including parts of Camel’s Hump State Park and Mount Mansfield State Forest, make it a mecca for outdoor recreation. Bolton is home to an extensive network of hiking, climbing, skiing, snowshoeing, biking and snowmobiling trails, many of which extend into neighboring towns. In many cases, these trails are part of larger regional or state-wide systems.

The Green Mountain Club also maintains several hiking trails and structures in the town, most significantly the Long Trail and its associated shelters. Much of the Long Trail in Bolton is located on state or town owned land. The Green Mountain Club owns a few small parcels in town as well, and the rest of the trail is protected by easements held by the Green Mountain Club. 16.5 miles of the Long Trail travels through Bolton. In 2015, relocation of the trail was completed on the north side of the Winooski River, where it now runs along Stimson Mountain. A striking footbridge has been added across the Winooski River, and a parking lot near the bridge now allows hikers to park near Route 2 and to pick up the trail. Relocation of the trail on the south bank of the Winooski is ongoing.

In 2003, the Town of Bolton acquired the 403 acre Preston Pond property. This site provides the Town with a significant recreational and natural resource which requires continued careful management by Bolton’s Conservation and Planning Commissions. The Vermont Land Trust holds a permanent easement on the land which does not allow for any type of development to occur on the property. See the [2016 Preston Pond Management Plan](#), incorporated by reference into this plan, for a detailed description of the property. The town-owned Preston Pond Conservation Area has four miles of trails, including a trail up to Libby’s Lookout.



Preston Pond (photo by: Amy Ludwin)



View from Bolton (photo by: Lee Krohn)

Almost four miles of the Cross Vermont Trail, used by bicyclists, runs through Bolton on Duxbury Road. The Cross Vermont Trail Association maintains signs and markers along the route, as well as informational materials for users.

The Vermont Association of Snow Travelers (VAST) works with private landowners to establish snowmobile trails. The Catamount Trail is 13.6 miles of trail, mostly shared with other trails systems, identified for skiing and snowshoeing. The Catamount Trail’s route through Bolton includes a connection between the Bolton Valley Nordic Center and the Trapp Family Lodge in Stowe. The State of Vermont also owns the Nordic Trails near

Bolton Valley Resort, which are used for cross-country skiing and hiking. The Resort leases the land from the state, and in the winter, the Resort grooms the trails and sells tickets to the area.

Bolton Valley Resort is a privately-owned ski area located on Ricker and Bolton Mountains, with over 300 acres for skiing and snowboarding including 71 trails and 3 terrain parks. In the summer, hiking, mountain biking and a ropes course are available at the resort. The resort is current working to become a viable four-season resort (see the [Economy](#) section for more detail).

Climbing. Bolton offers some of the best rock and ice climbing in Vermont. Key areas include the Bolton Quarry, which boasts 30 acres of climbing area, the cliffs at the base of the Bolton Notch Road, and the cliffs throughout West Bolton. Most of the prime rock climbing territory has been purchased by the Climbing Resource Access Group (CRAG-VT), which owns and maintains the property.

Water Recreation. The Friends of the Winooski paddling trail runs through Bolton, with access from the Bolton Canoe Access and the town-owned Sara Holbrook property. The Vermont Agency of Natural Resources and the town maintain the Bolton Canoe Access on the Winooski River and the two groups are in the process of improving it. Fishing opportunities

abound in the Winooski River and the many brooks and streams in Bolton. The State of Vermont maintains a fishing access area on Mill Brook, accessed from Nashville Road. Finally, the Bolton Potholes are a popular, but dangerous, swimming hole. Accidents and injuries happen regularly at the site, and several fatalities have occurred.

Hunting. Hunters and trappers can find a wide variety of game including deer, moose, bear, smaller mammals, turkey and a variety of other birds. Hunting is considered a “traditional use” of town land in Bolton, and is allowed in the Preston Pond Management Area. Hunting licenses are granted by the State of Vermont, which also regulates the number of animals that may be taken by hunters and the seasons during which hunting may occur. Hunters and others recreating sometimes come into conflict (discussed further below).

Family Recreation. Bolton’s only playground is located at Smilie School. However, many children in Bolton enjoy participating in the rich variety of recreational resources available in Bolton with their families. Wheeler Field in West Bolton also serves as an informal recreational space for all ages, hosting a ball field and open space. The future of Wheeler Field is unclear as of the writing of this plan. Informal

“Winter snow globe, summer paradise.”

“Skiing, hiking, climbing, swimming, hurray!”

Residents asked to describe Bolton in 5 words or less

indoor recreational sports also take place in Smilie School. Bolton's children also participate in a variety of recreational activities, including sports teams, Girl Scouts and Boy Scouts, in neighboring towns.

Recreation Conflicts. Those who recreate in Bolton, residents and visitors alike, sometimes come into conflict with one another. Because recreational opportunities abound in the town, disagreements arise about the appropriate use of the land at different times. One key area of conflict is the Bolton Potholes, where the behaviors and noise of visitors, including illegal parking, littering and drug use, can be disruptive to nearby residents. Conflict can also occur during hunting season—the same areas of town are ideal for hunting, rock climbing and hiking. Hunters wish to hunt in areas with small numbers of people, to prevent game from being driven away. Town residents are concerned with the future of recreation in the town, and say that the town must ensure that recreation in Bolton does not compromise the safety and well-being of town residents, visitors, domestic animals or wildlife, or infringe on Bolton residents' property rights or privacy.

Land Use

Historically, Bolton's development was concentrated largely around West Bolton and along the Winooski River. In the twentieth century, the creation of the Ethan Allen Firing Range led to the destruction of many historic homes and buildings in West Bolton, while the founding of Bolton Valley Resort created a new population center. Today, the town's population is concentrated along Route 2, in West Bolton and near Bolton Valley Resort, and the vast majority of the town's land is forested and undeveloped.

Future development is highly limited throughout Bolton due to conserved land, mountainous terrain and floodplains. In fact, when all constraints on development are considered, only about 3% of the town's land is available for development. This plan seeks to increase development opportunities in these areas. Currently, most of the Town's developable land is in West Bolton. Future growth in Bolton should be concentrated in West Bolton, in the Village area along Route 2, and around Bolton Valley Resort if water and sewer capacity allows. In all development, the protection of Bolton's resources is key. Community preferences about future land use in Bolton are shown on the [Maintain-Evolve-Transform Map](#), which is referenced throughout this section. Current land use can be seen on [Map 11](#), and proposed land use can be seen on [Map 12](#).

Village. While high density, flood resilient development is already allowed in Bolton's Village area, the town hopes that additional development will transform the Village section of Route 2 into a vibrant, flood-resilient and high density mixed use area. Bolton's vision for the Village area is for the area to remain the town's civic and governmental center, anchored by an open and thriving Smilie School that continues to serve as a community gathering place and offers more opportunities and places for residents to gather, celebrate community and support the local economy.

Village District. The Village District, located along Route 2 in Bolton between existing Interstate 89 and railroad rights-of-way, is an area that serves as the town's historic, governmental, civic, and commercial center, as well as the gateway to Bolton Valley. This plan expands the boundary of this district to include several parcels near the foot of the Bolton Valley Access Road, including Fernwood Manor, which were previously part of the Rural I District. The parcels have uses and densities more similar to the Village District than the Rural I District. The purpose of the Village District is to allow for the continuation of existing commercial, residential, and public uses in this area, and to encourage future development that is compatible with and promotes an historic village settlement pattern. Such development may include higher densities of development, as supported by existing and planned infrastructure.

Resort. Bolton residents wish to see Bolton Valley Resort and the surrounding areas evolve into a successful four-season resort that remains a key part of the local economy and retains its family friendly nature.

Resort Village District (Bolton Valley). The Resort Village District includes land comprising the Bolton Valley Resort's village base area that is served by the Catamount Bolton water and wastewater systems. The purpose of this district is to allow for coordinated, well planned higher density development, including a mix of recreational, commercial, and multi-family residential uses within a compact village setting, in a manner that supports the development of the resort as a year-round destination while protecting significant natural features and environmentally sensitive areas. Development of Bolton Valley Resort property shall occur in accordance with a master plan that establishes a clear indication of the intended type and pattern of future development. Significant additional development in this District will depend on the availability of additional water and wastewater capacity.

Resort Residential District (Bolton Valley). The Resort Residential District encompasses areas adjoining the Resort Village District, including the Bolton Valley Resort entrance on the Bolton Valley Access Road. The purpose of this district is to allow for moderate densities of coordinated, well-planned recreational, lodging and residential development in the immediate vicinity of the resort village, in an area that is served by centralized infrastructure and utilities, in a manner that reinforces the function of Bolton Valley as a compact resort village and protects significant natural features, ridgelines and environmentally sensitive areas. Development of Bolton Valley Resort property shall occur in accordance with a master plan that establishes a clear indication of the intended type and pattern of future development.

Rural. Bolton's residents plan to maintain the town's rural landscape, characterized by working farms and forests and quiet residential areas.

Rural I District. The Rural I district includes areas with ready access to public roads, which are physically suitable for residential development. The boundary of this district has been expanded to include property transferred out of state ownership on the Duxbury Road that was previously located within the Conservation District. The purpose of this district is to allow for traditional uses such as forestry and agriculture, moderate densities of residential development, home based businesses and limited commercial development along Route 2, in a manner that maintains the town's rural character.

Rural II District. This district includes upland areas with access and/or development constraints. The purpose of the district is to allow for limited, compatible, lower densities of development that maintain Bolton's rural character and protect significant natural resources while discouraging subdivision and development in areas with limited access to public roads.

Forests and Conserved Land. Bolton plans to maintain the town's protection of higher elevation lands that host important natural resources, are fragile, or are difficult to access. These areas include state parks and conserved lands, as well as most of the town's working forests.

The significance of Bolton's natural resources is demonstrated by the fact that 61% of the town's land has been conserved, either through purchase by federal, state or local government, purchase by non-profits, or conservation easements on private land. Conserved land in Bolton has many benefits for humans and animals. It protects the large habitat blocks that support Bolton's wildlife, and provides the recreational opportunities valued by Bolton's residents.

Conservation District. The Conservation District is intended to include all land above 2,500 feet in elevation, the town's permanently conserved lands, including town and state owned parks, forests and conservation land, and private in-holdings on Honey Hollow Road. The purpose of the Conservation

District is to protect Bolton’s generally remote and inaccessible mountainous areas and the town’s significant resources from further subdivision or fragmentation, development, and undue environmental disturbance, while allowing for the continuation of traditional uses such as forestry and outdoor recreation. The Conservation District also includes the Ethan Allen Firing Range, a federally-owned military establishment over which the town has no formal jurisdiction. It is important to note that not all of Bolton’s conserved land is within the Conservation District. Land that is privately conserved, such as land conserved through easements, may be located in other zoning districts.

Forest District. The Forest District includes all land between 1,500 and 2,500 feet in elevation, except for such land within the Resort Village, Resort Residential and Conservation Districts. The Forest District includes several parcels without frontage on or access to existing public roads (“landlocked” parcels). The Forest District minimizes the fragmentation or destruction of significant resources in Bolton as discussed in the [Natural Resources](#) section and [Natural Hazards and Resilience](#) section. The purpose of this district is to protect Bolton’s more remote and inaccessible forested upland areas from fragmentation, development, and undue environmental disturbance, while allowing for the continuation of traditional uses such as forestry, outdoor recreation and compatible low-density residential development.

West Bolton Hamlet. As one resident said during a community engagement event in October 2015, “we should recognize that West Bolton isn’t stagnant, it’s always changing.” Working with residents of West Bolton to decide the future of the area as it evolves will be a priority for the Town during the period of this plan. West Bolton has historically been one of Bolton’s most densely populated areas. Although the creation of the Ethan Allen Firing Range led to the destruction of many of the area’s historic homes and buildings, West Bolton has retained a unique “neighborhood” character. Although the area is currently part of the Rural I District, it is characterized by lots that are typically smaller and buildings that are closer to the road than what is allowed by current zoning regulations. These “pre-existing non-conformities” create an extra layer of regulatory challenges for residents, who must navigate a more complicated process than if the area were zoned with existing buildings and lots in mind. The Development Review Board and the Planning Commission support the creation of a West Bolton “hamlet,” encompassing roughly the area within walking distance (a one-half mile radius) of the intersection of Stage and Notch Roads. The exact boundaries, density and nature of development in the hamlet remains to be decided, but regulations will be revised to allow for smaller lots and more compact development. During community engagement undertaken for this plan, West Bolton residents expressed a range of ideas for the future of the West Bolton area. Residents value the sense of neighborhood found in the area, and many residents wish to see well-planned growth that expands the number of homes and allows for small business development. The area is one of the few parts of

TABLE 61: SUMMARY OF CONSERVED LAND IN BOLTON

	Total Acres	% of Bolton's Total Acreage
Publicly Owned Land	12,880.68	49%
Town of Bolton (Preston Pond, Sara Holbrook Property, Fisher Property and 2 wood lots)	458.40	2%
State of Vermont (Camels Hump State Park, Mt. Mansfield State Forest, Robbins Mountain Wildlife Management Area, Bolton Valley Nordic Lands and other parcels)	10,136.38	38%
United States Government (Ethan Allen Firing Range)	2,285.90	9%
Land Owned by Non-Profits	376.21	1%
CRAG, VT (Climbing Resource Access Group of Vermont)	56.01	0%
Green Mountain Club	171.90	1%
Jericho Land Trust	128.30	0%
UVM Outing Club	20.00	0%
Privately Owned Land (mostly properties with easements in the Vermont Forest Legacy Program)	2,822.06	11%
TOTAL CONSERVED LAND	16,079.49	61%

Bolton with appropriate topography and soils for development. However, all future changes must retain Bolton’s small-town feel and residents’ easy access to outdoor recreation.

Overlay Districts. Overlay Districts provide the town with the ability to regulate specific features, such as flood plains, that occur throughout various zoning districts. They define an additional layer of regulation without otherwise changing the characteristics of an area.

Flood Hazard Overlay Districts. The Flood Hazard Area Overlay Districts include all designated Special Flood Hazard Areas. The purpose of the Flood Hazard Area Overlay Districts is to (1) protect public health, safety, and welfare by preventing or minimizing hazards to life and property due to flooding; to (2) manage

development, as specifically defined for this purpose, within designated Special Flood Hazard Areas (SFHAs) according to the town’s adopted municipal and hazard mitigation plans; and to (3) ensure that the town is eligible for continued membership in the National Flood Insurance Program so that the town, its residents and businesses may qualify for federal flood insurance, and for available federal disaster recovery and hazard mitigation funds.

Flood Hazard Overlay District I. The Flood Hazard Overlay District I encompasses all Special Flood Hazard Areas that are within the Village District. All development that is allowed in the Village District is also allowed in the Flood Hazard Overlay District I, provided it meets flood hazard regulations and is not a type of development specifically prohibited within all Special Flood Hazard Areas. The State of Vermont may also review and approve certain types of development in the FHO I, such as public utilities, water/wastewater systems, floodplain management activities or stream crossing structures like bridges.

Flood Hazard Area Overlay District II. The Flood Hazard Area Overlay District II encompasses all Special Flood Hazard Areas outside of the Village District. Almost all new development is prohibited in the Flood Hazard Overlay District II, with exception of low impact uses such as agricultural, forestry, or accessory structures. The State of Vermont may also review and approve certain types of development in the FHO II, such as public utilities, water/wastewater systems, floodplain management activities or stream crossing structures like bridges.

River Corridor Overlay District. Bolton currently regulates streams and rivers by prohibiting development within certain distances of these bodies of water, and by requiring that part of these setbacks be maintained as vegetated buffer. This is intended to lessen bank erosion and to protect water quality and riparian wildlife habitat. Given Bolton’s steep slopes and high incidence of erosion, as

discussed in the [Natural Hazards and Resilience](#) section, these protections must be continued. However, the State of Vermont’s mapping of River Corridors has provided the town with a new data source on areas surrounding streams that should be protected. The town will investigate the development of a new River Corridor Overlay District to ensure that mapped River Corridors are properly protected, while maintaining the town’s current setback requirements for rivers and streams. However, the development of these regulations must take into account existing development in the River Corridor and the needs of affected property owners.

MAKE THE CONNECTION

See the [Natural Hazards and Resilience](#) section for a detailed discussion of floodplains and erosion in Bolton.

MAKE THE CONNECTION

See the [Natural Hazards and Resilience](#) section of the plan to read more about flood plains and river corridors, and how Bolton regulates them.

Source Protection Area Overlay. Bolton currently regulates source protection areas in its BLUDRs. Source protection areas are intended to ensure that drinking water supplies remain uncontaminated. The town will investigate the development of a Source Protection Area Overlay, to codify the location of source protection areas in the town and ensure that all are appropriately protected from development.

Place Goals, Objectives and Actions

GOAL 11. Identify, protect, and preserve significant features of Bolton’s history, including historic districts, sites, structures, historic landscape features, archaeological sites and archaeologically sensitive areas.

Objective 11.1. Document the historic and cultural significance of the highest priority historic development and cultural resources and work towards listing them on the State, and perhaps, National Register of Historic Places in partnership with the landowners.

Objective 11.2. Preserve and protect identified cultural, archaeological and historic resources, including potential archaeological sites identified by the Vermont Department of Historic Preservation or sites and structures listed on the State Register of Historic Places, from the adverse impacts of development.

Action 51. Establish a local historical society and/or appoint a town archivist or historian to identify, archive and maintain records and materials pertaining to Bolton’s history, conduct interviews with town residents, prepare oral histories, sponsor educational events and programs on Bolton’s history and update the town’s historic structures and sites surveys.

GOAL 12. The Town of Bolton will develop in a way that does not increase the community’s risk from natural and man-made hazards.

Objective 12.1. Bolton will be a resilient community that effectively prepares for natural hazards.

Objective 12.2. Seek to support property owners in the floodplain as they attempt to improve properties in a flood resilient manner.

Objective 12.3. Development shall not take place within the floodplain outside of the Village area.

Objective 12.4. Development within the floodplain in the Village area shall only be permitted if it is elevated above the base flood elevation, is designed to be reasonably safe from flooding and minimizes the risk of flooding on other properties, as described in the BLUDRs.

Objective 12.5. Decrease damage caused by fluvial erosion to buildings, facilities or infrastructure by limiting new development in river corridors or river corridor protection areas through amendments to the development regulations.

Objective 12.6. Development, including public and private roads and driveways, shall avoid steep slopes greater than 15% and less than 25% by siting the proposed development in an alternate location to the extent physically feasible.

Objective 12.7. Development, including public and private roads, service roads, driveways and building sites shall not be located in areas of very steep slopes of 25% or more.

Objective 12.8. The Bolton Road Crew will continue to maintain the roads for the safety of all users, especially during the winter months.

Action 52. Assess and undertake projects to stabilize the banks of Joiner Brook, Duck Brook, Gleason Brook and Mill Brook as needed, to prevent damage to existing homes and septic systems, and Smilie School from flashing flooding and fluvial erosion and collapse.

Action 53. Work with CCRPC to update the All Hazard Mitigation Plan.

Action 54. Drawing on NFIP guidance, develop information for property owners regarding constructing, improving or replacing structures within mapped flood hazard areas.

Action 55. Review the model and data used to establish the town's 2010 flood map (base flood elevation); if justified, consider remapping the floodplain (base flood elevation) within the village flood hazard area overlay.

Action 56. Partner with the Vermont Geological Survey to finish inventory of landslide hazard areas throughout town to ensure that clear information on landslide risk is available to property owners, residents and town officials, and update the BLUDRs as necessary.

Action 57. Undertake a hydrological/capacity analysis of local watersheds and determine whether new stream geomorphic assessments should be conducted on Gleason Brook and Mill Brook.

GOAL 13. Protect state-identified significant natural communities from fragmentation and destruction.

Objective 13.1. Avoid the fragmentation of state-identified significant natural communities (shown on [Map 1](#)), by minimizing subdivision, the incursion of roads and clearing for development.

GOAL 14. Protect forests from fragmentation and destruction.

Objective 14.1. Avoid forest fragmentation, especially in contiguous forest blocks (shown on [Map 1](#)), by minimizing subdivision, the incursion of roads and clearing for development.

GOAL 15. Protect significant wildlife habitats and contiguous habitat units from fragmentation and destruction.

Objective 15.1. Minimize fragmentation of Bolton's contiguous habitat units and significant wildlife habitats (as shown on [Map 1](#)), by minimizing subdivision, the incursion of roads and clearing for development.

Objective 15.2. Prohibit development on rock outcrops, including ledge, cliff and talus habitat (as inventoried in the Science to Action report and shown on [Map 2](#)).

Action 58. Inventory and map Bolton's most important wildlife travel corridors and road crossing shown in the Arrowwood [Science to Action Report](#) and more recent Biofinder wildlife crossing data in consultation with state agencies, and identify needed next steps.

GOAL 16. Protect populations of rare, threatened, and endangered species and associated habitat.

- Objective 16.1.** The town will support all efforts pursuant to the State of Vermont’s Threatened and Endangered Species Law, or other regulatory and non-regulatory mechanisms, to conserve or otherwise protect rare, threatened and endangered species and the habitats necessary for their continued survival.
- Objective 16.2.** The Town of Bolton will require consultation with a wildlife biologist regarding the impact of proposed development in the habitat area of a rare, threatened or endangered species, and will require the applicant to avoid or mitigate any impacts as recommended by the wildlife biologist.
- Objective 16.3.** Prohibit development or fragmentation of rare, threatened or endangered species habitat (as shown on [Map 1](#)).

GOAL 17. Surface and ground water in Bolton will be managed to ensure that water quality is maintained.

- Objective 17.1.** Avoid all development, including public and private roads, on or within 50 feet of all wetlands identified by the Vermont Significant Wetland Inventory (shown on [Map 2](#)) or identified through field investigation, in order to retain their value as wildlife habitat, flood protection and water quality protection.
- Objective 17.2.** Prohibit development within 200 feet from Goose Pond, Preston Pond and Upper Preston Pond, and within 50 feet of any other naturally occurring lake or pond with a surface area greater than one acre, as measured from the annual mean high water mark.
- Objective 17.3.** Prohibit development within 150 feet of the Winooski River and within 100 feet of Joiner Brook, Duck Brook, Goose Pond Brook, Gleason Brook, Honey Hollow Stream, Preston Brook, Mill Brook, Pinneo Brook, and the South Branch of Mill Brook, as measured from the top of the bank, to prevent surface runoff and protect water quality and riparian wildlife habitat.
- Objective 17.4.** Prohibit development within a 200-foot radius of a well or spring that serves a public water supply, except for activities, structures and uses directly related to the water system.
- Objective 17.5.** All on-site septic systems, including leach fields, shall be located outside of designated source protection areas. Ensure that all development within designated Source Protection Areas is reviewed for consistency with State of Vermont-approved source protection plans.

GOAL 18. Working lands will be maintained to support both the rural economy and wildlife habitat.

- Objective 18.1.** Development on farmland, including public and private roads, driveways and utility corridors, shall be designed to minimize site disturbance and fragmentation by following linear features such as roads, tree lines, stone walls, fence lines or field edge. Roads, driveways and utility corridors shall be shared to the extent feasible. Farmland is defined by prime or statewide agricultural soils, open fields or active agricultural production.

Objective 18.2. The Town of Bolton strongly supports responsible forest management that follows the State of Vermont’s Acceptable Management Practices (AMPs) on both public and private property, including consultation with a professional forester and development of forest management plans that balance the economic benefits of logging with maintaining healthy forests, water quality and protecting wildlife habitat.

Objective 18.3. Areas previously logged shall not be considered exempt from the standards of the development review process when development is proposed.

Objective 18.4. An appropriate use of Contiguous Habitat Units (shown on [Map 1](#)) is forest management activities that support a diversity of forests, including early succession forests, and that do not lead to an extension of edge conditions (as defined in the 2013 Science to Action Report).

Objective 18.5. Operation, stormwater management and erosion control and site reclamation plans shall be submitted for all new and expanded earth extraction and quarrying operations within Bolton, to ensure that the proposed operation will not cause any hazard to public health and safety, or adversely affect neighboring properties, property values or public facilities and services, surface water and groundwater supplies, contiguous habitat units and significant wildlife habitats, or other natural, cultural, and historic features.

GOAL 19. Bolton’s most important scenic views, including ridgelines, will be protected from the adverse impacts of new development.

Objective 19.1. Bolton’s scenic ridgelines are a defining characteristic of the town, and development shall be located in such a way that their aesthetic appeal is not lessened, especially along the ridgelines seen from the Rt. 2/1-89 corridor.

Action 59. Inventory and map Bolton’s scenic landscape features, scenic roads and view sheds, and recommend additional regulatory and non-regulatory options for their protection.

GOAL 20. Maintain, protect and improve Bolton’s recreational areas and resources to ensure continued public access and sustainable use by Bolton residents and visitors.

Objective 20.1. Management of the Preston Pond Town Forest will follow the standards listed in the Preston Pond Conservation Area Management Plan and the restrictions in the property’s easement.

Objective 20.2. Land that is owned by Town of Bolton will be managed by the Conservation Commission and the Select Board in a way that preserves its natural features and keeps it available for recreational use by town residents and visitors.

Objective 20.3. Increase the number of neighborhood community gathering areas and parks near residential areas.

Objective 20.4. Cooperate with key stakeholders such as Bolton Valley Resort, the Catamount Trail Association, the Climbing Access Resource Group, Cross Vermont Trail Association, the Green Mountain Club, Smilie School, the Vermont Association of Snow Travelers, and local landowners to ensure that Bolton’s recreational areas are protected, improved, sustainably managed and safe for all users.

- Action 60. Evaluate options for establishing neighborhood parks, playgrounds, community gardens or other community facilities in West Bolton, Bolton Valley or on US 2.
- Action 61. Place safety information related to hunting season (such as warning hikers to wear blaze orange) on the information kiosks of town-owned land.
- Action 62. Host hunter education courses locally.
- Action 63. Work with outdoor recreation groups and organizations active in Bolton to minimize user conflicts in shared recreation areas, especially during hunting and trapping season.
- Action 64. Investigate appropriate locations for town or privately maintained off-road parking at trailheads and in areas of heavy recreational use.
- Action 65. Verify that organizations seeking to build or maintain trails in Bolton have adopted appropriate trail standards that have proven effective in similar municipalities, to guide or regulate the development, use and maintenance of like trails.

GOAL 21. Bolton’s future development will protect the town’s unique natural resources as described in the [Natural Resources](#) and the [Natural Hazards and Resilience](#) sections of this plan.

GOAL 22. The Town of Bolton will maintain and steward its current amount of conserved land but will discourage proposals to preserve additional large amounts of land that are developable under the BLUDRs as most recently adopted.



The Woods in our Eyes, Madi Cohen, Spirit of Bolton Art Contest

GOAL 23. Bolton’s development pattern will continue to be characterized by areas of compact settlements along Route 2, in Bolton Valley and in West Bolton, and rural homesteads and large undeveloped areas elsewhere. Future development shall conform with the land use district descriptions as described in this chapter and shown on [Map 12](#).

Action 66. Review and update the Bolton Land Use and Development Regulations (BLUDRS) for clarification and ease of use, to incorporate new statutory requirements under Chapter 117, and to conform to and advance the goals and objectives of this plan, as highlighted below:

GENERAL BLUDR ISSUES

- a. Review and update mapped boundaries, dimensional standards and allowed uses under established zoning districts to determine whether any adjustments are justified.
- b. Review and update the BLUDRs and other policies and ordinances as needed to clearly reference and further protect the town’s significant natural, cultural, historic and scenic resources, as discussed in the [Natural Resources](#) section of this plan and shown on corresponding maps.
- c. Re-evaluate Select Board-adopted administrative and permit fee schedules as needed to ensure that the fees charged are adequate to cover allowed administrative costs and are comparable to those charged by similar towns but are not prohibitively expensive for residents.

HISTORIC PRESERVATION

- d. Refine the regulations surrounding the treatment of designated and potential historic buildings and sites to ensure the preservation of Bolton’s history while not unduly burdening property owners.

ECONOMY

- e. The town of Bolton will work with Bolton Valley Resort to gain an understanding of specific regulatory barriers that may act as a deterrent to development at the Resort, and to identify possible changes to the Bolton Land Use and Development Regulations that meet the goals of the town Plan to address those challenges, including a possible commercial recreation overlay district.
- f. Create educational materials for residents and business owners to learn about the BLUDRs
- g. Ensure that the Bolton Land Use and Development Regulations encourage the creation of home businesses.

TELECOMMUNICATIONS AND ENERGY SITING

- h. Revise the BLUDRs to provide density bonuses for Planned Unit Developments with layouts that enable energy efficiency and the use of renewable energy sources.
- i. Revise the BLUDRs to include renewable energy projects in the discussion of setbacks and screening.
- j. Review and update the telecommunications and co-location standard guiding local permitting and providing guidance to the Select Board and Planning Commission’s participation in the PSB (Section 248a) process.
- k. Update the BLUDRs to require the submission of associated energy certificates prior to the issuance of certificates of occupancy.

Roads

- l. Update BLUDRs town highway regulations to ensure safety and resilience of private roads and driveways.

WATER QUALITY AND STORMWATER

- m. Update current source protection area standards as needed, under the BLUDRs
- n. Determine and implement appropriate strategies for incentivizing Low Impact Development (LID) to reduce stormwater runoff from new development.

- o. Review, clarify and update existing stormwater management requirements under the BLUDRs to incorporate new state standards and model language regarding stormwater.
- p. Review flood hazard area bylaws for consistency with more recent state models and recommendations.
- q. Evaluate developing a new river corridor protection area overlay district, using state river corridor maps as amended for local use. Before establishing additional regulations, the town should work with CCRPC and ANR to ensure the most accurate data is included in the river corridor map. Bolton should review the implications of the full River Corridor on existing properties before establishing these additional regulations.

STEEP SLOPES

- r. Clarify, update steep slope regulations; evaluate whether additional engineered options to allow very limited development on 15-25% slopes and 25% or greater slopes (e.g., to access adjoining land) is justified under the BLUDRs – e.g., in association with an independent technical engineering review, and related stormwater management concerns.

TELECOMMUNICATIONS

- s. Update Bolton’s development regulations to meet FCC requirements for the regulation of telecommunications facilities. ”

- Action 67. Increase planning reserve funding to cover match requirements for planning grant programs.
- Action 68. Consider rezoning West Bolton, in consultation with local residents, as a new “hamlet” district, to include reduced lot sizes and setbacks and an allowed mix of uses that are more consistent with historically established patterns of development in the area.
- Action 69. Examine the feasibility of gaining a Village Center designation for the West Bolton area from the state to allow commercial property owners to access associated benefits, including historic and related tax credits.
- Action 70. Update the Town Plan.



West Bolton Streams, Isaac Post, Spirit of Bolton Art Contest



CHAPTER 5 | IMPLEMENTATION

Cover Art: "Bolton Valley Metamorphosis" by Gabriela Heermans, Spirit of Bolton Art Contest

The Town of Bolton has four full-time staff members, an annual municipal budget of less than one million dollars and a town government run completely by volunteers, most of whom have full time jobs. The goals and objectives in this plan reflect both the town's practical concerns and its lofty aspirations, but the actions included in this section are intended to reflect only those things the town expects to reasonably accomplish over the next eight years, given expected staff, volunteer and funding capacity. A second tier of actions are included, which represent actions that the town would like to undertake, but would only be able to pursue if new sources of funding arose and/or staff capacity increased. Within each tier, actions are ranked and numbered based first on the prioritization of them at the December 2016 community engagement event, and secondly on the cost, benefit and difficulty of accomplishing them. The actions have been assigned responsible parties, and relevant partners and funding sources have been identified. Additionally, the actions also follow the Maintain-Evolve-Transform theme. Each action is intended to either maintain, evolve or transform something about Bolton to meet the goals and objectives of this plan.

In addition to the action items identified here, one of the key forms of implementing the town plan is for Bolton to participate in Act 250 and Section 248 processes.

Act 250 provides a public, quasi-judicial process for reviewing and managing the environmental, social and fiscal consequences of major subdivisions and developments in Vermont. Both the Planning Commission and the Town of Bolton, represented by the Select Board, are statutory parties to the Act 250 process. Applicants must prove that proposed development is "in conformance" with the goals and objectives of this plan.

Section 248 outlines the process for the Vermont Public Service Board to determine whether development of a public utility facility advances the public good of Vermont. Both the Planning Commission and the Town of Bolton, represented by the Select Board, are statutory parties to the Section 248 process. The Public Service Board must determine that the proposed facility will not "unduly interfere with the orderly development of the region with due consideration having been given to the recommendations of the municipal and regional planning commissions, the recommendations of the municipal legislative bodies, and the land conservation measures contained in the plan of any affected municipality."

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
1	Leverage resident interest in community building events by re-establishing and funding a Bolton Recreation or Community Committee.	People - Community Connection	Select Board	Within 2 years	Low	Town Budget Volunteer Time	Evolve
2	Host at least one additional community event every year, in addition to existing events such as Town Meeting Suppers and Green Up Day.	People - Community Connection	Economic Resources Committee Recreation/Community Committee VT Farmers Market Association	Within 2 years	Low	Volunteer Time Donations Town Budget Grants	Evolve
3	Host a Bolton Volunteer Fire Department Fundraiser.	People - Community Connection	Select Board Voters	3-5 years	Low	Donations Volunteer Time	Evolve
4	Maintain annual allocations for organizations serving Bolton residents in annual town budgets, including for Our Community Cares Camps.	People - Childcare	Select Board Voters	"Ongoing	High	Town Budget	Maintain
5	Continue to offer childcare at Bolton Town Meeting and other town-sponsored events.	People - Childcare	Town Clerk Assistant Town Clerk Event Organizers	Ongoing	Low	Town Budget Volunteer Time	Maintain
6	In the event that Smilie School is closed and ownership reverts to the town, develop a plan to ensure that the facility remains a community center, which may also be creatively developed to include compatible private uses (e.g., a local day care facility) that help offset facility operation and maintenance costs.	People - Education	Select Board Planning Commission, Economic Resources Committee Voters	8+ years	High	Volunteer Time Town Budget	Transform
7	Educate residents about the services provided by municipal, state and regional agencies, such as Age Well, and increase senior services and community connection by recruiting volunteers to provide services for town residents to volunteer to meet those needs.	People - Social Services and Community Health	Town Website Administrator Senior Dinner Coordinator CVAA	Within 2 years	Low	Volunteer Time	Maintain
8	Provide all volunteer committees with adequate administrative support, through staff or contracted services, particularly as needed to ensure that open meeting law requirements are met.	People - Town Governance	Select Board	Ongoing	High	Staff time Town Budget	Maintain
9	Evaluate short term and long term town staffing needs on an annual basis to ensure that there is sufficient support for town administration and for the administration of any new programs, taking into account operating budgets, program requirements, existing staffing, and the cost of contracted services.	People - Town Governance	Select Board Other town boards Staff	3-5 years	High	Town Budget	Evolve
10	Coordinate with the Towns of Jericho and Underhill, and with Vermont's Congressional delegation, to gain federal Payment in Lieu of Taxes (PILOT) for the Ethan Allen Firing Range.	People - Town Governance	Select Board Jericho and Underhill Select Boards State Representatives Congressional Delegation	6-8 years	High	Volunteer Time	Transform

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
11 Seek additional sources of revenue and funding, including grants, donations, fundraising, and service payments where allowed, to help offset municipal operating expenses, and to purchase needed equipment.	Goal 3	People - Town Governance	Select Board BVFD Staff Other Town Committees Highway Foreman	Ongoing	High		Evolve
12 Track communications from Vermont Emergency Management and the National Weather Service in Waterbury and Burlington to ensure that the town receives up to date and accurate information prior to and during severe storms and flood events.	Goal 4	People - Public Safety	Emergency Management Coordinator Fire Chief Highway Foreman LEPC #1 VT Emergency Management	3-5 years	High		Evolve
13 Annually update the town's Local Emergency Operations Plan (LEOP) by May 1st, for use in emergencies and disasters and to ensure the appointment of qualified individuals to serve in key public safety positions.	Goal 4	People - Public Safety	Emergency Management Coordinator Highway Foreman Smile School Representative Select Board CCRPC VDEMHS	Ongoing	High		Maintain
14 Provide emergency response, hazardous materials response and fire training as resources permit, particularly for appointed positions, select board members, volunteer firefighters and other emergency responders – including Incident Command System (ICS) training as required for local officials.	Goal 4	People - Public Safety	Emergency Management Coordinator Select Board Fire Chief/BVFD Vermont Fire Academy VDEMHS	Ongoing	High		Maintain
15 Actively recruit volunteer firefighters, and provide necessary training and equipment to ensure their safety.	Goal 4	People - Public Safety	Fire Chief BVFD VDEMHS	Ongoing	High		Maintain
16 Continue to fund Richmond Rescue for emergency medical services.	Goal 4	People - Public Safety	Select Board Voters	Ongoing	High		Maintain
17 Evaluate the need for additional police coverage, in relation to local crime rates, through contracted or administrative service agreements with existing law enforcement agencies.	Goal 4	People - Public Safety	Select Board Law Enforcement Agencies	6-8 years	High		Evolve
18 Provide information to local residents interested in establishing a Neighborhood Watch Program.	Goal 4	People - Public Safety	Neighborhood Volunteers Select Board Town Web Master Vermont State Police	3-5 years	Low		Evolve
19 Identify locations with suitable access to surface water for the installation of additional dry hydrants in portions of town that currently do not have adequate supplies; and negotiate necessary access easements with willing landowners.	Goal 4	People - Public Safety	BVFD Select Board Planning Commission	6-8 years	Low		Evolve

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
20 Review the status of the Bolton Volunteer Fire Department and existing coverage, including ongoing department needs for equipment, volunteers and training, in relation to available municipal resources, including annual capital and operating budgets; reserve funds, and existing mutual aid agreements. Investigate options under existing or proposed aid or service agreements with neighboring communities to increase local coverage, and to share complementary equipment and services in the most cost-effective manner.	Goal 4	People - Public Safety	BVFD Select Board Vermont Fire Academy	8+ years	Low	Town Budget	Evolve
21 Explore the feasibility of creating a Community Resilience Organization (CRO) or similar organization for Bolton, to develop a town-wide notification and warning system in the case of emergencies, plan to reposition equipment during a flood event to ensure it is available in all parts of town, and develop neighborhood-specific emergency plans.	Goal 4	People - Public Safety	Emergency Management Coordinator Emergency Response Committee Vermont Department of Emergency Management and Homeland Security / LEPC / Community Resilience Organizations	6-8 years	High	Town Budget Volunteer Time Staff Time	Transform
22 Encourage residents to sign up for VT Alert notifications about emergencies.	Goal 4	People - Public Safety	Emergency Management Coordinator Town Web Master	Within 2 years	High	Volunteer Time	Evolve
23 Create an emergency and public safety web page for the town.	Goal 4	People - Public Safety	Emergency Management Coordinator Town Web Master	Within 2 years	Low	Volunteer Time	Evolve
24 Complete and maintain an inventory of all businesses in Bolton and make the list of interested businesses available as a community resource on the town website.	Goal 5	Prosperity - Economy	Economic Resources Committee Town Webmaster	Ongoing	High	Volunteer Time	Maintain
25 The Town of Bolton and Bolton Valley Resort will work together to improve the relationship between the two entities, by initiating quarterly discussions to establish a dialogue regarding long term planning in and around the Resort, and by investigating changes to the BLUDRs as necessary and appropriate.	Goal 5	Prosperity - Economy	Economic Resources Committee Select Board Planning Commission Bolton Valley Resort	3-5 years	High	Volunteer Time USDA Rural Business Development Grants	Transform
26 Undertake a survey to quantify the number of abandoned buildings in Bolton and adopt an ordinance regarding the definition and treatment of abandoned buildings.	Goal 5	Prosperity - Economy	Select Board Consultant/Contractor Legal consul VLCT	6-8 years	Low	Town Budget	Evolve
27 Educate residents about eligibility for homestead declarations.	Goal 6	Prosperity - Housing	Town Website Administrator Town Clerk and Assistant Town Clerk Town Assessor Senior Coordinator AARP Vermont Department of Taxes	Within 2 years	Low	Staff time Volunteer Time	Maintain

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
28	Ensure that town highway department personnel, including the Highway Foreman, receive training on and are aware of relevant state standards, including the requirements of the under Municipal Roads General Permit.	Prosperity - Transportation	Select Board Highway Foreman	Within 2 years	High	Town Budget	Maintain
29	Increase the Highway Department's capacity within the limits of the town's annual operating budgets as necessary to maintain and update paving, culvert and erosion inventories, identify priority projects, and seek funding as necessary to comply with Municipal Roads General Permit requirements.	Prosperity - Transportation	Select Board Highway Department CCRPC, VTrans VLCT	Within 2 years	High	Better Roads Grant, Vermont DEC Town Budget	Evolve
30	Work with VTrans and CCRPC to develop management practices and road and bridge standards for mountainous terrain and adopt standards that will lead to an increase in the town's ERAF match rate after disasters.	Prosperity - Transportation	Select Board Highway Foreman Planning Commission VTrans / CCRPC VLCT	3-5 years	High	Volunteer Time VTrans Funding	Evolve
31	Continue to coordinate with VTrans on issues involving development on and access to Route 2.	Prosperity - Transportation	Select Board Highway Foreman Planning Commission VTrans / CCRPC VLCT	Ongoing	High	Road Crew VTrans Funding	Maintain
32	Advocate for options to increase pedestrian and motorist safety, and wildlife crossing connections in association with the replacement of the Notch Road tunnel (Culvert 51-3) under I-89, which also accommodates the Long Trail.	Prosperity - Transportation	Select Board Planning Commission Conservation Commission CCRPC Vtrans Green Mountain Club Vermont Fish and Wildlife	Ongoing	High	Volunteer Time Staff Time Alternative Transportation Program	Transform
33	Develop a Complete Streets Policy.	Prosperity - Transportation	Select Board Highway Foreman CCRPC	6-8 years	Low	Town Budget CCRPC UPWP	Evolve
34	Administer and enforce the town's traffic ordinance through contracted services with existing law enforcement agencies (Vermont State Police, Chittenden County Sheriff) and/or through shared service agreements with neighboring municipalities.	Prosperity - Transportation	Select Board Contracted Law Enforcement	Ongoing	High	Town Budget Volunteer Time	Maintain
35	Identify road locations where guard rails might be needed.	Prosperity - Transportation	Select Board Highway Foreman VTrans CCRPC	6-8 years	Low	Volunteer Time Staff Time CCRPC UPWP Town Budget	Evolve

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
36 Investigate a municipal Park and Ride in Bolton.	Goal 8	Prosperity - Transportation	Select Board Highway Foreman Planning Commission VTrans	8+ years	Low	Volunteer Time Staff Time Town Budget Park and Ride Grant	Transform
37 Provide local residents with information about Go! Vermont and carpool, vanpool, ridesharing, and public transit opportunities coordinated through the program.	Goal 8	Prosperity - Transportation	Town Web Master Go! Vermont	Within 2 years	Low	Town Budget	Evolve
38 Continue to investigate options to ensure that Bolton has a flood proof Town Garage.	Goal 9	Prosperity - Utilities and Facilities	Select Board	Ongoing	High	Town Budget	Evolve
39 Centralize all town records in the Bolton Town Office for safekeeping and public inspection, and allocate funds to continue to archive, digitize, index and update town land records, permit records, cemetery records and grand lists in formats appropriate for access and use; and develop interactive town maps with the assistance of the Chittenden County Regional Planning Commission.	Goal 9	Prosperity - Utilities and Facilities	Town Clerk and Assistant Town Clerk Volunteers Cemetery Commission Town Archivist State Archivist CCRPC VT or National Historical Societies	6-8 years	High	Town Budget Record Reserve Fund Volunteer Time	Evolve
40 Conduct a cost of service analysis for each town department to increase understanding of expenses and identify areas that may need budgetary changes in the future.	Goal 9	Prosperity - Utilities and Facilities	Select Board Consultant	3-5 years	Low	Town Budget MPG	Evolve
41 The Capital Planning Committee will maintain a current Capital Improvement Plan by revising the document annually, in conformance with the municipal plan.	Goal 9	Prosperity - Utilities and Facilities	Capital Planning Committee Select Board CCRPC	Ongoing	High	Volunteer Time Town Budget	Maintain
42 Work with the Vermont Geological Survey to complete detailed groundwater mapping, to determine possible sources for future privately-owned community water systems.	Goal 9	Prosperity - Utilities and Facilities	Planning Commission Conservation Commission Vermont Geological Survey	3-5 years	Low	Vermont Geological Society Funds Volunteer and Staff Time Match	Transform
43 Work with service providers to increase wired high-speed internet infrastructure on Bolton's currently underserved roads. Increase connectivity and quality of telecom services locally, focusing on underserved areas of town and technology adapted for use within mountainous terrain.	Goal 9	Prosperity - Utilities and Facilities	Economic Resources Committee Service Providers Lake Champlain Area Chamber of Commerce	6-8 years	Low	Volunteer Time Grants	Evolve
44 Partner with Efficiency Vermont to complete energy audits of town buildings and implement identified strategies.	Goal 10	Prosperity - Energy	Energy Coordinator Efficiency Vermont Utilities	6-8 years	High	Town Budget Reserve Funds Grants	Evolve
45 Evaluate options for installing renewable energy systems to power and heat municipal buildings.	Goal 10	Prosperity - Energy	Select Board Energy Coordinator Efficiency Vermont	8+ years	Low	Town Budget Volunteer Time	Transform

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
46	Recruit and appoint an Energy Coordinator for the town.	Prosperity - Energy	Select Board	Within 2 years	High	Volunteer Time	Transform
47	Educate Bolton residents about the energy siting plan developed for the town during the CCRPC Regional Energy Plan process, and ensure that residents know about the potential for individual renewable energy projects on their own land.	Prosperity - Energy	Energy Coordinator Planning Commission Renewable Energy Contractors	Within 2 years	Low	Town Budget Volunteer Time	Evolve
48	Continue to provide information to permit applicants regarding building energy efficiency requirements for new residential and commercial buildings.	Prosperity - Energy	Energy Coordinator Town Webmaster	Ongoing	High	Volunteer Time	Maintain
49	Provide information to Bolton residents and property owners regarding available energy efficiency, weatherization and renewable energy installation programs, such as those offered by Efficiency Vermont and the Vermont Community Energy Dashboard.	Prosperity - Energy	Town Clerk and Assistant Town Clerk Energy Coordinator Efficiency Vermont Renewable Energy Resource Center Advanced Wood Heating Program Utilities Renewable Energy Contractors	Within 2 years	Low	Town Budget	Maintain
50	Bolton will review any necessary changes and may update/amend the town plan to incorporate local renewable energy siting policies and maps that recognize local as well as regional priorities and constraints for the siting of renewable energy generation projects in town, in conformance with state energy goals.	Prosperity - Energy	Energy Coordinator Planning Commission Select Board CCRPC	Within 2 years	Low	CCRPC UPWP	Evolve
51	Establish a local historical society and/or appoint a town archivist or historian to identify, archive and maintain records and materials pertaining to Bolton's history, conduct interviews with town residents, prepare oral histories, sponsor educational events and programs on Bolton's history and update the town's historic structures and sites surveys.	Place - Historic Bolton	Select Board, Town Clerk Historical Society Vermont Historical Society VT Division for Historic Preservation UVM Historic Preservation	Within 2 years	Low	Town Budget Records Reserve Fund Grants Volunteer Time	Evolve
52	Assess and undertake projects to stabilize the banks of Joiner Brook, Duck Brook, Gleason Brook and Mill Brook as needed, to prevent damage to existing homes and septic systems, and Smile School from flashing flooding and fluvial erosion and collapse.	Place - Natural Hazards and Resilience	Select Board Conservation Commission Planning Commission Consultant CCRPC, Vermont DEC River Scientist	8+ years	Low	Vermont Ecosystem Restoration Grant Town Budget	Evolve
53	Work with CCRPC to update the All Hazard Mitigation Plan.	Place - Natural Hazards and Resilience	Emergency Management Coordinator Emergency Response Committee Select Board CCRPC	3-5 years	High	Town Budget CCRPC UPWP	Maintain

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
54	Drawing on NFP guidance, develop information for property owners regarding constructing, improving or replacing structures within mapped flood hazard areas.	Place - Natural Hazards and Resilience	Zoning Administrator Planning Commission DRB Vermont DEC Floodplain Manager FEMA	6-8 years	Low	Volunteer Time	Maintain
55	Review the model and data used to establish the town's 2010 flood map (base flood elevation); if justified, consider remapping the floodplain (base flood elevation) within the village flood hazard area overlay.	Place - Natural Hazards and Resilience	CCRPC Planning Commission Select Board Consultant/Engineer	8+ years	Low	Grants MPG Town Budget	Evolve
56	Partner with the Vermont Geological Survey to finish inventory of landslide hazard areas throughout town to ensure that clear information on landslide risk is available to property owners, residents and town officials, and update the BLUDRs as necessary.	Place - Natural Hazards and Resilience	Planning Commission Select Board Vermont Geological Survey	6-8 years	Low	Vermont Geological Society Funds Volunteer and Staff Time	Evolve
57	Undertake a hydrological/capacity analysis of local watersheds and determine whether new stream geomorphic assessments should be conducted on Gleason Brook and Mill Brook.	Place - Natural Hazards and Resilience	Select Board Planning Commission Consultant CCRPC, Vermont DEC River Scientist	8+ years	Low	Vermont Ecosystem Restoration Grant Town Budget	Evolve
58	Inventory and map Bolton's most important wildlife travel corridors and road crossing shown in the Arrowwood Science to Action Report and more recent Biofinder wildlife crossing data in consultation with state agencies, and identify needed next steps.	Place - Natural Resources	Conservation Commission Consultant, ANR, VTTrans, VT Department of Fish and Wildlife	6-8 years	Low	Conservation Fund Grants	Evolve
59	Inventory and map Bolton's scenic landscape features, scenic roads and view sheds, and recommend additional regulatory and non-regulatory options for their protection.	Place - Natural Resources	Conservation Commission Planning Commission Select Board	3-5 years	High	Volunteer Time Town Budget	Evolve
60	Evaluate options for establishing neighborhood parks, playgrounds, community gardens or other community facilities in West Bolton, Bolton Valley or on US 2.	Place - Recreation	Recreation Committee Select Board Conservation Commission	8+ years	Low	Bolton Conservation Fund Volunteer Time Staff Time	Transform
61	Place safety information related to hunting season (such as warning hikers to wear blaze orange) on the information kiosks of town-owned land.	Place - Recreation	Conservation Commission Preston Pond Steward Recreation Committee Hunter advocacy organizations	Ongoing	High	Volunteer Time Town Budget	Evolve
62	Host hunter education courses locally.	Place - Recreation	Conservation Commission Preston Pond Steward Recreation Committee Hunter advocacy organizations	6-8 years	Low	Volunteer Time Town Budget	Maintain

Action	Associated Goal	Chapter and Section	Responsible Party and Partners	Timeframe	Priority	Funding Source	Maintain Evolve Transform
63	Work with outdoor recreation groups and organizations active in Bolton to minimize user conflicts in shared recreation areas, especially during hunting and trapping season.	Place - Recreation	Recreation Committee Select Board, Conservation Committee, Vermont Department of Parks and Recreation Green Mountain Club, the Vermont Association of Snow Travelers, the Catamount Trail Association, the Climbing Access Resource Group, Friends of Bolton Nordic Lands and Backgrounds, Smilie School and local landowners	6-8 years	High	Volunteer Time	Evolve
64	Investigate appropriate locations for town or privately maintained off-road parking at trailheads and in areas of heavy recreational use.	Place - Recreation	Planning Commission Select Board	8+ years	Low	Town Budget	Evolve
65	Verify that organizations seeking to build or maintain trails in Bolton have adopted appropriate trail standards that have proven effective in similar municipalities, to guide or regulate the development, use and maintenance of like trails.	Place - Recreation	Conservation Commission Select Board	3-5 years	Low	Volunteer Time	Maintain
66	Review and update the Bolton Land Use and Development Regulations (BLUDRS) for clarification and ease of use, to incorporate new statutory requirements under Chapter 117, and to conform to and advance the goals and objectives of this plan (see page 60).	Place - Land Use	Planning Commission Select Board Consultant/CCRPC, DRB Vermont Rural Water Agency State Agencies	Within 2 years	High	Municipal Planning Grant CCRPC UPWP	Evolve
67	Increase planning reserve funding to cover match requirements for planning grant programs.	Place - Land Use	Select Board Planning Commission	Within 2 years	Low	Town Budget	Evolve
68	Consider rezoning West Bolton, in consultation with local residents, as a new "hamlet" district, to include reduced lot sizes and setbacks and an allowed mix of uses that are more consistent with historically established patterns of development in the area.	Place - Land Use	Planning Commission Select Board CCRPC or Consultant	Within 2 years	High	Town Budget CCRPC UPWP	Transform
69	Examine the feasibility of gaining a Village Center designation for the West Bolton area from the state to allow commercial property owners to access associated benefits, including historic and related tax credits.	Place - Land Use	Planning Commission Select Board CCRPC or Consultant	8+ years	Low	Town Budget CCRPC UPWP	Transform
70	Update the Town Plan.	Place - Land Use	Planning Commission Select Board Consultant	6-8 years	High	Town Budget MPG	Maintain

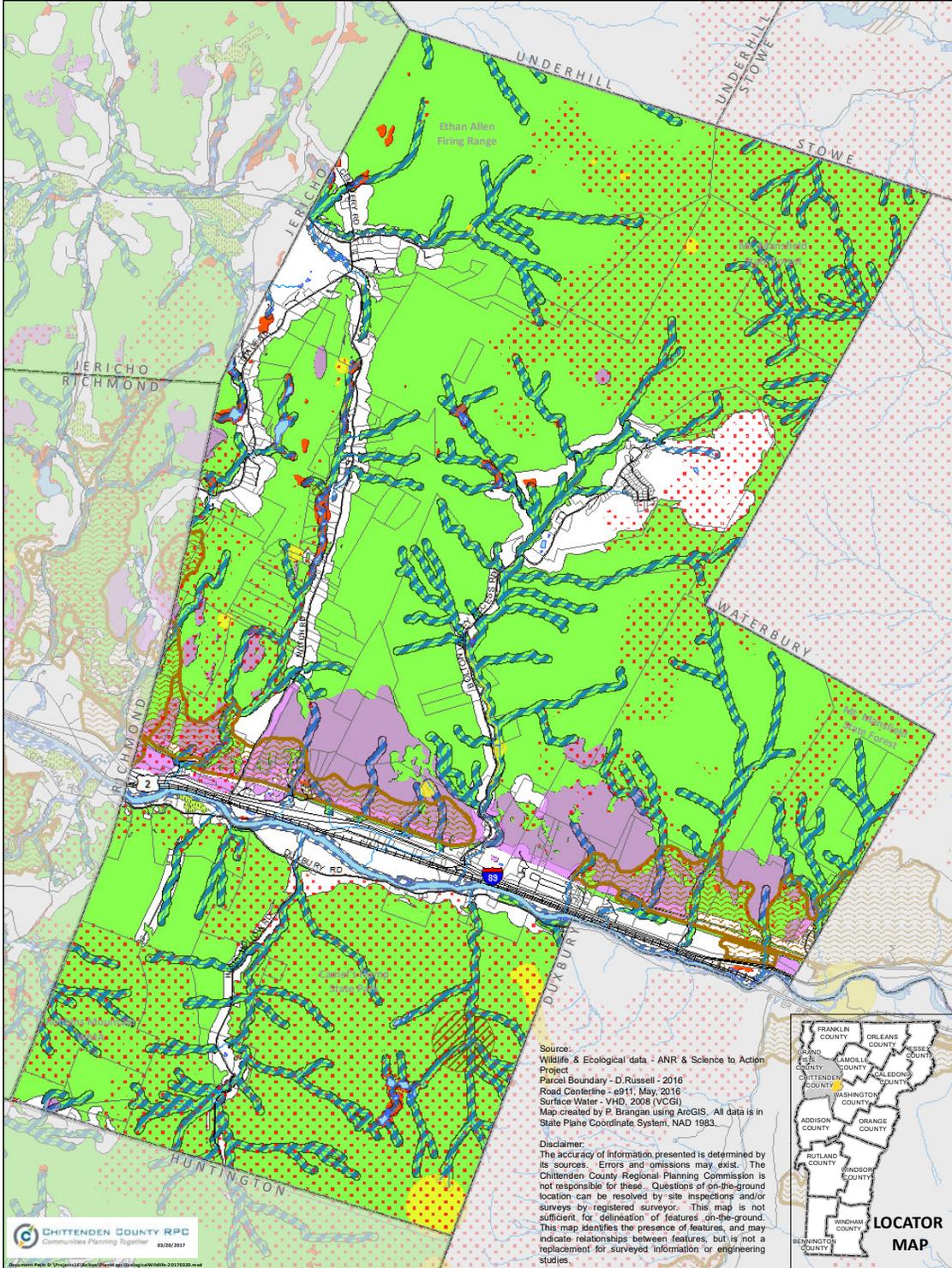
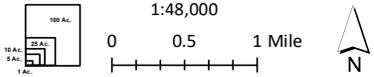
APPENDICES

Appendix 1: Maps

- » Map 1: Natural Resources – Ecological and Wildlife Resources
- » Map 2: Natural Resources – Earth and Water Resources
- » Map 3: Working Lands
- » Map 4: Conserved Land
- » Map 5: Recreation and Cultural Resources
- » Map 6: Hazard Areas
- » Map 7: Facilities
- » Map 8: Existing Energy and Constraints
- » Map 9: Energy Resource Areas
- » Map 10: Transportation System
- » Map 11: Existing Land Use
- » Map 12: Proposed Land Use
- » Map 13: Maintain-Evolve-Transform

Map 1 DRAFT
**Natural Resources:
 Ecological & Wildlife
 Resources**
BOLTON, VERMONT

- Legend**
- State Significant Natural Community
 - Deer Wintering Area
 - Stream Centerline
 - Rare, Threatened, Endangered Species
 - Grassland Habitat (management dependant)
 - Surface Water
 - Animal
 - Forested Riparian Habitat
 - Road Centerline
 - Plant
 - Potential Bear Wetland
 - Railroad
 - Hard Mast Stands: Beech & Oak
 - Tax Parcel Boundary
 - Contiguous Habitat Units

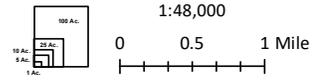


Source:
 Wildlife & Ecological data - ANR & Science to Action Project
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911; May, 2016
 Surface Water - VMD, 2008 (VCS)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

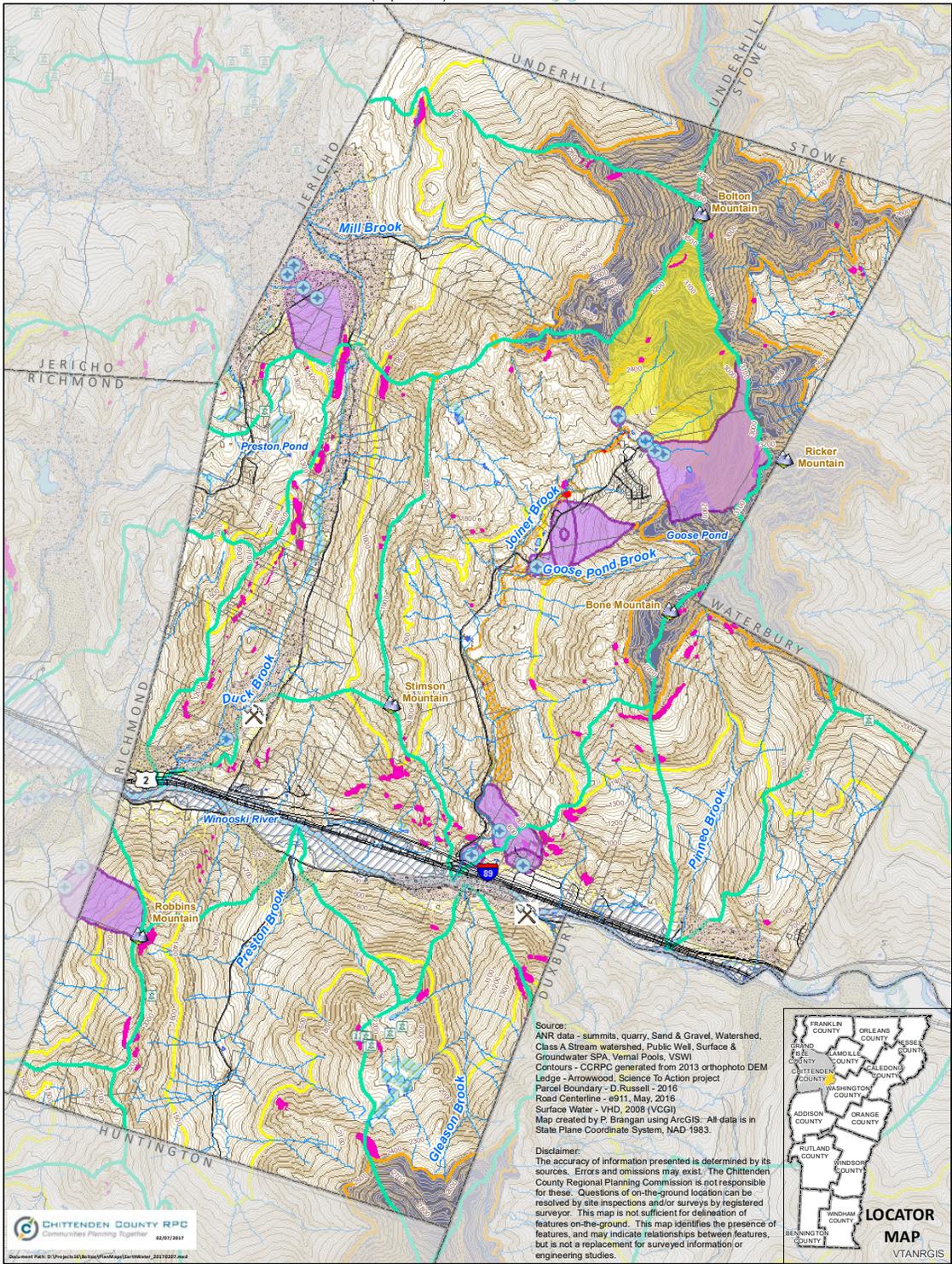
Disclaimer:
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Map 2 **DRAFT**
Natural Resources:
Earth & Water Resources
BOLTON, VERMONT



- Summit
- Topography - 20 ft Interval**
- Contour Line, Minor
- Contour Line, Major
- 1500 ft
- 2500 ft
- Sand & Gravel Pit
- Sand
- Sand and Gravel
- Potential Ledge/Cliff/Talus (slope-based)
- Stream Centerline
- Surface Water
- Watershed Boundary
- Class A Stream Watershed
- Flood Hazard (FEMA)
- Public Well
- Surface Water Source Protection
- Groundwater Source Protection Area
- Confirmed Vernal Pool
- Vermont Significant Wetland
- Existing Landslide
- Area Susceptible to Slope Failure
- Road Centerline
- Railroad
- Tax Parcel Boundary



Source:
 ANR data - summits, quarry, Sand & Gravel, Watershed, Class A Stream Watershed, Public Well, Surface & Groundwater SPA, Vernal Pools, VSWI
 Contours - CCRPC generated from 2013 orthophoto DEM
 Ledge - Arrowwood, Science to Action project
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, May, 2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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CHITTENDEN COUNTY RPC
 Communitywide Planning Together 62/07/2017
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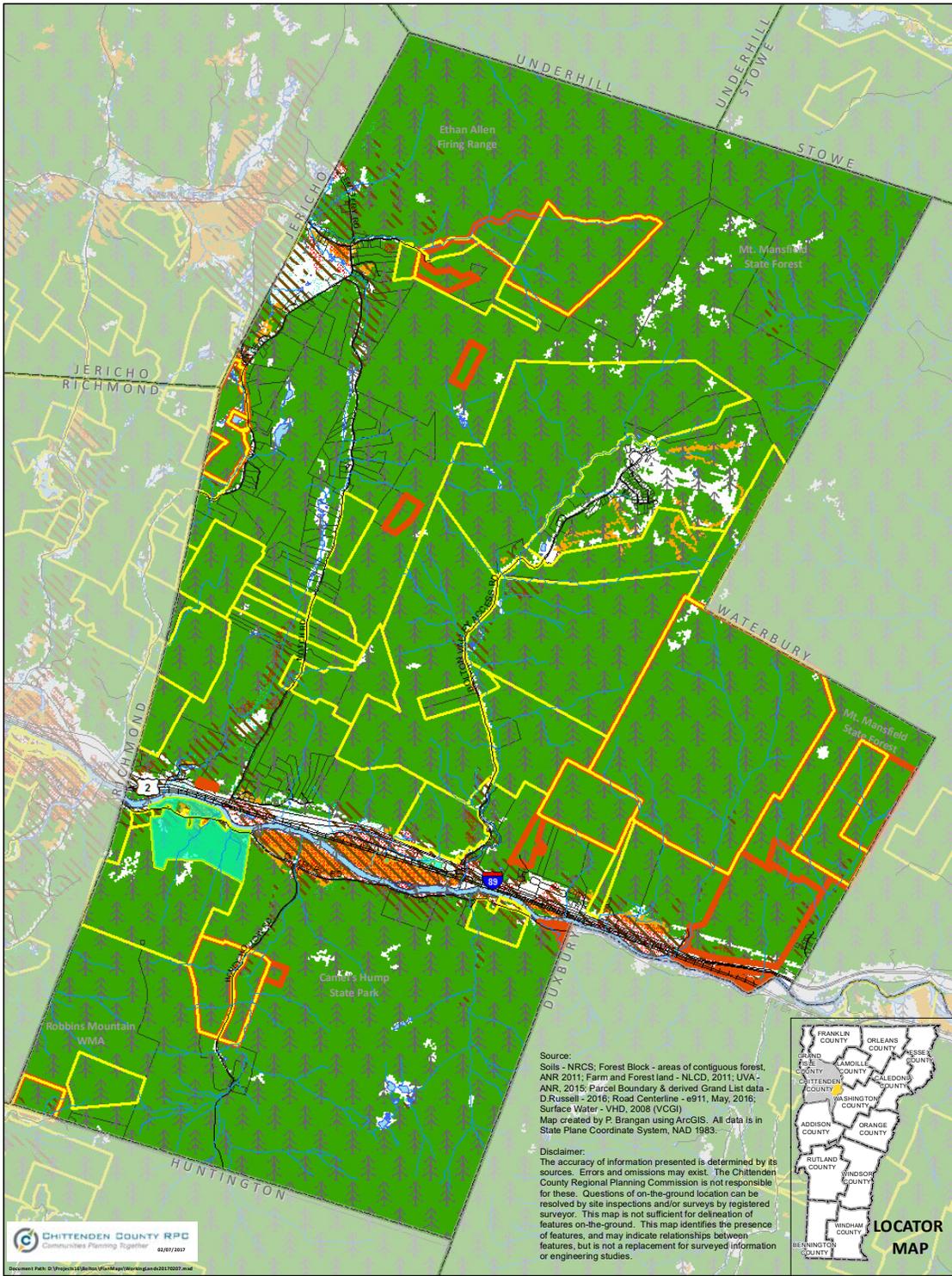
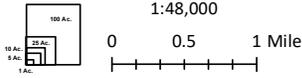
Map 3 DRAFT

Working Lands

BOLTON, VERMONT

Legend

- Woodlot Parcel - From Grand List
- Farm Parcel - From Grand List
- 2015 Parcels enrolled in Use Value Appraisal Program
- Soils**
- Prime Agricultural Soil
- Farmland Soils of Statewide Significance
- Prime Forest Soil
- Contiguous Forest Block
- 2011 Land Cover**
- Forestland
- Farmland
- Stream Centerline
- Surface Water
- Road Centerline
- Railroad
- Tax Parcel Boundary



Source:
 Soils - NRCS; Forest Block - areas of contiguous forest,
 ANR 2011; Farm and Forestland - NLCD, 2011; UVA -
 ANR, 2015; Parcel Boundary & derived Grand List data -
 D Russell - 2016; Road Centerline - e911, May, 2016;
 Surface Water - VHD, 2008 (VCS)

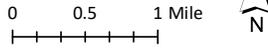
Map created by P. Brangan using ArcGIS. All data is in
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 features on-the-ground. This map identifies the presence
 of features, and may indicate relationships between
 features, but is not a replacement for surveyed information
 or engineering studies.



Map 4 **DRAFT**
Conserved Land
BOLTON, VERMONT

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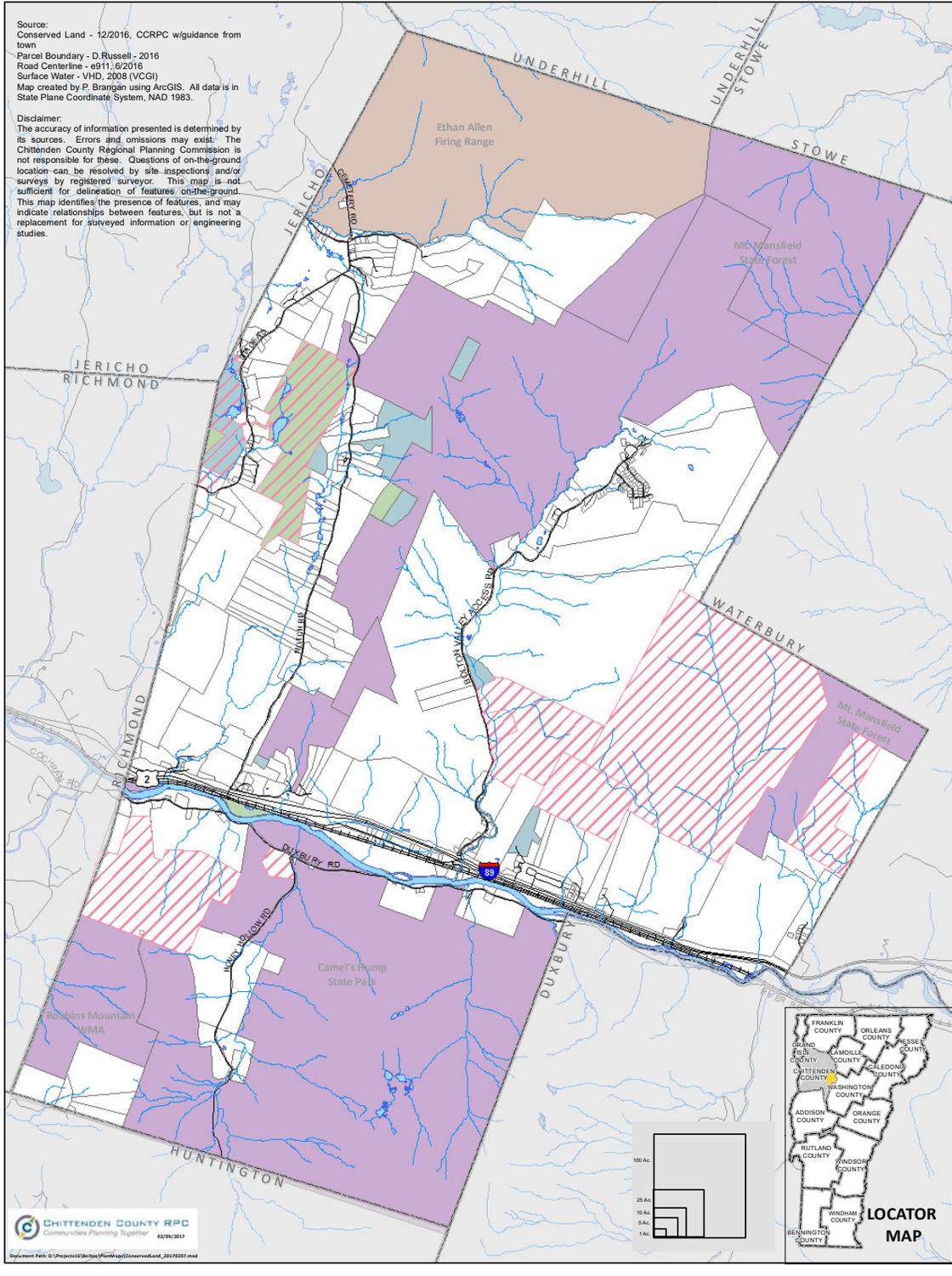


Conserved Land as of 1/2017	
Ownership	Acres
Federal	2,285.90
State	10,136.38
Town	458.40
Nonprofit	419.44
Private	3,234.52

- Legend**
- Conservation Easement
 - Tax Parcel Boundary
 - Conserved Land**
 - Town of Bolton
 - State of Vermont
 - US Government
 - Land Trust or Other
 - Stream Centerline
 - Surface Water
 - Road Centerline
 - Railroad

Source:
 Conserved Land - 12/2016, CCRPC w/guidance from town
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, 8/2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

Disclaimer:
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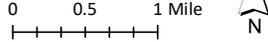
CHITTENDEN COUNTY RPC
 Communities Planning Together 8/20/2017
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Map 5 Recreation & Cultural Resources BOLTON, VERMONT

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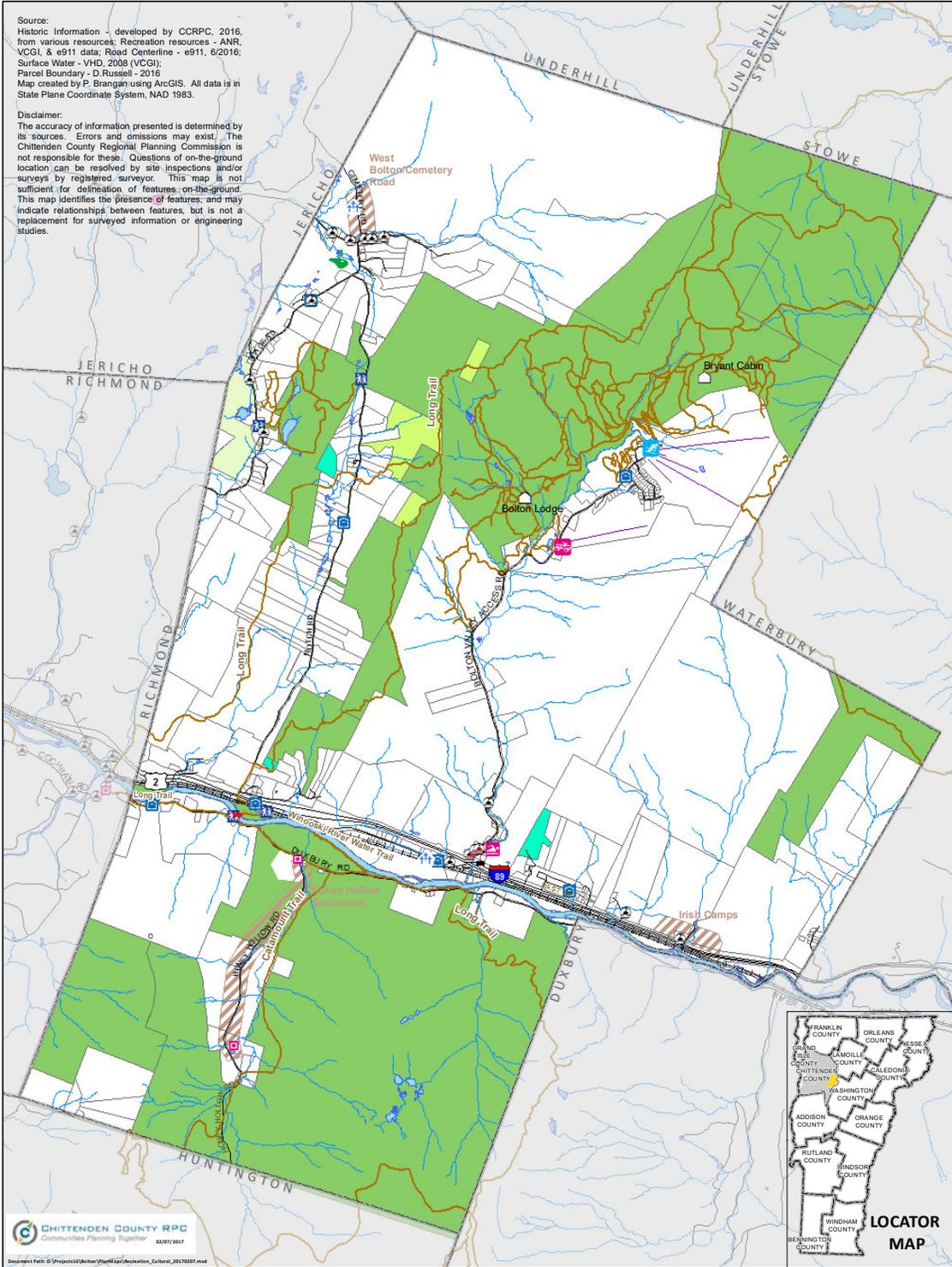


Legend

- Bolton's Own Little Libraries
- National Historic Site
- State Historic Site
- Cabin - National Register Eligible
- Historic Area Identified for Inventory/Nomination
- Historic District
- Cemetery
- School - Community Recreation Facility
- Bolton Potholes
- 4x4 Center
- West Bolton Golf Course
- Bolton Valley Ski Area
- Trailhead
- GMC Foot Bridge
- Trail
- Ski Lift
- Outdoor Recreation Land**
- State Land
- Green Mountain Club
- CRAG-VT
- Wolfrun Natural Area & Gateway Land
- Road Centerline
- Railroad
- Stream Centerline
- Surface Water
- Tax Parcel Boundary

Source:
Historic Information - developed by CCRPC, 2016, from various resources; Recreation resources - ANR, VCGI, & e911 data; Road Centerline - e911, 6/2016; Surface Water - VHD, 2008 (VCGI); Parcel Boundary - D. Russell - 2016
Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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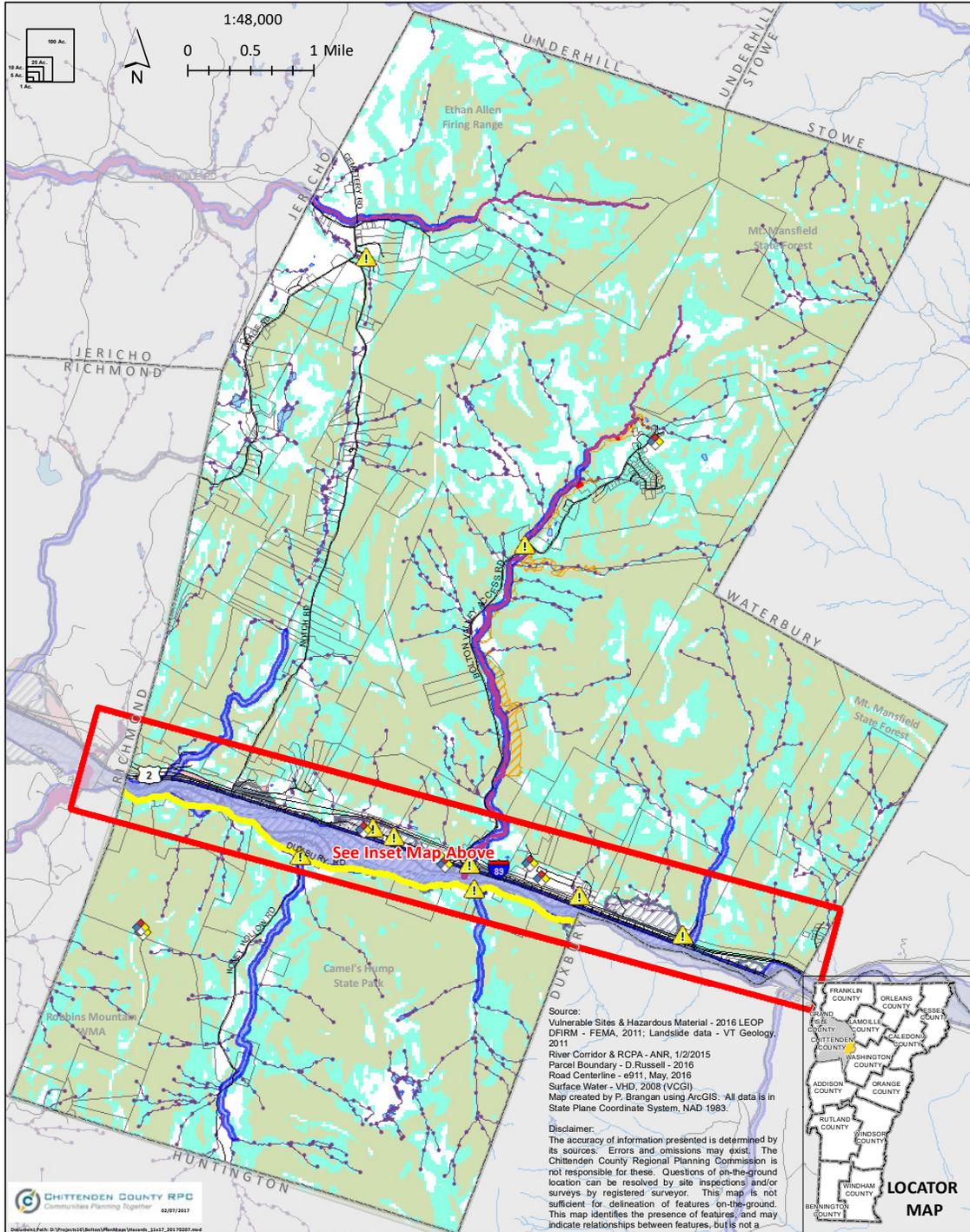
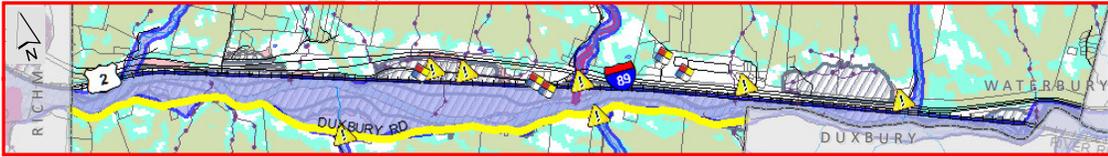


CHITTENDEN COUNTY RPC
Communities Planning Together
02/07/2017

Map 6 Hazard Areas BOLTON, VERMONT

DRAFT

- Legend**
- Site Vulnerable to Washout
 - Road Vulnerable to Washout
 - Hazardous Materials (Tier II) Facility
 - Steep Slope**
 - =>15%
 - >25%
 - Existing Landslide
 - Area Susceptible to Slope Failure
 - Flood Hazard (FEMA)**
 - 1% Annual Chance Flood Hazard Zone
 - 0.2% Annual Chance Flood Hazard Zone
 - River Corridor
 - Small Streams - 50 ft Setback
 - River Corridor Protection Area
 - Stream Centerline
 - Surface Water
 - Road Centerline
 - Railroad
 - Tax Parcel Boundary



Source:
 Vulnerable Sites & Hazardous Material - 2016 LEOP
 DFRM - FEMA, 2011; Landslide data - VT Geology, 2011
 River Corridor & RCPA - ANR, 1/2/2015
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, May 2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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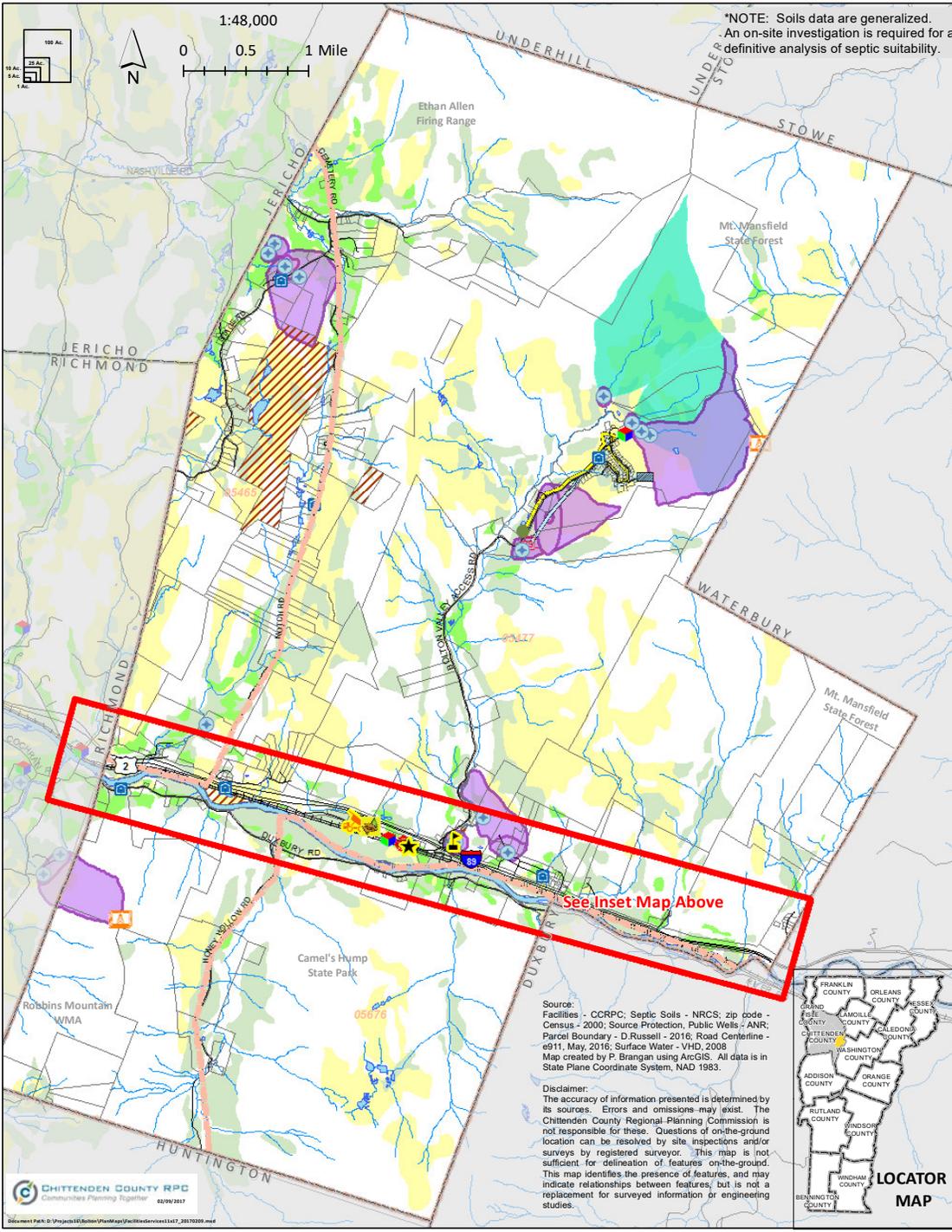
CHITTENDEN COUNTY RPC
 Communities Planning Together
 02/07/2017

Map 7 Facilities BOLTON, VERMONT

DRAFT

- | | | | |
|-------------------------------|--------------------------|------------------------------------|---|
| School | Town Park | Private Water Line | Cemetery |
| Fire Station | Telecommunication Tower | Private Sewer Line | Town Owned Property |
| Town Office | Public Well | ZIP Code Area | On-Site Septic Suitability by Soil Type* |
| Childcare | Reservoir | Groundwater Source Protection Area | Well Suited |
| Town Garage | Sewer Treatment Facility | Surface Water Source Protection | Moderately Suited |
| Bolton's Own Little Libraries | Timber Line Pump House | | Marginally Suited |

A Yellow Highlighted icon indicates proposed improvements for the facility.



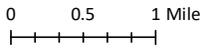
Map 8 DRAFT

Existing Energy and Constraints

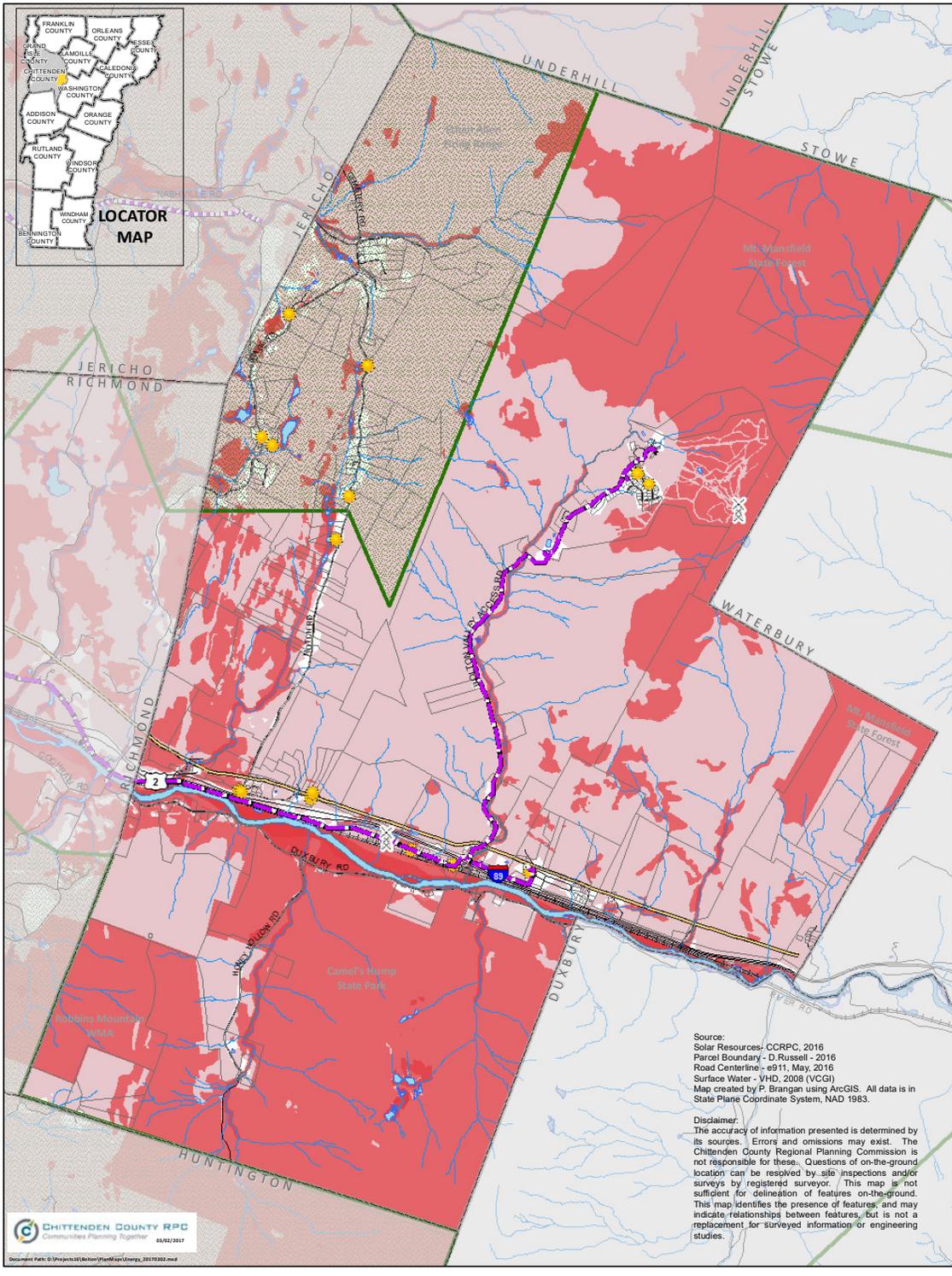
BOLTON, VERMONT



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- Legend**
- Existing Solar
 - Existing Wind
 - VELCO Transmission Line
 - 3 Phase Power Lines
 - Electric Utility Service Area
 - Green Mountain Power
 - Vermont Electric Co-Op
 - Act 174 State Renewable Energy Constraints
 - Known Constraint
 - Possible Constraint
 - Stream Centerline
 - Surface Water
 - Road Centerline
 - Railroad
 - Tax Parcel Boundary



Source:
 Solar Resources - CCRPC, 2016
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, May, 2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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Map 9 DRAFT Energy Resource Areas BOLTON, VERMONT



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0 0.5 1 Mile

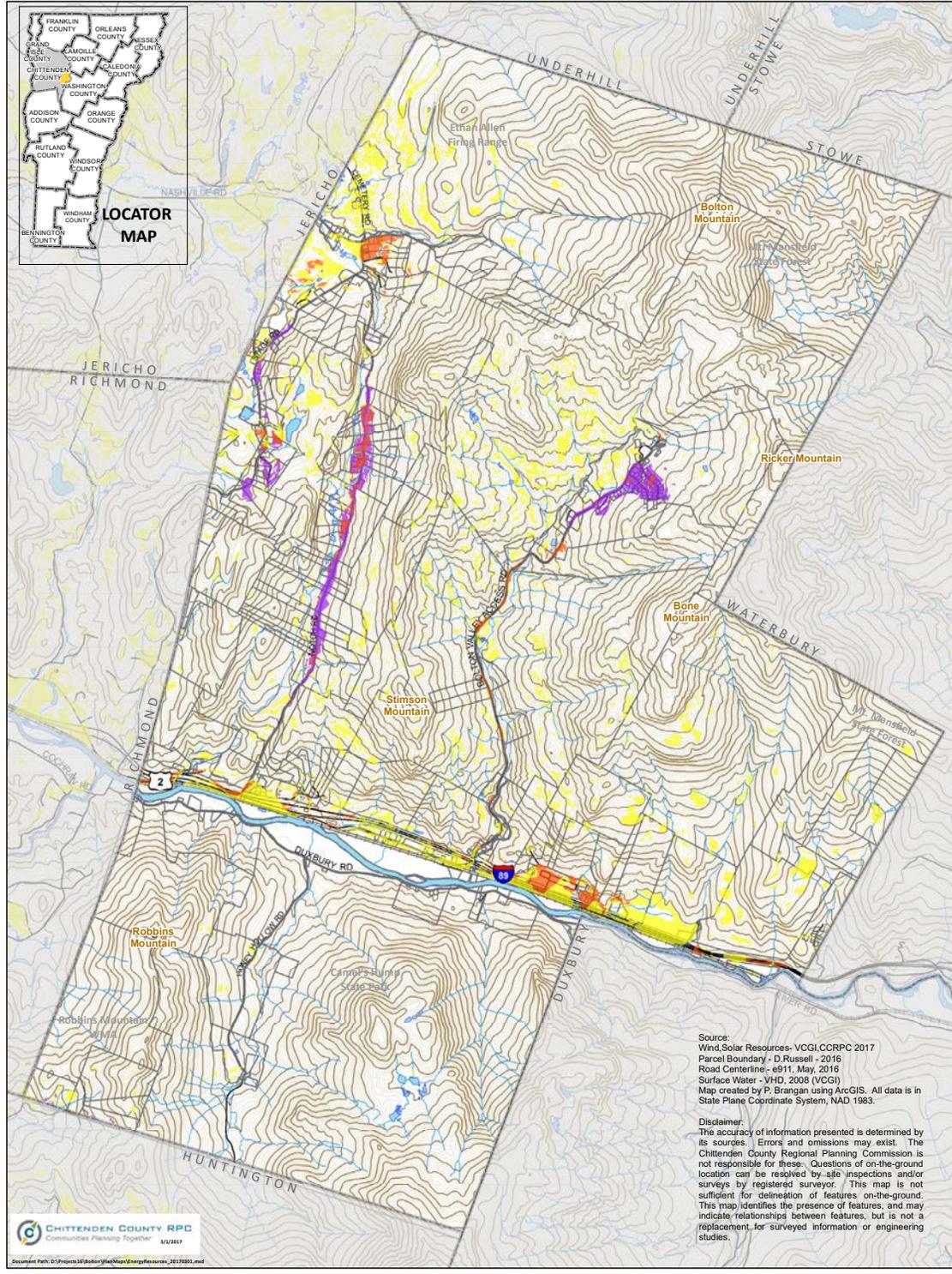


Legend

Potential Resource Areas for Renewable Energy* Topography - 20 ft Interval

- Prime Solar
- Base Solar/Possible Constraints
- Wind Resource for Small and Large Scale Generation
- Contour Line, Minor
- Contour Line, Major
- Stream Centerline
- Surface Water
- Road Centerline
- Railroad
- Tax Parcel Boundary

*Note: Potential prime renewable energy resource areas account for both statewide and local known constraints. A local constraint is a condition which precludes the development of a renewable energy project. Local known constraints include the conservation district, steep slopes greater than 25%, flood hazard overlay II, wetland buffers, surface water buffers, and town-owned land. Base resource areas have a presence of possible constraints. Possible constraints are conditions that signal the need for mitigation and which may prove a site unsuitable after site specific studies.



Source:
 Wind/Solar Resources - VCGI/CCRPC 2017
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, May, 2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Branigan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

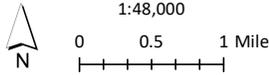
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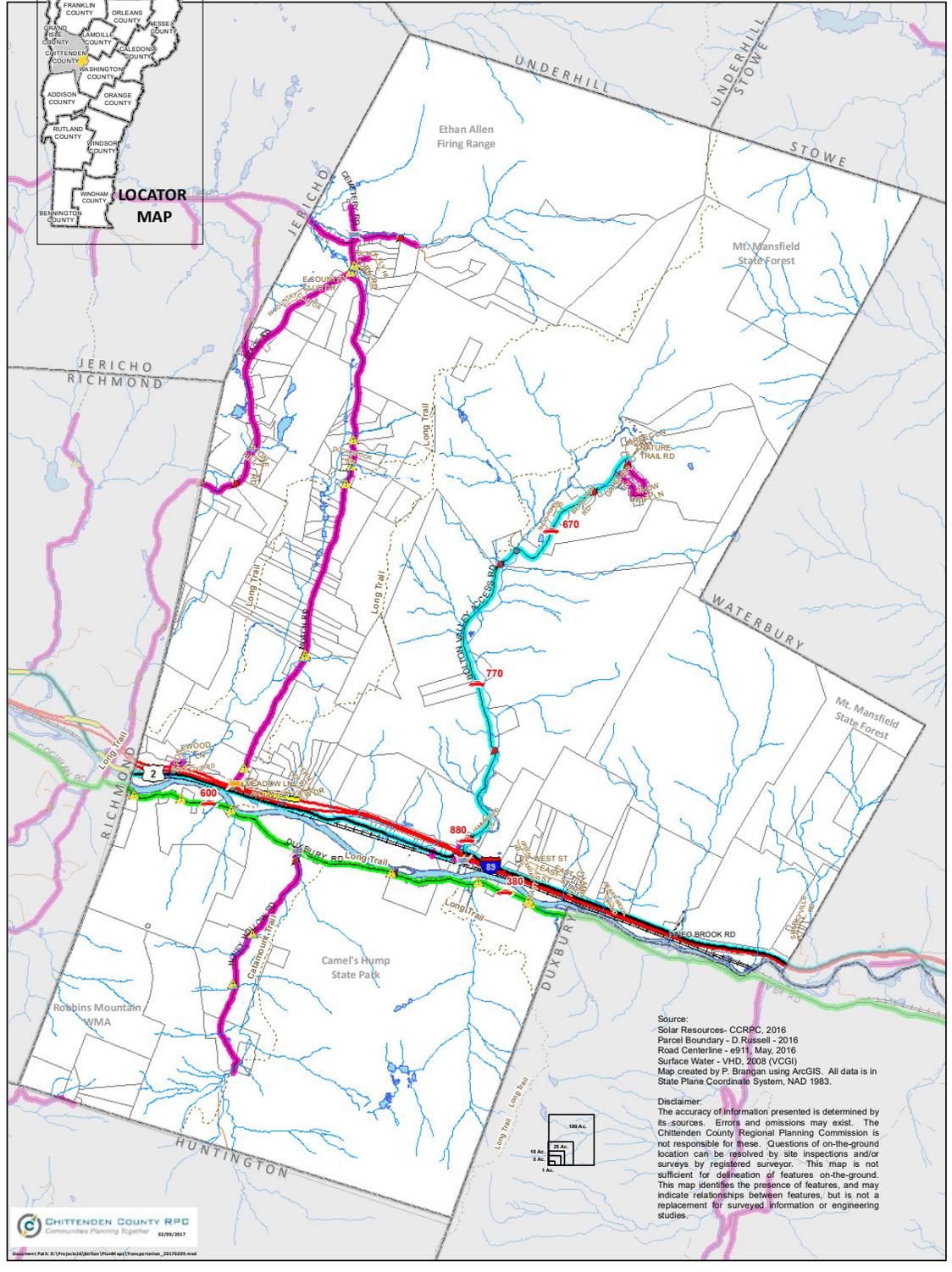
Map 10 DRAFT

Transportation System

BOLTON, VERMONT



- | | | |
|--|--|--|
| <ul style="list-style-type: none"> ● Major Culvert ⊘ Bridge ✂ TIP Bridge/Culvert Work - Construction FY 2019 ⚠ Roads & Bridges - FEMA Public Assistance ⚡ Gully Erosion Present - Road Erosion Inventory 🔥 Annual Average Daily Traffic (2015) ⋯ Trail (Note: Cross VT Trail follows Duxbury Rd) 🚗 2010 - 2014 High Crash Location | <p>Road Class</p> <ul style="list-style-type: none"> 🛣 Interstate Highway - 11.5 miles 🛣 US/State Highway - 5.7 miles 🛣 Class 2 - 8.6 miles 🛣 Class 3 - 12 miles 🛣 Class 4 - 3 miles 🛣 Private/Unknown - 6.4 miles 🛣 Legal Trail | <p>Functional Class</p> <ul style="list-style-type: none"> 🌊 Major Collector (part of Federal Aid System) 🌊 Minor Collector 🌊 Local 🚂 Railroad 🌊 Stream Centerline 🌊 Surface Water 🏠 Tax Parcel Boundary |
|--|--|--|



Source:
 Solar Resources - CCRC, 2016
 Parcel Boundary - D. Russell - 2016
 Road Centerline - e911, May, 2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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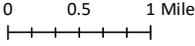
Map 11 Existing Land Use/Land Cover BOLTON, VERMONT



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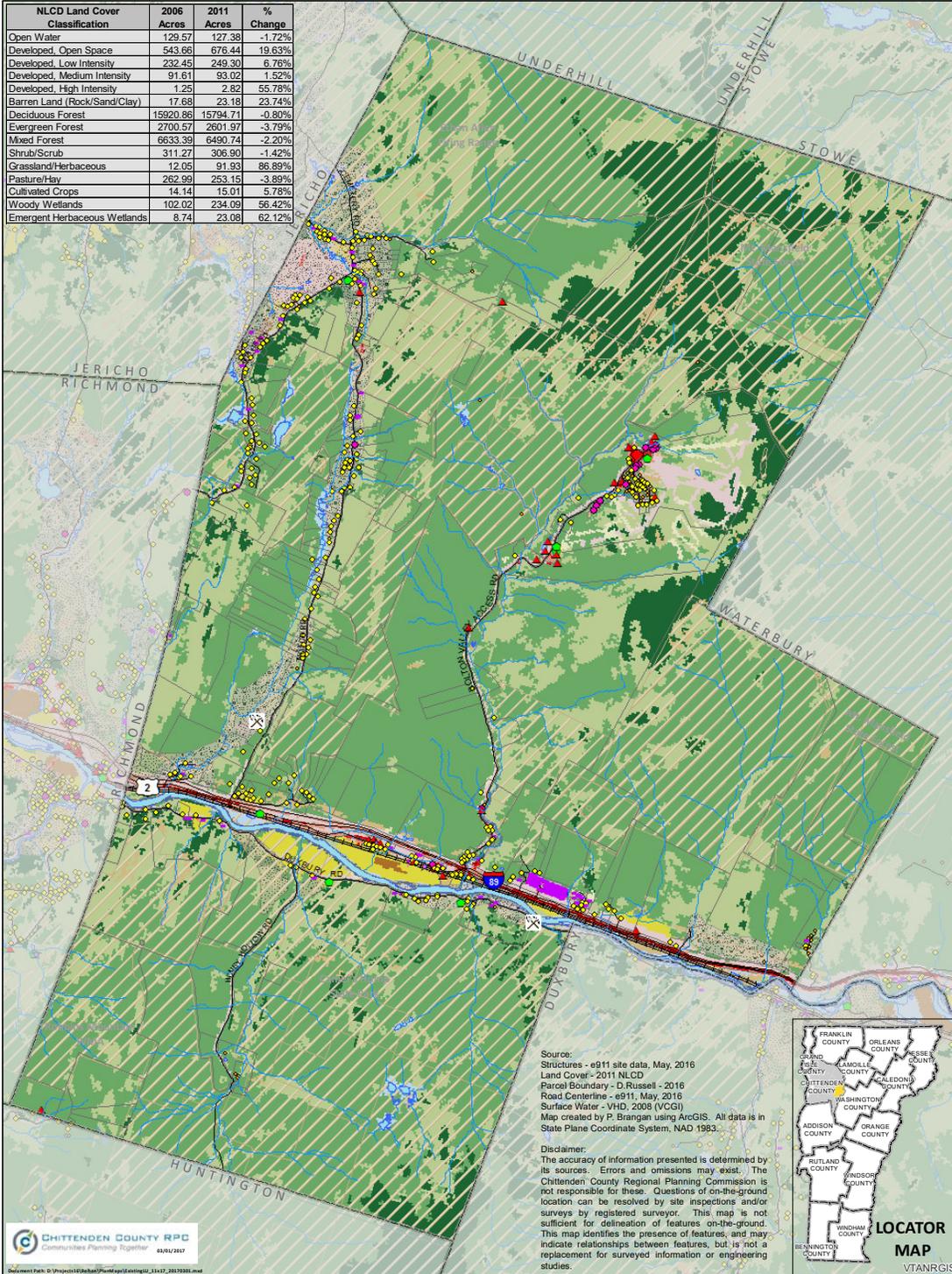
- Single Family Residential
- Multi-Family Dwelling
- Mobile Home
- Camp/Seasonal Home
- ▲ Commercial
- ★ Government/Education
- ★ Public Gathering/Recreation Site
- ✂ Sand & Gravel Pit

- ### 2011 Land Cover
- Open Water
 - Developed, Open Space
 - Developed, Low Intensity
 - Developed, Medium Intensity
 - Developed, High Intensity
 - Barren Land

Legend

- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture Hay
- Cultivated Crops
- Woody Wetlands
- Emergent Herbaceous Wetlands
- Quarry
- Sand
- Sand and Gravel
- ~ Stream Centerline
- Surface Water
- ~ Road Centerline
- ~ Railroad
- Conserved Land
- Tax Parcel Boundary

NLCD Land Cover Classification	2006 Acres	2011 Acres	% Change
Open Water	129.57	127.38	-1.72%
Developed, Open Space	543.66	676.44	19.63%
Developed, Low Intensity	232.45	249.30	6.76%
Developed, Medium Intensity	91.61	93.02	1.52%
Developed, High Intensity	1.25	2.82	55.78%
Barren Land (Rock/Sand/Clay)	17.68	23.18	23.74%
Deciduous Forest	15920.86	15794.71	-0.80%
Evergreen Forest	2700.57	2601.97	-3.79%
Mixed Forest	6633.39	6490.74	-2.20%
Shrub/Scrub	311.27	306.90	-1.42%
Grassland/Herbaceous	12.05	91.93	86.89%
Pasture/Hay	262.99	253.15	-3.89%
Cultivated Crops	14.14	15.01	5.78%
Woody Wetlands	102.02	234.09	56.42%
Emergent Herbaceous Wetlands	8.74	23.08	62.12%

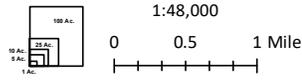


Source:
Structures - e911 site data, May, 2016
Land Cover - 2011 NLCD
Parcel Boundary - D.Russell - 2016
Road Centerline - e911, May, 2016
Surface Water - VHD, 2008 (VCGI)
Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

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Map 12 DRAFT Proposed Land Use BOLTON, VERMONT

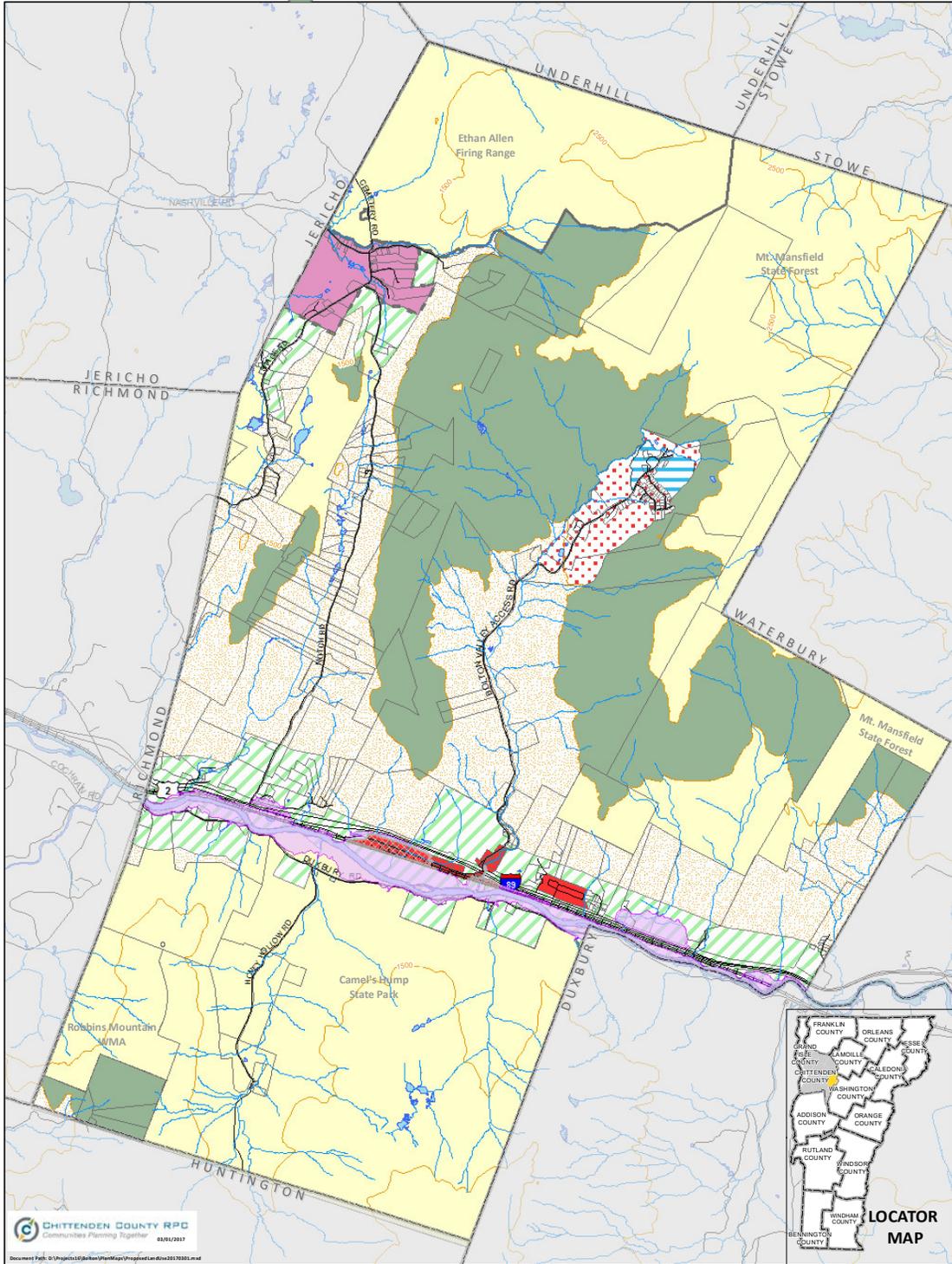


- Proposed Land Use**
- Village - 130 ac.
 - Resort Residential - 368 ac.
 - Resort Village - 85 ac.
 - Proposed West Bolton Hamlet - 350 ac.
 - Rural I - 2,207 ac.
 - Rural II - 5,239 ac.
 - Conservation - 12, 974 ac.
 - Forest - 5,766 ac.

- Flood Hazard Overlay**
- FHO I
 - FHO II
 - 1,500 & 2,500 Ft Contour
 - Tax Parcel Boundary
 - Stream Centerline
 - Surface Water
 - Road Centerline
 - Railroad

Source:
 Future Land Use - 2016, CCRPC
 Parcel Boundary - D.Russell - 2016
 Road Centerline - e911, 6/2016
 Surface Water - VHD, 2008 (VCGI)
 Map created by P. Brangan using ArcGIS. All data is in State Plane Coordinate System, NAD 1983.

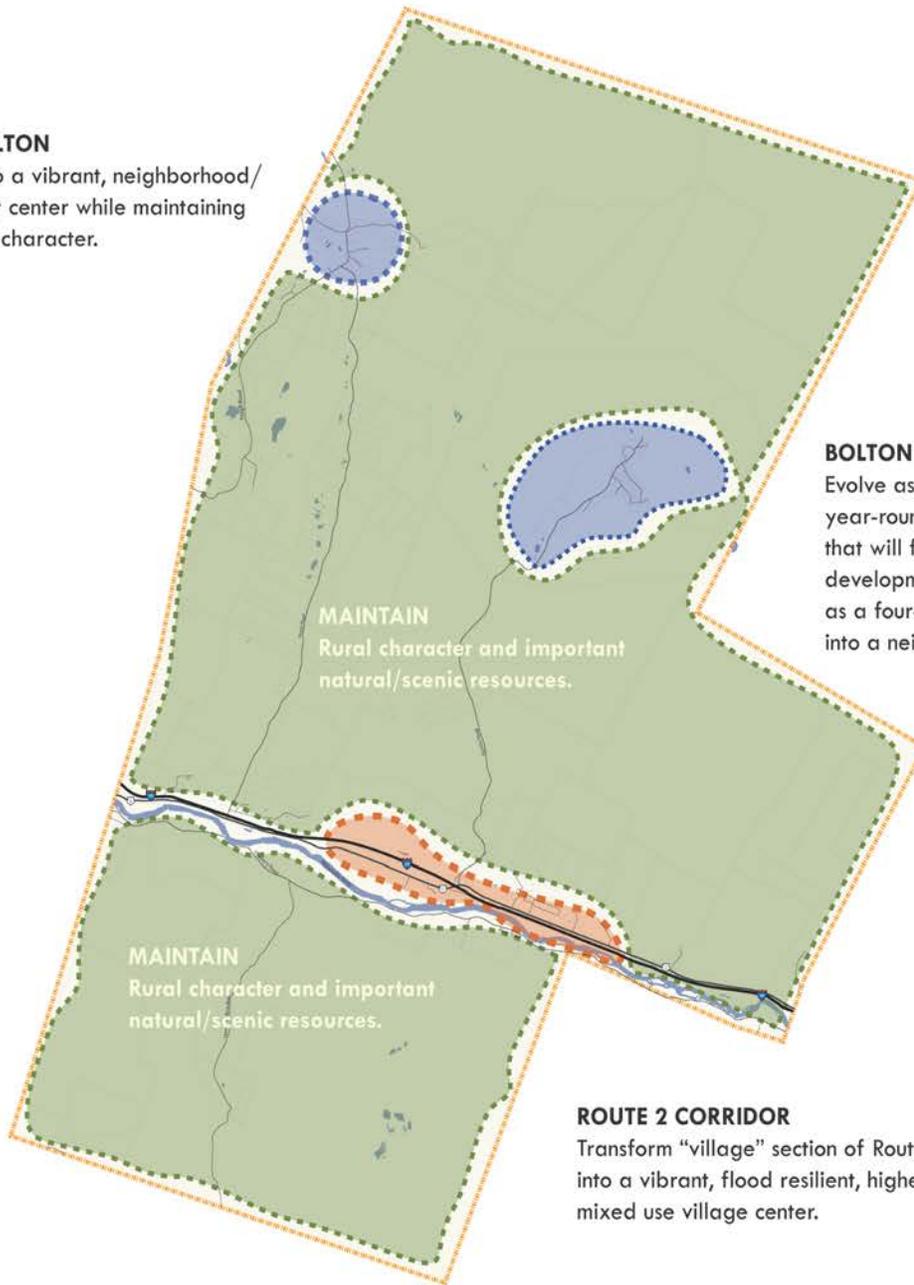
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 03/01/2017
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WEST BOLTON

Evolve into a vibrant, neighborhood/ community center while maintaining its historic character.



MAINTAIN
Rural character and important natural/scenic resources.

MAINTAIN
Rural character and important natural/scenic resources.

BOLTON VALLEY

Evolve as destination for year-round outdoor recreation that will focus on the ongoing development of Bolton Valley as a four-season resort. Evolve into a neighborhood center.

ROUTE 2 CORRIDOR

Transform "village" section of Route 2 into a vibrant, flood resilient, higher density mixed use village center.

Map 13
Maintain, Evolve, Transform
BOLTON, VERMONT



Appendix 2: Documents Incorporated by Reference

Town-Specific Documents

- » [Bolton Community Data Profile](#) (as amended periodically—current draft attached to this document)
- » [Bolton Town Plan Community Engagement Process Results \(2015-2016\)](#)
- » [Bolton Town Plan Hearing Summaries](#)
- » [Bolton All Hazards Mitigation Plan](#) (as updated and adopted every five years)
- » [Bolton Capital Budget and Program](#) (as updated and adopted annually)
- » [Bolton Highway Erosion Inventory \(2016\)](#)
- » [Bolton Local Emergency Operations Plan](#) (as updated and adopted annually)
- » [Bolton Paving, Culvert and Road Sign Inventory \(2016\)](#)
- » [Joiner Brook Watershed: Phase 2 Geomorphic Assessment \(2008\)](#)
- » [Joiner Brook River Corridor Plan \(2009\)](#)
- » [National Register of Historic Places in Bolton \(1999\)](#)
- » [Preston Pond Management Plan \(2016, updated and adopted periodically\)](#)
- » [Protocol for Identification of Areas Sensitive to Landslide Hazards in Vermont \(2012\)](#)
- » [Town Highway Policies](#) (as amended or adopted by the Select Board)
- » [Town Ordinances](#) (as amended or adopted by the Select Board)
- » [Traffic Speed Study for Duxbury and Bolton Valley Access Road \(2015/2016\)](#)
- » [State Register of Historic Sites in Bolton \(1980\)](#)

Regional or Statewide Documents

- » [ECOS Plan \(2013, updated and adopted every five years\)](#)
- » [Science to Action: Four Town Natural Resources Inventory: Bolton, Huntington, Jericho and Richmond \(2013\)](#)
- » [Vermont Natural Resources Atlas](#) (as maintained by the Vermont Agency of Natural Resources)
- » [Winooski River Tactical Basin Plan](#) (as updated in 2017)

Appendix 3: Compliance with Statutory Requirements

Required Items for Municipal Plans as stated in Vermont State Statute 4382. This plan is consistent with the goals established in 24 VSA §4302 and contains all the elements required by state law in 24 VSA §4382(a), as indicated by the Bolton Planning Commission's written report, dated 3/24/2017 and adopted by reference. See the table below that shows the location of the required elements within this plan.

Required Item	Location in Plan
1. Statement of objectives, policies, and programs of the municipality to guide the future growth and development of land, public services and facilities, and to protect the environment...	Located throughout each section.
2. A land use plan, consisting of a map and statement of present and prospective land uses...	Place Chapter, Land Use Section, Page 40, & Maps #11 & #12 in Appendix 2.
3. A transportation plan, consisting of a map and statement of present and prospective transportation and circulation facilities...	Prosperity Chapter, Transportation Section and Map 10 in the Appendix.
4. A utility and facility plan, consisting of a map and statement of present and prospective community facilities and public utilities showing existing and proposed education, recreation and other public sites...	People Chapter, Community Services Section and Prosperity Chapter, Utilities and Facilities Section, and Maps 5 and 7 in the Appendix
5. A statement of policies on the preservation of rare and irreplaceable natural areas, scenic and historic features and resources...	Place Chapter, Historic Bolton and Natural Resources Sections
6. An educational facilities plan consisting of a map and statement of present and projected uses and the local public school system...	People Chapter, Community Services Section and Map 7 in the Appendix
7. A recommended program for the implementation of the objectives of the development plan...	Implementation Chapter
8. A statement indicating how the plan relates to development trends and plans for adjacent municipalities, areas and the region developed under this title...	Appendix 3, Compliance with Statutory Requirements
9. An energy plan, including an analysis of energy resources, needs, scarcities, costs and problems within the municipality, a statement of policy on the conservation energy...	Prosperity Chapter, Energy Section and Maps 8 and 9 in the Appendix
10. A housing element that shall include a recommended program for addressing low and moderate income person's housing needs as identified by the regional planning commission...	Prosperity Chapter, Housing Section
11. An economic development element that describes present economic conditions and the location, type, and scale of desired economic development, and identifies policies, projects, and programs necessary to foster economic growth...	Prosperity Chapter, Economy Section
12. A flood resilience plan that identifies flood hazard and fluvial erosion hazard areas...and designates those areas to be protected...	Place Chapter, Natural Hazards and Resilience Section

Compatibility with Other Plans

The Bolton Town Plan is compatible with the ECOS Plan (the regional plan for Chittenden County) and the municipal plans of all adjoining municipalities.

ECOS Plan: The ECOS Plan establishes broad, high-priority strategies to strengthen the economy, increase resilience, maintain working lands and natural resources, improve health, facilitate access to education, develop efficient finance and governance systems and increase inclusion of all residents in programs. The Bolton Town Plan works towards similar goals on a local level. The ECOS Plan also includes a strategy of striving for 80% of new development to be located in areas planned for growth, which equal 15% of growth. In the 2013 ECOS Plan, the areas identified as being planned for growth in Bolton were the Route 2 Village Area and the Bolton Valley Resort Area. This plan proposes the creation of a new Hamlet District in the West Bolton area, which would increase the amount of area in Bolton that is planned for growth. However, 77% of Bolton is still conserved land, and the creation of the Hamlet District in West Bolton increases the amount of land planned for growth in Bolton to 3.4%. Therefore, the town plan is still compatible with the ECOS Plan. The rest of the town is part of the Rural Planning Area, planned for low density commercial, industrial, and residential development that is compatible with working lands and natural areas. This is compatible with current and planned land use in Bolton.

Duxbury: Most of Bolton's border with Duxbury is included in Camel's Hump State Park. This area is located in Bolton's Conservation District and Duxbury's Ecological Reserve Lands District, both of which prohibit almost all development. The rest of the border lies along the Winooski River, and is located in Bolton's Rural I District and Duxbury's Rural Agricultural II District. Both Districts allow for low-density development, but the presence of the floodplain severely limits development potential on both sides of the river.

Huntington: Bolton's border with Huntington is mostly within the Conservation District due to the presence of Camel's Hump State Park. A small section of the border is within Bolton's Forest and Rural II District and Huntington's Rural Residential and Woodland District, both of which allow for very limited development.

Jericho: Approximately half of Bolton's border with Jericho is located within the Ethan Allen Firing Range. This area is included in Bolton's Conservation District and in Jericho's Open Space District. Almost all development is prohibited in both districts. The rest of the border is split between the proposed Hamlet District and the Rural I District in Bolton, and between the Rural/Agriculture Residential and Forestry Districts in Jericho. The Rural I District in Bolton and the Forestry District in Jericho both allow for limited, low density development. The Rural/Agriculture Residential District in Jericho is intended to provide land for agriculture and forestry while allowing for limited low density development. This district abuts the proposed Hamlet District. However, even with the smaller lot sizes intended in the Hamlet District, Bolton's anticipated rate of growth is approximately 5 homes per year. Therefore, it is unlikely that the increased density will create additional development pressures in Jericho.

Richmond: The land on Bolton's border with Richmond is located within the Conservation, Forest, Rural I and Rural II Districts. In Richmond, the land is all located within the Agricultural/Residential District, which has a one-acre minimum lot size. Lot sizes in Bolton along the Richmond border vary widely. However, given Bolton's development constraints, development in Richmond's Agricultural/Residential District will likely not create development pressures in Bolton. The Bolton Volunteer Fire Department also has a mutual aid agreement with the Richmond Fire Department.

Stowe: Bolton's border with Stowe is located completely within the Mt. Mansfield State Forest. This area is included in Bolton's Conservation District and in Stowe's Ridgelines/Hillside Overlay District, both of which prohibit almost all development.

Underhill: Bolton's border with Underhill is located completely within the Ethan Allen Firing Range. This area is included in Bolton's Conservation District and in Underhill's Soil and Water Conservation District. Almost all development is prohibited in Bolton's Conservation District, and limited development is permitted in Underhill's Soil and Water Conservation District.

Waterbury: Most of the border between Bolton and Waterbury is part of Mt. Mansfield State Forest. All of the land in Waterbury that borders Bolton is in the Waterbury Conservation District, which prohibits most development. Some areas bordering the Mt. Mansfield State Forest in Bolton are in the Forest District, which limits development and is compatible with Waterbury's Conservation District. Along Route 2 and north of it, land in Bolton bordering Waterbury is designated as part of the Rural I and II District, which have lot sizes (2 acres and 10 acres respectively) that are compatible with the Waterbury Conservation District.