

Adopted February 10<sup>th</sup> 2014

# Plainfield Town Plan



*Photo by Jim Thompson*

*The Plainfield Town Plan was first adopted in 1973  
Revised and re-adopted in 1979, 1984, 1994, 2000, and 2007*

## **Plainfield Planning Commission**

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## Introduction

### 1.1 The Planning Process

This document sets out the vision Plainfield residents have for the future of the town and provides a framework to achieve the community's goals and objectives over the next ten years. As a small-sized town close to two urban areas, Montpelier and Barre, Plainfield is more likely to be affected by outside development pressure than to generate growth or impacts affecting other towns. A Town Plan is important to protect the community's interests, retain local control, and encourage desired forms of growth and development. The plan itself has no regulatory authority, it merely expresses the town's consensus on the goals and objectives that regulations should strive to obtain.

The Town Plan is updated every five years to reflect new information and changing needs in the community. It can also be amended at any time to deal with unanticipated changes affecting the town. As the principal policy statement for the Town of Plainfield, it is intended as a guide upon which to base decisions about community issues.

The Plainfield Town Plan should be used for:

- providing information about the community
- serving as a basis for decisions regarding economic development, recreation, land conservation and development
- providing the framework for planning the future of the town
- guiding regulatory actions, such as zoning bylaws, and regulations regarding flood inundation, fluvial erosion, and subdivisions.
- establishing a basis for the review of state and regional programs
- evaluating proposals affecting the community
- guiding Plainfield's relations with neighboring towns and the state

While this plan charts a direction for the town, it is up to its citizens to use the plan to shape Plainfield's future.

### 1.2 The Authority to Adopt the Town Plan

The Plainfield Town Plan was prepared in accordance with Title 24 of the Vermont Statutes Annotated: Chapter 117, The Vermont Municipal and Regional Planning Act.

### 1.3 Town Participation in Writing this Plan

Numerous efforts have been made to encourage participation and formulate the community's goals and objectives. In the summer of 2009, the Select Board received a *Take Charge/Recharge* grant to discuss economic development opportunities for Plainfield. During a similar time period, the Plainfield Planning Commission obtained a planning grant from the Vermont Dept. of Housing and Community Affairs. These grants facilitated a broad discussion of economic development and the long-term health and viability of Plainfield. A steering committee was formed to plan and organize a process for conducting a community-wide conversation. The objectives were to gain input for development of a "vision statement" and to identify potential economic development opportunities.

In March of 2010, over 50 members of the Plainfield community gathered at Twinfield Union School to participate in the process. The input received at these meetings is detailed in the "Plainfield Community Conversation" report published in 2010. The Plainfield Planning Commission followed up on the report with a town survey that was mailed to all residents in the fall of 2010. The reports and surveys are available at the Plainfield municipal building. The Town Plan also reflects input received in writing the 2007 version, which included a town survey and focus group meetings. The Flood Advisory Committee, the Conservation Commission, the Selectboard, and other town organizations all contributed to the writing of the plan. Public Hearings were held by both the Planning Commission and the Select Board.

### 1.4 Coordination with Neighboring Towns

Plainfield shares a number of governmental and social interactions with the neighboring towns. The major link between Plainfield and Marshfield is their shared union school, Twinfield. This unites the two towns on a social and economic level since the largest share of the local tax

revenue goes to the operation of the school. The water and wastewater system that serves the village of Plainfield also serves part of the town of Marshfield. Plainfield is a member of the Central Vermont Regional Planning Commission. The town's fire and fast squad are part of a mutual aid system in Washington County. Twin Valley Senior Center, located at

the School House Common in Marshfield, provides health and wellness programs and meals for the senior citizens of Plainfield. The Plainfield Planning Commission has worked with towns along the Route 2 corridor to develop a commuter van service in conjunction with the Wheels Transportation Network.

<b>The Planning Process</b>		
<b>Goals:</b> Widespread involvement of Plainfield citizens and landowners at all levels of the local planning and decision-making process.		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Provide opportunities for citizen input during planning and decision-making process.	Planning Commission Selectboard	Short Term (within 1 year)
Inform the public of governmental activities through public forums, the Mill Street Park kiosk, direct mailings, Front Porch Forum, local newspapers and Field Notes.	Selectboard Conservation Commission Historical Society Town Clerk	Short Term (within 1 year)
Actively participate in the Central Vermont Regional Planning Commission, the CVRPC Transportation Advisory Committee, and the Regional Planning process.	Selectboard	Short Term (within 1 year)
Provide elected and appointed Town officials with a description of their roles and responsibilities and afford them opportunities to participate in professional training.	Selectboard Town Clerk	Short Term (within 1 year)
Maintain the Town Hall and improve the Municipal Building so that suitably-sized, accessible meeting space is available for the conduct of public business.	Selectboard	Short Term (within 1 year)
Increase the amount of information about Town business and administration on the Town's web site and the timeliness of postings.	Selectboard	Short Term (within 1 year)

## 2| A Vision of Plainfield

### 2.1 Plainfield Today

Plainfield is a small, diverse town with a compact village straddling the Winooski River in its northwest corner. US Route 2, a major east-west artery, cuts through the upper village. In the lower village, gravel roads branch out into the town's hills, offering access to the beauty of Plainfield's open land and long-range views. At 13,500 acres, Plainfield is approximately half the size of neighboring towns.

Previous Town Plans stress the importance of maintaining Plainfield's rural character—a landscape of hills, valleys, fields, and forests. Though only a few farms are still in business, agriculture is strongly supported by its citizens.

Plainfield Village, over the past decade, has grown into a stable neighborhood, attractive to homeowners, renters, and entrepreneurs. New amenities include sidewalks and crosswalks, a public park, tree plantings and public gardens, bicycle racks, historic markers, boat access to the Winooski River, and a Park & Ride. The Green Mountain Transportation Agency's US 2 Commuter offers daily public bus service from the Park & Ride at the east end of Main Street and from the Goddard College Parking lot. (*See Section 8 | Transportation.*) In 2013, construction was completed on an information kiosk at Mill Street Park, and the Main Street Bridge was rewired with replicas of the original lampposts, creating a welcoming gateway into the lower village from US Route 2. There are plans to upgrade the water lines in the upper village.

Currently, the Plainfield Town Hall/Opera House is undergoing restoration, sparking a renewed interest in promoting the performing arts and an appreciation of the village's historic architecture.

Plainfield's Village Historic District represents an intact nineteenth century village. The historic significance is represented by the cohesiveness of the village as a whole rather than just the examples of a few outstanding individual buildings. There are a notable number of brick buildings derived from an early nineteenth

century building tradition using locally sourced bricks. Listings on both the State and the National Register acknowledge the importance of these village buildings and the need to preserve them, but do not restrict the possibilities for the property owners. However, the Town encourages property owners, when they renovate, to be sensitive to historic attributes. The town can provide information about the ways and means of maintaining the integrity of the original design.

Nearly forty homes outside the village are listed on the State Register of Historic Places. There are also a number of historic barns remaining in Plainfield and most are considered an integral part of the rural landscape. Maintenance of these structures can be costly and is often neglected once the barn is no longer used for agricultural use. The Planning Commission has been considering non-traditional uses for these structures to ensure their maintenance and preservation.

Plainfield is home to a restaurant, a food coop, an auto repair business, a bookstore, a furniture store, an antique business, a yoga studio, a café, a jewelry store, retail professional office space, a beer making supply store, a clothing design firm, an art gallery, and a summer farmers' market. (*See Section 11 | Economic Development.*)

During the growing season, the farmer's market is held every weekend at the Mill Street Park. Some of the institutions that enrich community life are Goddard College, The Health Center, the Plainfield Coop's Community Center, the Cutler Library, and the Plainfield Historic Society. Popular annual events include Plainfield Old Home Days and the Halloween Parade. During the 2013 Old Home Day, the Plainfield Fire Department celebrated its 100<sup>th</sup> anniversary.

Enforcement of the noise ordinance and public parking regulations is a problem for the community. Speeding and pedestrian safety continue to be a concern in the lower village, on the back roads, and on US 2. Another major problem is flooding—particularly, the Great Brook. With support from Central Vermont Regional Planning Commission, the Town is addressing these issues.



*Bancroft Inn, now Plainfield Furniture, and Universalist Church, now Town Hall*

## 2.2 Plainfield's Past

Plainfield's first visitors were most likely from the Abenaki and Cowasuck Native American tribes who traveled along the river. Surveyors employed by the colony of New York were probably among the first white settlers to pass through Plainfield in 1773. In 1788, Plainfield, a land grant left over from neighboring surveyed townships, was called St Andrew's Gore. The first settlement occurred in 1791. In 1797, the legislature granted the petition to incorporate the town as Plainfield, but it wasn't until 1867 that the village became incorporated. In 1812, more than a dozen families had settled in the village and a commercial center was forming by the falls on the Winooski River, south of the Main Street Bridge. The falls provided the principal power source for Plainfield's mills. A sawmill and gristmill on Brook Road gave rise to a secondary commercial center called Perkinsville. In 1860 there were 157 dwellings in Plainfield-107 in the hills and 50 in the village. The typical farm size was 130 acres. Farmers worked with a pair of horses or oxen and grew diversified crops of wheat, rye, Indian corn, and oats.

A new era began in 1873 when the Montpelier and Wells River railroad track reached Plainfield. In 1889, the town mill cut between two and three million board feet of lumber a year and ground 600-800 bushels of grain a day with a work force of 30 men. Stores for hardware, dry goods, paints, shoes, and groceries; and the services of blacksmiths, shoemakers, dressmakers, jewelers, veterinarians, mechanics and physicians were all

available. Seventy percent of the land had been cleared. The village hotel served overland East and West travelers and, in the summer, provided an overnight post for tourists on their way to the "Spring House" in Perkinsville. Several village homes were altered to provide housing for the mill and railroad workers. Rail cars shipped cheese, butter, potatoes, sheep, and cattle to the south. The town had a creamery, two farm machinery dealers, four builders, two livery stables, eleven merchants, and fourteen manufacturers, mechanics or artisans. The total town population was about 750 people.

Plainfield Village growth and prosperity continued into the twentieth century. Electricity came to the village in 1906. The town's first ice merchant and the first dentist set up trade in 1915. In 1916, F. J. Bancroft erected a sawmill beyond the railroad station to cut ash lumber for tennis stock and dowels. The Plainfield Garage opened in 1923 to service the new automobiles in town. The Goddard Seminary completed its move from Barre to Plainfield in 1938. The railroad ceased operation in 1956 when trucks started to replace trains in transporting milk to the market.

## 2.3 Recent History

Consolidation is a common theme in Plainfield and throughout Vermont during the second half of the 20th century. Milk cans were replaced by bulk storage tanks, allowing farmers to keep their milk cool on site while waiting for pickup by milk tanker trucks. As the industry rushed to consolidate, small dairy farms failed and larger farms, willing to invest in technology, survived.

The Vermont legislature was going through a process of consolidation as well. In 1791, the Vermont Constitution established a House of Representatives consisting of one lawmaker for each of the State's 246 towns. Burlington had the same number of representatives as Plainfield. This system, which clearly favored small towns and rural interests, changed in 1964, to comply with the US Supreme Court Ruling that representation must be based on population. In 1965, Vermont lawmakers created a new 150-member House with districts based on population.

Plainfield government went through a consolidation as well. Plainfield Village and Plainfield Town had two separate governance structures with many overlapping interests and conflicts. In 1985, the Village Government was dissolved by Town Vote. There was also a statewide trend to replace individual schools with one large facility. Plainfield and Marshfield residents voted to build one school for both towns: Twinfield Union School (TUS), serving students in grades K-12. More than any other shared resource, TUS creates a bond between the two towns, particularly through sports and cultural events.

One of the more significant developments over the past fifty years is the growth, decline and re-emergence of Goddard College. (*See Chapter 7 | Facilities.*) In the late 1960's, Goddard employed approximately 350 people; as it's student population peaked. Single-family homes were converted into apartments to provide student housing. During the school year, the village population doubled. Cultural and political differences between Goddard students and Plainfield residents were common.

The decline in Goddard's enrollment in the late 1970's had a negative economic impact on the town. However, many student apartments became part of the village's affordable housing infrastructure. The school introduced many out-of-state students to the area. Some decided to stay and purchase homes and land.

Since the beginning of the 21<sup>st</sup> century, there have been consistent and permanent improvements to Plainfield's infrastructure: 2002, Mill Street Park; 2003, sidewalks on the north side of US Route 2 and on Main and Mill Street; 2005, a Park & Ride. In the past, Plainfield Village was recognized by the Vermont Department of Housing and Community Development as a Designated Village Center. The Town is planning to regain this status following approval of this Town Plan. Becoming a Designated Village Center would provide citizens with resources to protect and improve the appearance, safety, and accessibility of historic homes and commercial

buildings. It would also assist the Town with financing infrastructure improvements. With this designation, Plainfield will be eligible for tax credits for community projects (25% for façade improvements; 50% for code improvements) and will be given priority status for certain grants (HUD, CBDG, and Municipal Planning). The Town will be able to create a Business Improvement District and to raise funds for operating and capital expenses for projects within that District.

Plainfield values walkable diverse neighborhoods that are mixed-use, have enough public space, are developed in a context-appropriate way, and move toward sustainability with proper respect given to land owners.

**Plainfield Vision**

**Goals:** The Town shall foster appreciation for Plainfield’s culture and history, its rural character, and it’s human and natural resources. Encourage economic development in keeping with Plainfield tradition of providing local services, while building on its well-earned reputation as a hub for artists and craftspeople.

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Help land owners access programs with information/resources on how to make renovations compatible with the historic period of the structure (including barns).	Historical Society Zoning Administrator	Near Term (within 1-3 years)
Encourage the permanent protection of farmland and important natural resource areas through conservation easements or comparable deed restrictions and by facilitating communication between interested landowners and conservation organizations to preserve the working landscape.	Conservation Commission	Near Term (within 1-3 years)
Support Plainfield revitalization groups such as the Plainfield Area Community Association, the Town Hall Revitalization Committee, and the Plainfield Historical Society.	Selectboard	Short Term (within 1 year)
Obtain a Designated Village Center status in order to provide financial incentives for property owners to make building façade and code improvements, obtain grants, and make a Downtown Business Improvement District possible.	Planning Commission	Near Term (within 1-3 years)
Continue to organize Old Home Day celebrations, seeking the widest possible community participation.	Fire Department Selectboard Historical Society	Short Term (within 1 year)

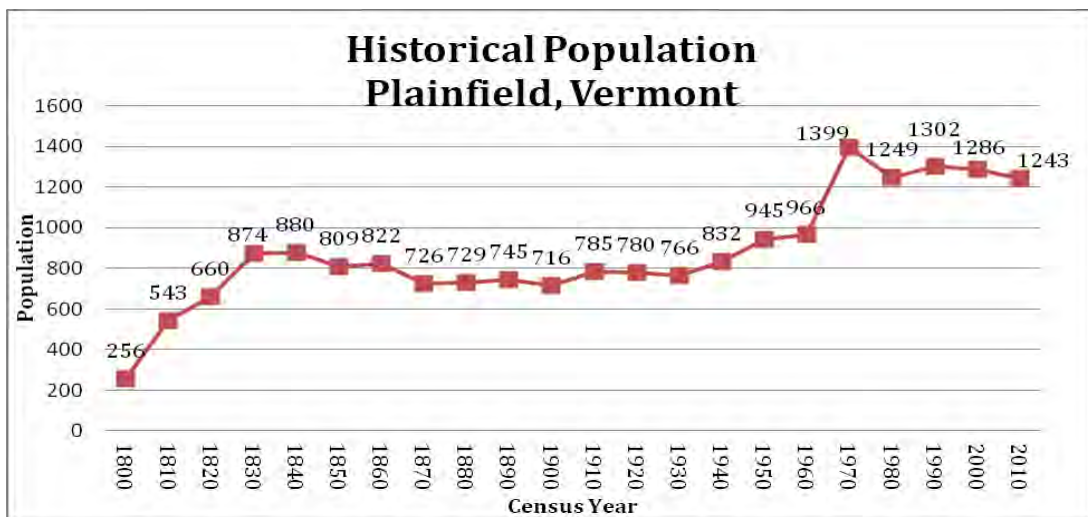


### 3| Community Profile

Plainfield's population has generally followed the same growth pattern as that of most Vermont communities. The town's population peaked in 1840 with 880 residents and gradually declined to 716 in 1900. Since the beginning of the 20th century, the number of Plainfield residents has steadily increased, exceeding its 1840 population peak in 1950, to a historic high in 1970 of 1,399.

The 45% increase in Plainfield's population between 1960 and 1970 may be related to the expansion of Goddard College. Plainfield's population today is about 8% less than its historical high, roughly corresponding to Goddard's decline in enrollment. (See Chart 3.1.)

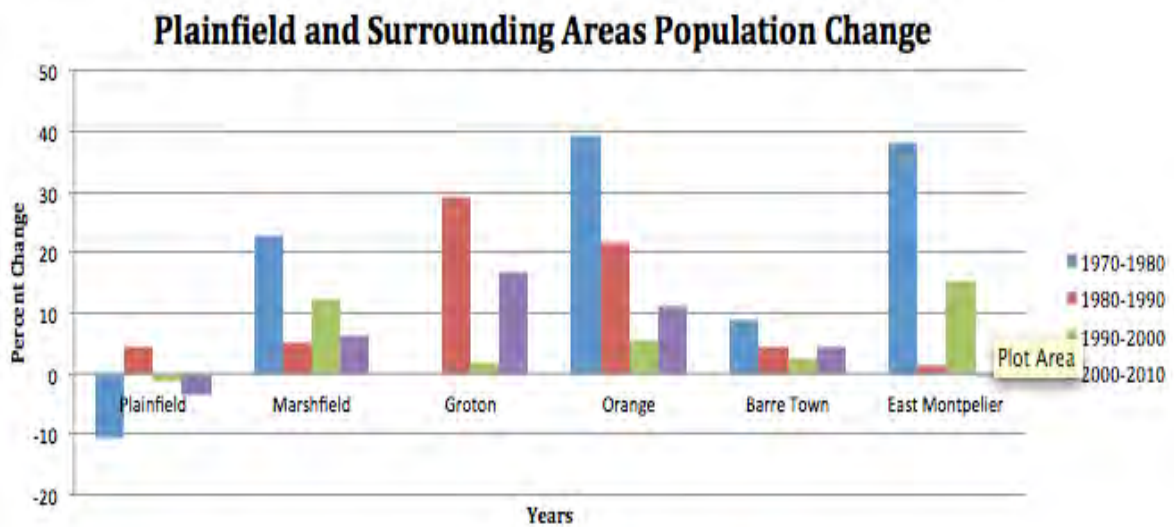
Chart 3.1



The Central Vermont Regional Planning Commission contracted with Economic and Policy Research Inc. (ERPI) of Williston, Vermont to prepare economic and demographic forecasts for towns in the region through 2020. According to ERPI's forecast, Plainfield's population will increase to 1,306 people (up 20 people) by 2015, an average annual rate of growth of 0.1%.

Most of the neighboring towns have experienced steady population growth in the last decade. Plainfield is the lone exception with a slight decrease in population since 1990. (See Chart 3.2.)

Chart 3.2



**The 2010 U.S. Census shows that Plainfield has lost roughly 3% of its population over the past decade. (See Chart 3.3.)**

Chart 3.3

<b>2010 Population Characteristics</b>	
Plainfield's population	1243
Population density	53.5 acre per capita
Absolute Population Change	-43
<b>Percent Population Change from last census</b>	<b>-3.34%</b>
Natural Increase	68
Net Migration	-111
Number of Families	319
Average Family Size	2.91 person
Median Age	42.2 years
Non family households	209
Total Children in Single Parent Families	36
Total Households	528
<i>Source: 2010 US Census</i>	

Chart 3.2

<b>Community Profile</b>		
<b>Goal:</b> Accommodate a diverse, sustainable population that does not overburden community facilities, services or the Town's natural and cultural resources.		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Encourage, through land use and housing goals and policies, a socially and economically diverse population that includes families with children, young adults who grew up in the community, senior citizens, and those new to town.	Planning Commission	Short Term (within 1 year)
Regularly monitor population and housing estimates along with annual permit data to identify correlation between housing development and population growth.	Planning Commission	Long Term (within 5 years)
When appropriate the Town will exercise party status in the Act 250 development review process and other state regulatory proceedings to ensure that the Town's growth needs and limitations are properly addressed relative to this plan.	Planning Commission Selectboard	Short Term (within 1 year)
Develop and implement plans for the repair, maintenance and improvement of municipal water and wastewater systems.	Water and Wastewater Commission	Short Term (within 1 year)
Develop and implement plans for the repair, maintenance and improvement of the Town Recreation Field.	Recreation Committee	Short Term (within 1 year)

## 4| Natural Environment

Residents and visitors alike value Vermont’s natural beauty and rich biological diversity. Town planners should be proactive to ensure the protection of Plainfield's natural environment while balancing conservation of plant and animal species with the economic diversity and viability of the town itself.

Habitat loss (e.g., degradation, fragmentation, etc.) is the single greatest threat to Vermont’s biological diversity. Protection of habitat offers long-term benefits beyond species conservation; it includes attention to storm water runoff, soil stabilization, and opportunities for recreation.

As our land-based culture =farming and forestry, hunting and fishing=declines, resource conservation is vital to ensure protection of the natural environment.

### 4.1 Climate

According to 2012 data collected at the Knapp Airport in Berlin, the total melted annual precipitation is 34 inches of which 96 inches falls as snow. The number of days with any measurable precipitation is 143. On average, there are 160 sunny days per year in Plainfield. The July high is around 78 degrees. The January low is 7. See Chart 4.1.

Chart 4.1

Rainfall (in.)	34.4
Snowfall (in.)	96.4
Precipitation Days	143
Sunny Days	160
Avg. July High	78
Avg. Jan. Low	6.7
UV Index	2.9
Elevation ft.	1,152

Much attention has been given to global climate change in recent years. The effects of climate change are already evident in Vermont, including more intense storms linked to rising average temperatures. Over the next 50 years, climate change models have projected that the average temperatures in the state will increase five to nine degrees Fahrenheit. Such an increase would reduce the number of months with average low temperatures below freezing from the current six to four, and increase the number of months with average highs above 80°F from two to three or four. Climate change is expected to alter the frequency and magnitude of storm events, rain-

on-snow events, ice storms, and even the timing and frequency of droughts. Climate change is also expected to alter the town’s natural environment by changing the plant species that can thrive in Plainfield, the migrating patterns of birds, the timing of the budding and flowering of plants, the temperature of rivers and ponds, and countless other changes throughout the interconnected web of life.

Greenhouse gas emissions associated with human activities are contributing to changes in the climate, both here in Vermont and globally. As a state, Vermont has established aggressive goals of reducing emissions from 1990 baseline levels as follows: 25% by 2012; 50% by 2028; and, if practicable using reasonable efforts, 75% by 2050.

Air pollution emissions in rural areas like Plainfield tend to be dominated by “area sources” (for example: residential heating, road dust, agricultural, consumer solvent use, open burning, etc.), and “mobile sources” (e.g. Cars, trucks, lawn & garden equipment, etc.) To our knowledge, there are currently no significant “point sources” of air pollution in Plainfield. Point sources include large industrial facilities and electric power plants, but also increasingly include many smaller industrial and commercial facilities, such as dry cleaners and gas stations.

If climate change proceeds as currently anticipated, the climate and natural environment in Vermont will become more like that of the mid-Atlantic region by the end of the 21st century. For many years, Vermont has been a winter tourism and recreation destination, but climate change has the potential to undermine this critical component of our economy.

A changing climate will bring dramatic social, economic, and environmental change. Plainfield should anticipate these changes and take steps to enable our human and natural communities to adapt as effectively as possible by supporting diversification of the local economy and take actions to limit future emissions of climate changing air pollutants. Maintaining a connected

network of forests and natural cover is a critical step in allowing for plant and animal movement in response to this changing climate.

#### **4.2 Surface Water**

A number of small (less than ten acre) ponds, both natural and man-made, are scattered throughout the town. The largest in Plainfield is Bancroft Pond, a 14-acre shallow pond located at the intersection of East Hill Road and Bancroft Pond Road. The shoreline of the pond is undeveloped except for a single camp on the north shore. The wetland areas adjacent to Bancroft Pond provide excellent wildlife habitat. Ducks, geese, otter, beaver, snowshoe hare, and coyote are among the many species of birds and mammals in the wetlands and on the water of the pond. Uses of the pond include warm-water fishing, canoeing, bird watching, and in the winter, skating. Due to the pond's shallowness, it is not used for swimming.

Surface water runoff can cause erosion and damage during heavy rains, which are anticipated to occur with increasing frequency. Managing this erosion and subsequent damage outside the larger watersheds will be an important part of the town's future infrastructure needs. Part of this should take place in the village by updating and maintaining the storm water system and part needs to take place along the roads by continually upgrading culverts and drainage management. New driveways and road entrances should be designed to minimize erosion and possible damage to Town roads.

The rivers, streams and brooks of Plainfield are important features in Town. The Winooski River is one of Vermont's largest. The Winooski flows east to west through Plainfield, shaping the landscape and influencing land use in the village.

Plainfield residents and others use the Winooski River for canoeing and kayaking from the dam upstream. There is a newly designated boat portage site located behind the Plainfield Coop, maintained by The Friends of the Winooski. The river is used for swimming above the sewage treatment plant. Along the river are several high,

unstable riverbanks that provide unique habitat for kingfishers and cliff and bank swallows.

Plainfield (like many other towns) discharges its treated wastewater into the Winooski River. (*See Section 7 | Facilities, Utilities & Services*). The State of Vermont classifies the Winooski as Class B for one mile downstream of the sewage treatment plant discharge. This means that for one mile downstream of the sewage treatment plant, the river is considered unsuitable for swimming, fishing, or drinking— although it is suitable for limited agricultural or industrial water supply and habitat for aquatic species, fish and wildlife.

Checkerberry Brook originates at Bancroft Pond and flows west for several miles to Great Brook. In May 2007, the beaver dam at the mouth of the pond broke open, draining the pond to several feet below its usual level and causing considerable damage to Fowler and Brook roads.

Potter Brook originates in the southeastern portion of L.R. Jones State Forest and flows in a northerly direction, eventually entering Nasmith Brook which flows into the Winooski River in Marshfield.

In addition to these named watercourses, six unnamed tributaries to Great Brook and two unnamed tributaries to the Winooski River are shown on the USGS topographic maps for Plainfield.

The Great Brook, a tributary of the Winooski River, bisects the town from south to north. The Great Brook and all of the brooks and streams in Plainfield (except for the Winooski River) are designated by the State of Vermont as "Class B" waters. Class B waters are managed by the State of Vermont to maintain a high-quality habitat for fish, wildlife, and other aquatic species, as well as a variety of important human uses. The classification of the water quality fluctuates greatly with the amount of water in the rivers and streams at any one time. The Town strives to maintain the highest water quality with the resources available.

Damaging floods are known to have occurred in the Great Brook watershed in July 1857, April and October of 1869, November 1927, September 1938, June 1973, June 1989, August 1990, September 1999, and most recently, in May and August of 2011.

During the evening of May 26, 2011, a series of intense thunderstorms swept across central Vermont, resulting in a period of intense rainfall. The National Weather Service cooperative weather station at Plainfield had a storm total of 5.22 inches, the highest of all reported totals for this event. The rain began after 7PM and most of the total had fallen by midnight. As the snowpack had been heavy in the late winter and April and May had been very rainy, the ground was already saturated. The Great Brook responded rapidly to the downpour, cresting in the village sometime around 2AM. The Winooski River took longer to respond, reaching its crest at Plainfield sometime between 6 and 7AM. Heavy erosion occurred on the banks of the streams in town, destabilizing the slopes in many locations. Erosion was especially severe along Great Brook from the village up to about Maxfield Road. This led to landslides, which in turn resulted in many trees falling into the brook. Damage in Plainfield and surrounding towns was extensive, with all of Plainfield's roads sustaining moderate to severe damage. The first bridge on the Brook Road (Town Highway Bridge 21) clogged with debris and washed out the Brook Road on the east side. A long stretch of Brook Road just downstream from the intersection with Fowler Road was washed out and took several weeks to repair.

The second flooding in 2011 was the result of Tropical Storm Irene. The rain began in Plainfield late on the evening of August 27<sup>th</sup> and ended around midnight on the 28<sup>th</sup>. Although damage in Plainfield was quite limited in comparison to many towns in Vermont, 5.12 inches fell within 24 hours at Plainfield and the streams rose to dangerously high levels. The flow on the Great Brook peaked in the late afternoon of the 28th. A debris jam had begun to accumulate upstream of Town Highway Bridge 21 on the

Brook Road, but it broke up and there was no repeat of the May washout. A small bridge higher up on the Brook Road (Bridge 13, the first one upstream of the Lee Road intersection) clogged with debris and sent water across the road. There were numerous washouts along the roads and several important culverts were washed out, but no major bridges went out. The banks of the Great Brook were again eroded and slopes were further destabilized.

Costs to the Town for road repairs from these two storms totaled \$504,021. The costs from the May storm along Brook Road alone exceeded \$184,652, the bulk of which was the cost of the major washout near the bottom of Fowler Road.

After the May flood, the Selectboard appointed a Flood Advisory Committee to study existing conditions and ways to manage the hazards associated with the Great Brook. The committee met several times between August of 2011 and June of 2012 and has made a series of recommendations, summarized in the Flood Advisory Committee Report. Several of these recommendations have been incorporated into this Town Plan

#### 4.3 Wetlands

Wetlands are those areas of town inundated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands contain types of soils and plants that act as natural filters, removing many potential pollutants from runoff as it flows into streams, rivers, and ponds. The removal of



nutrients, especially phosphorus, from water flowing into rivers and ponds, is one of the most beneficial water quality functions of wetlands in rural and agricultural areas. Wetlands are among the most productive natural systems in Vermont and provide critically important habitat, food, and protection to numerous species of birds, mammals, amphibians, and fish. Common in the wetlands and adjacent waters of Plainfield are spring peepers, red-winged blackbirds, snipe, warblers, beavers, snowshoe hares, and many other species. Forty-six of Plainfield's wetlands are included on the National Wetlands Inventory (NWI) maps, which were prepared by interpreting 1977 aerial photographs. These wetlands identified on the NWI maps are considered "significant" by the State of Vermont for the functions and values they provide and are protected under the Vermont Wetland Rules as "Class Two" wetlands.

Wetlands are especially important in watersheds that are subject to flooding during storms. During storms, wetlands store water and slow down its rate of flow; they release that water slowly, thus lowering the flood peak and the volume of water flowing in the streams and rivers. By reducing the stream's volume and velocity, wetlands reduce stream bank erosion and thus help reduce the destruction of land and property.

In fall and winter or with the meltwater and runoff of winter and spring snow and rain, vernal pools fill with water. By late summer, vernal pools are generally dry. Their periodic drying keeps them free from populations of predatory fish. This reduced-predator environment supports local and regional biodiversity by serving as essential breeding, nursery, and feeding grounds for several species, such as spotted salamanders and wood frogs, and unique invertebrates, such as fairy shrimp, organisms which have evolved to use a temporary wetland where they are not eaten by fish. These organisms are the "obligate" vernal pool species, so called because they must use a vernal pool for various parts of their life cycle.

#### **4.4 Groundwater**

Homes in the Village that are served by the Plainfield Water Department and those that are served by dug or drilled wells are dependent on

groundwater sources. The importance of ground water to residents of Plainfield cannot be overstated. So dependent is the community on groundwater sources for water supplies, that protection from depletion or pollution of the ground water should be a priority. Failed septic systems, road salt, and illegal disposal of waste such as used oil, antifreeze, household chemicals, pesticides or household trash can pose risks to existing or future ground water supplies. The amount of water supplied by a well can vary, depending on a variety of factors. Data from well reports filed with the Vermont Agency of Natural Resources for 180 wells drilled in Plainfield between 1967 and 1997 indicate that most of the high yield wells ( $\geq 20$  gallons per minute) are less than 300 feet in depth. At greater depths, the cracks in the type of bedrock found in Plainfield tends to be under such great pressure that they are very closed down and little ground water flow can occur. Historical evidence indicates that wells with depths to bedrock greater than 100 feet rarely have very high yields. This may be due to the dense till or silty clay present above bedrock, both of which are quite impermeable and may reduce groundwater recharge in the bedrock.

#### **4.5 Physical Landscape**

Several times over the last 1.8 million years our region was covered by large continental ice sheets, which scraped away much of the loose soil and sediment as they advanced, and left behind a variety of sedimentary deposits which have served as the raw materials for the soils of the present day. The most common material is glacial till, which is a mix of grain sizes, from boulders down to silt and clay. Much of the glacial till in the Plainfield area is rich in silt and a little clay and is quite hard when freshly exposed (a common name for this is "hardpan"). This sort of till is fairly resistant to erosion. Till which has less silt and more sand is very susceptible to erosion. The type of soil in any given area is dependent upon the underlying bedrock or glacial deposits, vegetation, topography, climate and time.

The Plainfield landscape can be divided into three regions: the eastern hills, the western hills, and the Winooski River Valley. The eastern hills have



rather conical shapes and are underlain by granite bedrock. Spruce Mountain, Colby Hill, and the unnamed hill southwest of Spruce Mountain are the major peaks. The western hills are irregular in shape and are underlain by metamorphic bedrock such as phyllite, schist, and metamorphosed limestone. They extend from the vicinity of Bancroft Pond westward to the Winooski River Valley.

An important factor affecting the suitability of land for development is elevation; at higher elevations soils tend to be thinner, erosion more extensive, and vegetative cover more sparse. Steep slopes and high elevations are generally unsuitable for many types of development, posing serious limitations to sewage disposal and increasing the potential for soil erosion as well as increasing construction costs for a project.

#### **4.6 Natural Communities**

Plainfield has dozens of distinctive natural communities, from early successional fields (with shrubs and/or sapling growth), to coniferous and deciduous forests, streams, ponds, grasslands and wetlands. They can be found throughout the town. Some—like early successional fields—are very common; others, such as grasslands and wetlands, are scarcer as more homes are built and lawns expand in size. One type of community, Rich Northern Hardwood Forests, can host not only scarlet tanager and wild turkey, but also white-tailed deer and red-backed salamander, maidenhair fern, and ginseng—a full range of living things. The term natural community is used to describe a suite of species that convene in the landscape under the specific environment of conditions (such as soil, climate, and water). One reason landscape diversity is important is because many species rely on more than one community type to meet their habitat needs. A mix of open and wooded land creates excellent habitat for many mammals such as deer, fox, coyote, woodchuck, chipmunk, skunk, shrews, and mice. Red-tailed hawks, kestrels, turkeys, flickers, flycatchers, and bluebirds are some of the birds that rely on the mix of forested and open land.

Plainfield also includes a variety of uncommon significant natural communities, such as Montane Spruce Fir and Northern White Cedar Swamps. These add to the overall biological diversity of species and communities present in Plainfield.

## Wildlife present in different sized Forest Patches

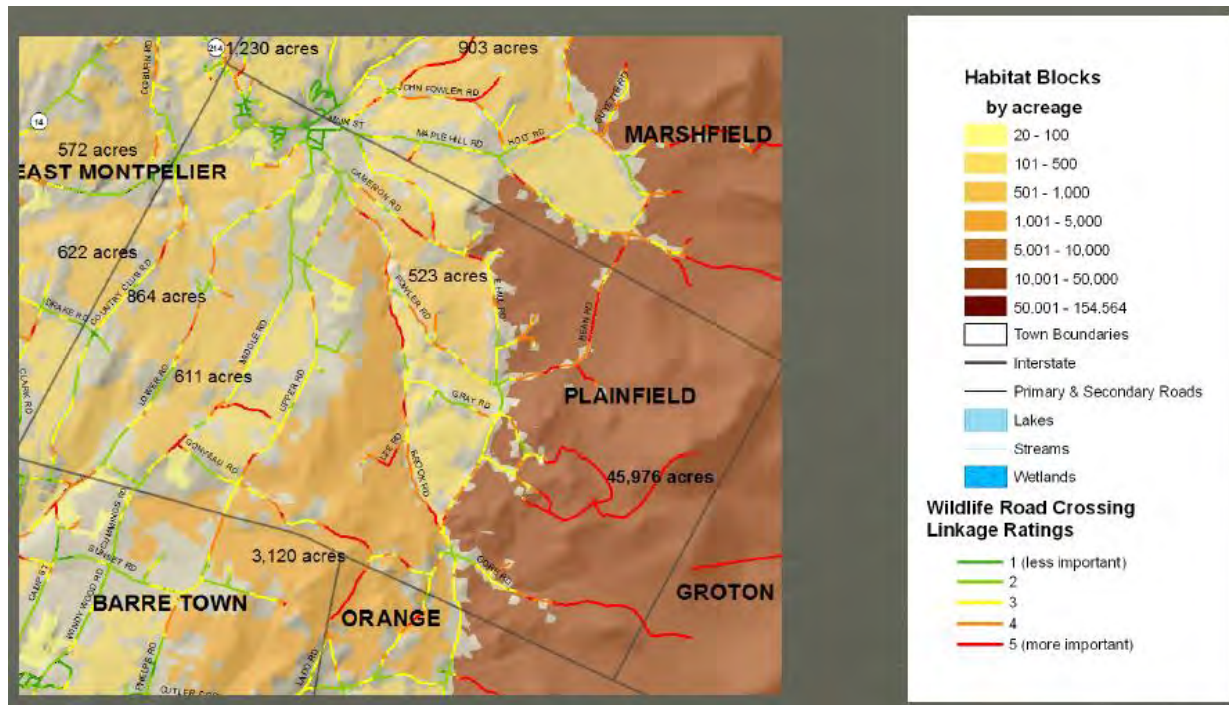
Tier 1 <i>Undeveloped</i>	Tier 2 <i>500-2500 acre blocks</i>	Tier 3 <i>100-500 acre blocks</i>	Tier 4 <i>20-100 acre blocks</i>	Tier 5 <i>1-20 acre blocks</i>
Raccoon	Raccoon	Raccoon	Raccoon	Raccoon
Hare	Hare	Hare	Hare	
Coyote				
Small rodent	Small rodent	Small rodent	Small rodent	Small rodent
Porcupine	Porcupine	Porcupine	Porcupine	
Bobcat				
Cottontail	Cottontail	Cottontail	Cottontail	Cottontail
Beaver	Beaver	Beaver	Beaver	
Black bear				
Squirrel	Squirrel	Squirrel	Squirrel	Squirrel
Weasel	Weasel	Weasel	Weasel	
Mink	Mink	Mink		
Fisher				
Woodchuck	Woodchuck	Woodchuck	Woodchuck	
Deer	Deer	Deer	Deer	
Muskrat	Muskrat	Muskrat	Muskrat	Muskrat
Moose				
Red fox	Red fox	Red fox	Red fox	Red fox
Songbirds	Songbirds	Songbirds	Songbirds	Songbirds
Sharp-shinned hawk	Sharp-shinned hawk	Sharp-shinned hawk		
Bald eagle	Bald eagle			
Skunk	Skunk	Skunk	Skunk	Skunk
Cooper's hawk	Cooper's hawk	Cooper's hawk		
Harrier	Harrier	Harrier		
Broad-winged hawk	Broad-winged hawk	Broad-winged hawk		
Goshawk	Goshawk			
Kestrel		Kestrel		
Red-tailed hawk	Red-tailed hawk			
Horned owl	Horned owl	Horned owl		
Raven	Raven			
Barred owl	Barred owl	Barred owl		
Osprey	Osprey	Osprey		
Turkey vulture	Turkey vulture	Turkey vulture		
Turkey	Turkey	Turkey		
Reptiles	Reptiles	Reptiles		Most Reptiles
Garter snake	Garter snake	Garter snake	Most Reptiles	
Ring-neck snake	Ring-neck snake	Ring-neck snake	Garter snake	
Amphibians	Amphibians	Most Amphibians	Ring-neck snake	
Wood frog	Wood frog	Wood frog	Most Amphibians	

From Above and Beyond." Campoli, J., Humstone, E., & MacLean, A. 2002.

scarlet tanagers that require large areas of unbroken forest for survival.

### 4.7 Contiguous Forest

Contiguous forest habitat supports native plants and animals, including those species like bobcats and black bears that require large areas to survive. Such habitat, together with other important habitats such as wetlands, also supports natural ecological processes such as predator/prey interactions and natural disturbance. It also serves to buffer species against the negative consequences of fragmentation. These areas are likely to include considerable biological diversity given their size. These areas are used by mammals with large home ranges such as black bear and fisher, as well as as forest "interior" species like great horned owls, warblers, and



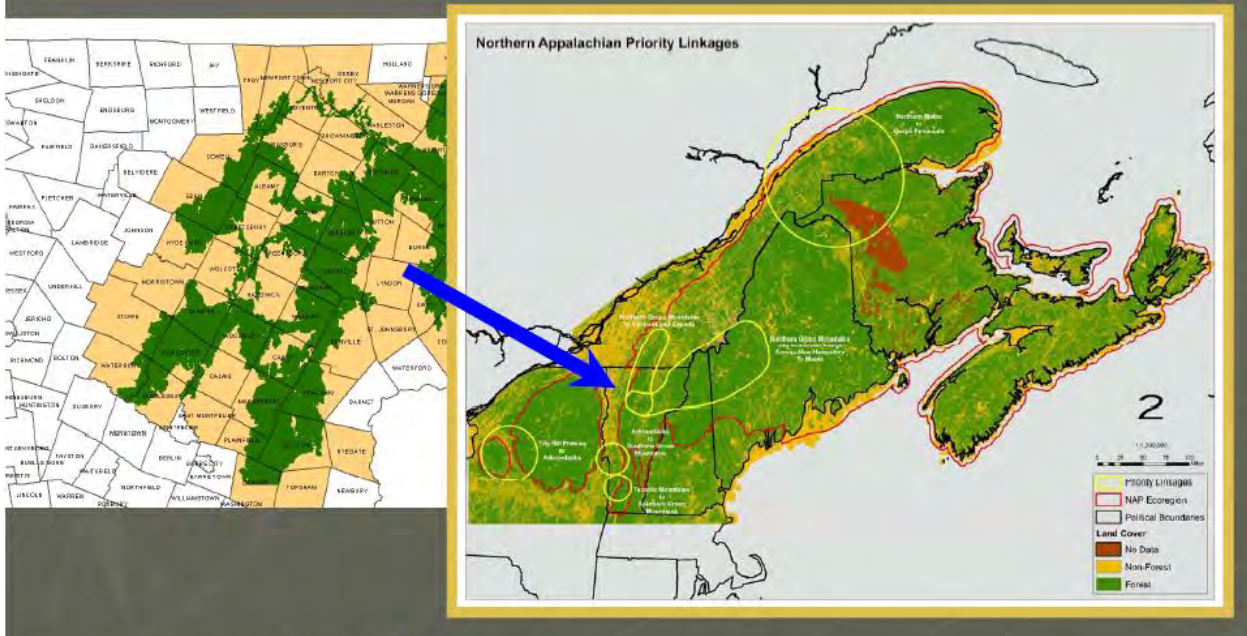
A 45,000 acre block of forested habitat covers the eastern side of Plainfield and neighboring towns, providing core habitat for a variety of species. To the west, the pattern includes more fragmentation with forest blocks of only a few hundred acres. At least half of Plainfield is considered to be potential black bear habitat by the Vermont Fish and Wildlife Department. The heavily forested and relatively undeveloped eastern portion of town is considered to be “bear production habitat”—a region supporting relatively high densities of cub producing female bears. Adjacent to the bear production area is an area of seasonal bear habitat. This area includes critical feeding areas such as beech stands and wetlands. Contiguous forest habitat is important to Plainfield because it supports the biological requirements of many plants and animals; supports viable populations of wide-ranging animals by allowing access to important feeding habitat, reproduction, and genetic exchange; serves as habitat for source populations of dispersing animals for recolonization of nearby habitats that may have lost their original populations of those species; supports public access to and appreciation of Vermont’s forested landscape; provides forest management opportunities for sustainable extraction of forest products; provides forest management

opportunities to yield a mixture of young, intermediate, and older forest habitat; helps maintain air and water quality; and provides important opportunities for education and research of forest ecosystems.

#### 4.8 Habitat Connectivity

While eastern Plainfield is part of a huge forest block of more than 45,000 acres, even this alone is not sufficient for species with large home ranges. For example, black bear in Vermont require between 10,000 and 20,000 acres EACH, and male bobcat have a home range of 27 square miles each. Using a multitude of forest blocks is required for these and other species to meet their basic needs. Vermont still enjoys a relatively connected network of lands and waters, where wildlife still have locations where forest blocks are close to one another, allowing for easy movement between them, even with rural roads in between. This network is critically important in order for plants and animals to adjust their home ranges, moving around in the face of climate change. Furthermore, riparian (river bank) habitats play a key role in this overall network, allowing for multiple benefits associated with their protection, including improving water quality, flood resiliency and movement areas for aquatic and terrestrial wildlife species.

# Regional connectivity



## Species Habitats

According to the Vermont Fish and Wildlife Department, there are five major deer winter areas in Plainfield. Given that Plainfield is at the northern edge of the White-tailed deer range, these areas of softwood cover provide protection from deep snow, cold temperatures, and wind, allowing animals to exert less energy at a stressful time of year. They provide a dense canopy of softwood trees, a favorable slope and aspect (mentioned above), generally moderate elevation, and low levels of human disturbance in winter.

Plainfield is home to at least four rare and uncommon plant populations in two locations. Rare native species in Vermont are an important part of Vermont's natural heritage. These species most at risk of extinction, serve as barometers of the state of the environment.

Plainfield has the opportunity to maintain this connected network into the future by identifying possible wildlife corridors and important specific road crossings that can be protected by zoning and other conservation methods.

## 4.9 Other Biologically Significant Areas

Bald Hill as seen from East Hill Road is one of the town's most striking views, and its summit is a popular place for walkers, skiers, kite fliers, and others. The area's current owner generously allows this non-destructive recreation.

Spruce Mountain, with its remarkably conical slopes and high summit at 3,037 feet, is Plainfield's most dramatic natural feature, and one of its best-loved. Spruce Mountain gets its name from its dominant vegetation community: a spruce-fir forest. Most of the mountain and the land surrounding it are part of the Seyon Block of Groton State Forest, the largest state forest in Vermont; 633 acres of Groton State Forest are in Plainfield. The Vermont Department of Forests, Parks, and Recreation maintains a management plan for the Seyon Block that designates the "classification emphasis" for Spruce Mountain as "protection" (as opposed to timber management, recreation, wildlife, or special use). A hike to the summit reveals a breathtaking view of the town's rural landscape, a panorama of forested hills and open fields. The State left the abandoned fire tower at the summit of Spruce Mountain to

provide hikers with access to the stunning views of Vermont and New Hampshire. Like many high elevation trails in Vermont, during very wet periods, such as early Spring, the use of the trail is discouraged.

The L.R. Jones State Forest covers 642 acres in the eastern portion of town. The initial acquisition consisted of 450 acres purchased from three owners by the State of Vermont Board of Agriculture and Forestry in 1909. The State bought the rest of the parcel in the following three years. The forest ranges in elevation from 1,700 feet where Potter Brook leaves the parcel to over 2,700 feet on the southwest slope of Spruce Mountain. Much of the popular hiking trail to the summit of Spruce Mountain is located in the L.R. Jones forest.

Soils in the state forest range from somewhat poorly drained in the lower areas to well-drained at higher elevations. The area includes a variety of forest cover types and age classes which can be divided into two groups by their origins: natural stands and softwood plantations. The softwood plantations include stands of white pine, Norway spruce, red pine and Scotch pine. The natural forest communities include four typical mixes of trees: 1) sugar maple, beech, and yellow birch; 2) sugar maple; 3) red spruce and yellow birch; and 4) spruce and fir. The state's management plan for the forest specifies three goals: protection and enhancement of the Spruce Mountain Trail; maintenance and improvement of wildlife habitat; and demonstration of "best management" forestry practices.

The Triple Point Natural Area is primarily wetland and is a good example of a cedar swamp with some hardwoods and softwoods. Plant surveys have been done which demonstrate a diversity of native plant species, including leatherwood, and very few non-native invasive species.

### **Resource Extraction**

The Plainfield zoning ordinance allows for the removal for sale of soil, loam, sand gravel or quarried stone with a conditional use permit if a public hearing determines that it will not cause physical damage to neighboring properties, erosion, sedimentation or water pollution and will not create an undue burden on town roads.

**Natural Environment – General**

**Goal:** Maintain and protect Plainfield’s natural resources of rivers, streams, trails, open spaces, soils, and forest for the benefit of current and future generations. Involve citizens and local schools in this effort.

Strategy	Responsible Party	Priority
Promote responsible recreational use of Plainfield’s natural resources for the health and well-being of its residents.	Recreation Committee Conservation Commission	Near Term (within 1-3 years)
Adopt and implement fluvial erosion and mitigation plan.	Planning Commission Development Review Board	Short Term (within 1 year)
Research and seek funding opportunities for repairing and preventing erosion.	Conservation Commission	Near Term (within 1-3 years)
Develop a long-term management plan for minimizing infrastructure damage due to flooding.	Selectboard Conservation Commission	Near Term (within 1-3 years)
Review and amend zoning regulations to ensure that riparian buffer strips alongside all streams are maintained and that structures are not built in areas subject to flooding and fluvial erosion.	Planning Commission	Near Term (within 1-3 years)
Identify possible wildlife corridors and protect specific road crossings. Use this information to determine how best to protect those areas.	Planning Commission Conservation Commission	Near Term (within 1-3 years)
Manage Town properties for biodiversity by controlling populations of exotic invasive species.	Conservation Commission	Near Term (within 1-3 years)
See that zoning ordinances insure that the extraction of sand, bedrock, gravel, and soil does not cause physical damage to neighboring properties, does not cause destabilization of slopes, erosion, sedimentation or water, air or noise pollution, does not create an undue burden on town roads, and includes effective plans for the rehabilitation of the site at the conclusion of the operation.	Selectboard Zoning Administrator	Near Term (within 1-3 years)
Work with local schools to incorporate community service activities involving the protection and appreciation of the environment into student schedules.	Selectboard Conservation Commission School Principal	Long Term (within 5 years)
Develop trails and a timber management plan for the Town Forest.	Conservation Commission	Near Term (within 1-3 years)

**Natural Environment, continued**

**Goal:** Maintain and protect Plainfield’s natural resources of rivers, streams, trails, open spaces, soils, and forest for the benefit of current and future generations. Involve citizens and local schools in this effort.

Strategy	Responsible Party	Priority
Work to identify and protect important natural resources, including prime agricultural soils, forest resources (soils, products, and habitat), significant wildlife habitat, floodplains, river corridors, water resources, water quality and other features described in this plan.	Planning Commission Conservation Commission	Near Term (within 1-3 years)
Maintain habitat connectivity networks by managing development where habitat block are close to one another and connected to other large areas not only within the state but throughout the entire region.	Planning Commission Conservation Commission	Near Term (within 1-3 years)
Obtain an inventory and map of Plainfield’s significant natural communities, prime agricultural soils, forest resources (soils, products, and habitat), significant wildlife habitat, habitat connectivity, floodplains, river corridors, water resources and other features described in this Plan and develop appropriate measures for their protection. This map will be used to guide zoning and development decisions.	Conservation Commission Planning Commission	Near Term (within 1-3 years)
Encourage the permanent protection of farmland and important natural resource areas through conservation easements or comparable deed restrictions, and by facilitating communication between interested landowners and conservation organizations (e.g. Vermont Land Trust or Vermont Housing and Conservation Board) that work to preserve Vermont’s working landscape.	Conservation Commission	Near Term (within 1-3 years)

**Natural Environment – Air Quality****Goal:** Safeguard Plainfield’s air quality by reducing current sources and preventing future sources of greenhouse gases and air pollution

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Increase the use of public transportation and carpooling.	Energy Coordinator	Short Term (within 1 year)
Increase the use of clean, efficient, renewable sources of energy for home use and heating through education and information about programs that offer financial assistance for conservation and efficiency measures, such as weatherization.	Energy Coordinator	Short Term (within 1-3 years)
Provide financial assistance through the Town’s revolving loan fund to help people buy more efficient, cleaner-burning wood stoves for home heating.	Revolving Loan Fund Committee Energy Coordinator	Near Term (within 1-3 years)
Encourage alternatives to burning brush piles, such as composting or using them to provide wildlife habitat.	Fire Warden	Near Term (within 1-3 years)
Develop guidelines and zoning regulations that permit a review process that ensures new development will not result in water, air or noise pollution.	Planning Commission Select Board	Short Term (within 1 year)



**Natural Environment – Groundwater Quality**

**Goal:** Safeguard Plainfield’s groundwater quality.

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Development in Town shall conform to all state and federal regulations regarding protection of headwaters of watersheds or areas supplying recharge water to aquifers.	Development Review Board  Zoning Administrator	Short Term (within 1 year)
Promote public and private practices to reduce run-off from yards, farms, and roads into waterways.	Conservation Commission	Long Term (within 5 years)
Partner with CVSWMD to provide residents with educational information about management and legal disposal of household waste and composting methods for organic waste.	Central Vermont Solid Waste Management District, Plainfield Representative	Near Term (within 1-3 years)
Develop water conservation guidelines that will lower consumption and help with reducing the load on the Waste Water Treatment Plant.	Water and Wastewater Commission	Near Term (within 1-3 years)
The Town should encourage naturally vegetated buffer strips of at least 50 feet along the banks of the Winooski River, streams, wetlands and ponds, so as to filter pollution, prevent erosion, and protect fisheries and wildlife habitat.	Development Review Board	Short Term (within 1 year)

**Natural Environment – Scenic and Historic Resources**

**Goal:** Maintain and preserve Plainfield’s scenic and historic resources.

Strategy	Responsible Party	Priority
Through the Subdivision, Planned Unit Development and Conditional Use review process the Town will ensure that new development maintains and enhances the Town’s rural and historic character.	Development Review Board	Short Term (within 1 year)
The Town will work with the Plainfield Historical Society to insure that suitable space is available to store and display documents and artifacts related to Plainfield’s history.	Selectboard Historical Society	Short Term (within 1 year)
Permits for telecommunications facilities will be contingent upon their being sited, designed, maintained and operated so as to minimize negative impacts on natural, cultural and scenic resources. Additional facilities should use existing towers and communication facilities rather than developing new towers.	Planning Commission Selectboard Development Review Board	Short Term (within 1 year)
Where safety is not an issue, maintaining the rural character of the roads will take precedence over improving road surfaces or motorists’ sight lines. Roads should not be widened or straightened unless such changes maintain existing rural character or are absolutely necessary for safety reasons. Road maintenance should include protection of stone walls and mature trees in the road right of way.	Selectboard	Short Term (within 1 year)
Maintain visual quality of night sky; use Outdoor Lighting Manual for Vermont Municipalities developed by the Chittenden County Planning Commission and the standards developed by the International Dark-Sky Association (IDA) and Engineering Society of North America (IESNA) to guide zoning and subdivision regulations and to clarify construction requirements so that cost-effective, environmentally-friendly outdoor lighting and minimal light pollution can be assured.	Development Review Board	Short Term (within 1 year)
Continue to improve lighting in and near the Village.	Selectboard	Short Term (within 1 year)

## 5| Housing

Plainfield is a rural community with a traditional Vermont village surrounded by open countryside. Housing is concentrated in the upper and lower village and on hillsides and old farm fields. Since 1970, Plainfield's housing stock has increased substantially, even though the population has declined by nearly 10%. The majority of recent housing development is mainly the construction of single family homes on parcels greater than 5 acres. According to the 2010 Census, 70% of the housing units are owner occupied (*see Chart 5.1*). The Land Use map in the Appendix shows the distribution of residential development throughout the town.

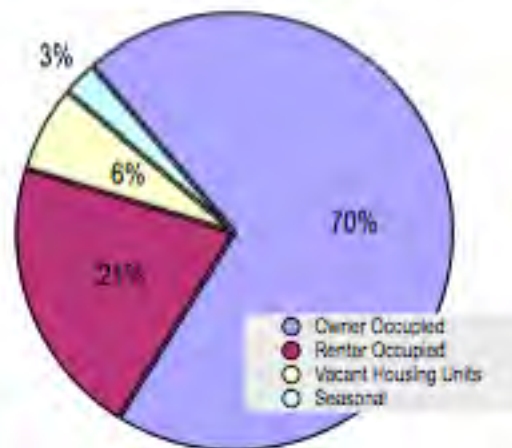
### 5.1 Existing Conditions

Plainfield ensures that the housing is appropriately located through a permitting process. For health and safety reasons, all applicable state permitting requirements are incorporated into Plainfield's zoning permits. The highest allowable densities for housing are in and near the village, encouraging growth to occur closest to the municipal services and commercial opportunities. Plainfield's zoning allows two family dwellings in all zones, as well as accessory apartments, and does not restrict manufactured housing. Although it is a small sample, the median and average sale price of primary residences in Plainfield is above that of the surrounding area (*see Chart 5.2*). The median monthly rental price is below the surrounding area (*see Chart 5.3*). Affordable housing in Plainfield can be found in the former high school on School Street (Route 2), which has been converted to apartments. There are also several multi-unit buildings in the village. Plainfield's housing values are generally higher than neighboring towns. There is a need for dedicated Senior Housing, therefore the Town should investigate options and funding sources for Senior Housing. As new housing stock develops, there must be communication between various Town officials and departments. Therefore, both the Fire Department and the Road Foreman need to review

new access permits to ensure that driveways provide adequate access for fire protection and that road cuts don't damage town roads.

Chart 5.1

Plainfield Housing Units by Type, 2010



## 5.2 Growth

In 2007, the Central Vermont Regional Planning Commission conducted a Build-Out Analysis of the housing in Plainfield. The analysis relates the existing number and location of housing to projected growth, applying Plainfield's current zoning regulations. The results show that much of the growth will take place along the secondary roads in the Forest and Agricultural Zoning District, on lots no smaller than 5 acres.

This type of 'sprawl growth' would have permanent negative impacts on prime agricultural soils, forest resources (soils and products), on wildlife habitat and road crossings important to wildlife corridors, and on floodplains, river corridors, and water resources. Therefore, Plainfield's significant natural communities need to be surveyed and mapped to provide guidance for planning future housing.

The Central Vermont Regional Housing Distribution Plan projects that Plainfield should plan for an increase of 42 year-round housing units between 2015 and 2020. The location of these units will have an impact on the town.

A Village Centered Growth Plan that increases the allowable densities in and near the village would reduce the cost for new infrastructure and service expansion and would enhance economic and cultural development. A Build Out Analysis that promotes Planned Unit Development that sites housing units in higher densities and is sensitive to natural resources (rather than the traditional grid acreage of current zoning) would lessen the negative impacts of new housing yet still meet the need for growth. Therefore, to follow Land Use goals, to encourage the vitality of the village, and to avoid the negative impacts of 'sprawl growth,' the town should investigate and implement Village Centered Growth and Planned Unit Development (*see Appendix: Land Use and Zoning Maps*).

Chart 5.2



Chart 5.3



<b>Housing</b> <b>Goals:</b> Ensure the availability of safe and affordable housing for all Plainfield residents and plan for sufficient growth to meet the projections of the Regional Housing Distribution Plan. Locate new housing in ways that minimize the negative impacts as much as possible.		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Review and update current zoning and subdivision regulations, using the build-out concept data as a tool for developing future zoning regulations.	Planning Commission  Development Review Board  Select Board	Short Term (within 1 year)
Investigate and pursue sources of funding for village revitalization efforts.	Selectboard	Short Term (within 1 year)
Promote the use of Town revolving loan funds and other funding sources for the preservation of historic houses.	Selectboard  Revolving Fund Committee  Historical Society	Near Term (within 1-3 years)
Encourage a variety of housing types to meet the needs of senior citizens and a diversity of social and income groups.	Planning Commission  Selectboard	Short Term (within 1 year)
Consider handicapped accessibility in site plan reviews of housing developments.	Development Review Board	Near Term (within 1-3 years)
Consider permitting higher density zones in and around the village to allow for clustered developments and possible growth centers when revising the current zoning regulations.	Planning Commission  Development Review Board	Short Term (within 1 year)
The use of Planned Unit Developments (PUDs) should be encouraged to be used where it is possible to do so.	Development Review Board	Short Term (within 1 year)
Obtain an inventory and map of Plainfield's significant natural communities, prime agricultural soils, forest resources (soils, products, and habitat), significant wildlife habitat, habitat connectivity, floodplains, river corridors, water resources and other features described in this Plan and develop appropriate measures for their protection.	Conservation Commission  Planning Commission	Near Term (within 1-3 years)

## 6| Energy

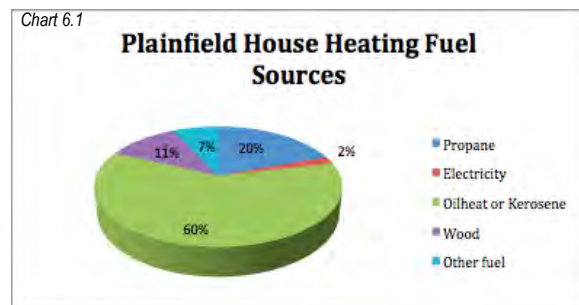
In order to plan for the long-term energy security of our Town, we must first understand that it is not energy itself that we want or need, but the services that energy provides: we need heat for our homes; we want safe and inexpensive transportation; we need light for our work place, village streets and home. The energy security of Plainfield depends on being able to provide these energy services consistently, sustainably and affordably to the townspeople.

### 6.1 Thermal Energy

Plainfield, like most of Vermont, relies mostly on fossil fuels such as oil, kerosene, and propane for heat and hot water. (See Chart 6.1.) There are more than a dozen companies that compete to provide this service in Plainfield. Alternative thermal energy such as solar and geothermal is not widespread. More than 10% of Plainfield residents identify wood (either chunk or pellet) as their primary source of heat; however, wood provides a significant source of thermal energy as a supplemental heat source in many other homes.

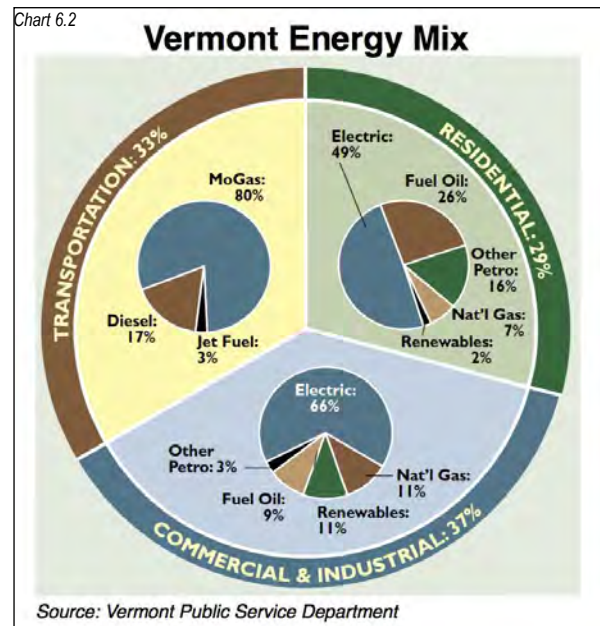
The overall Energy Mix in Plainfield is similar to that in Vermont statewide. (See Chart 6.2.) The Department of Public Service has a set of Residential and Commercial Building Energy Standards that, when used in new construction and renovations, will save money for the owners of the building and lower the carbon footprint of the town. Promoting the use of these standards will be a benefit to individual owners and the town.

In 2012, Goddard College applied for permits to build a wood chip heat plant to provide thermal energy to many of its buildings on campus.



### 6.2 Transportation

As documented in Section 7, Plainfield residents have a public transportation option. In 2010, a commuter bus service was established, providing five trips weekdays between St Johnsbury and Montpelier. The Route 2 commuter bus stops at the Plainfield Park & Ride and in front of Goddard College. This service was initially funded by a Congestion Mitigation Air Quality (CMAQ) grant, which provided federal funding to cover 80% of the net cost of the service. The remaining service costs are covered by passenger fares and the 20% net local match from the towns



served by the route, including Plainfield. The CMAQ grant ends in 2013. In 2013 the route will transition to another source of 80% net funding. However, as in previous years, GMTA will continue to request the remaining 20% match from the towns served by the commuter route. In 2012, the US 2 Commuter saw a 30% ridership increase from from 2011— equaling 19,056 riders.

When the Red Store on Route 2 closed in 2012, Plainfield lost its only gasoline station. A gas station just over the town line in Marshfield provides gasoline, diesel, kerosene, and 20 pound propane cylinders.

### 6.3 Electricity

In Vermont, electricity accounts for approximately 40% of energy consumption. The village of Plainfield's electricity is supplied by Green Mountain Power (GMP), which is owned by Gaz Métro, a Quebec company. In the rest of town, power is supplied by the Washington Electric Co-op (WEC), which owns and operates the Wrightsville hydroelectric generating station, on the North Branch of the Winooski River. A methane generation facility in Coventry provides about two-thirds of the electricity needs for WEC customers. In 2008, GMP and the town of Plainfield explored the possibility of joint ownership of a small hydro power facility at Batchelder Mills, however that project never materialized. Wind power has never been utilized on any large scale in Plainfield, however according to the Vermont Wind Energy Atlas (*see Appendix*), there is potential for wind energy near Spruce Mountain. There are no large-scale solar farms in Plainfield; however, there are several homeowner installations.

Energy generation and transmission systems that are linked to the electrical grid are preempted from local land use regulation. They are instead regulated by the Public Service Board (PSB) under 30 V.S.A. Section 248 (Section 248 review). These include net metered distributed energy installations, as well more commercial, utility-scale generation, transmission and distribution facilities. The Public Service Board (PSB) must consider project conformance with municipal and regional plans prior to issuing a Certificate of Public Good. The town does not have statutory party status in PSB (Section 248) proceedings, but does receive notice of most applications (petitions) before the board. The town may participate informally by providing comments on a proposed project, or request more formal status as an intervener with rights to participate and appeal. Town participation in the state's review process, based on adopted community standards under this plan, is the best way to ensure that local conservation and development objectives are considered and weighed by the Public Service Board.

### 6.4 Energy Efficiency

In 2013, the Plainfield Energy Team successfully promoted a municipal street light changeover in the lower village from high-pressure sodium to LEDs. The Team plans to expand the project to the upper village. LEDs use less energy, provide a better quality of light (which improves vehicle and pedestrian safety) and are Dark Sky Friendly.

In 2012, Plainfield voters approved the creation of a Property Assessed Clean Energy (PACE) District. Through PACE, homeowners may qualify for financing to complete energy-related projects (weatherization, more efficient oil heat equipment, solar hot water, etc.). The loan is paid back through an assessment on the homeowner's property tax bill. The assessment stays with the property if it is sold and the financing can be extended for a longer period than typical loans. More than 30 Vermont towns have passed similar measures.

In 2011, the Plainfield Energy Team received a \$3,000 grant from the Vermont Energy & Climate Action Network (VECAN) to weatherize a portion of the Town Hall. The VECAN grant program is funded from a Federal Earmark obtained by Senator Bernie Sanders (I-VT). The Plainfield Energy Team has also highlighted ways homeowners can become more energy efficient. In 2009, volunteers conducted nearly three dozen home energy visits. These visits helped educate Plainfield residents about energy usage. The Team installed low-flow showerheads and aerators to reduce water consumption, as well as compact fluorescent light bulbs, pipe insulation, water heater jackets, and thermostats.

<b>Energy</b>		
<b>Goals:</b> Create a sustainable energy future: one that minimizes environmental impact; supports our local economy; emphasizes energy conservation, efficiency, and the increased use of local and regional clean, renewable, environmentally sound energy sources.		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Energy efficiency and conservation should be a primary consideration in new municipal construction projects, equipment purchases and operations. In addition, all non-municipal (i.e. –residential and commercial) construction and renovation should be encouraged to comply with the department of Public Service Residential and Commercial Building Energy Standards.	Selectboard Energy Coordinator Zoning Administrator	Short Term (within 1 year)
Encourage the increased use of local and regional clean, renewable, environmentally sound energy sources and technologies as they become available.	Selectboard Energy Coordinator Zoning Administrator	Short Term (within 1 year)
Energy facilities, including solar arrays and other generation facilities, transmission and distribution lines, accessory structures, and access roads should be located so as to minimize and mitigate adverse impacts to agricultural land, waterways, and significant natural communities as well as property in the village zoned for housing.	Planning Commission Selectboard	Short Term (within 1 year)
Encourage the use of public transportation systems and multi-modal alternative transportation systems.	Energy Coordinator	Short Term (within 1 year)
Minimize the adverse impacts of energy production on public health, safety and welfare, the town’s historic and planned pattern of development, environmentally sensitive areas, and Plainfield’s natural and cultural resources, consistent with adopted plan policies and community standards for energy development, resource protection and land conservation.	Conservation Commission Development Review Board Energy Coordinator	Near Term (within 1-3 years)
Promote energy efficient development, the use of renewable energy, and the weatherization of existing structures.	Energy Coordinator	Short Term (within 1 year)
Promote community energy literacy, and provide information about available energy assistance and incentive programs, state energy codes and energy system permitting, and voluntary, cooperative purchasing agreements to reduce the costs of acquiring and installing small-scale renewable energy systems for individual homes.	Energy Coordinator	Short Term (within 1 year)
Provide financial assistance through the Town’s revolving loan fund to help people buy more efficient, cleaner-burning wood stoves for home heating	Revolving Fund Committee Energy	Short Term (within 1 year)



## 7| Facilities, Utilities, Services & Resources

### 7.1 Facilities

In response to a resolution approved at the 2012 Town Meeting, the Select Board worked with community members and consultants to assess the condition of Town owned properties and to evaluate the Town's current and future needs for municipal space. The 2013 Municipal Facilities Study evaluates the available municipal spaces for town meetings and administration, fire and rescue, emergency shelter, senior citizens, and the Plainfield Historical Society. The study also addresses the issues of public parking, pedestrian facilities, traffic calming, and the US Route 2/Main Street intersection. Information from the Municipal Facilities Study and the 2012 Town Hall Advisory Committee Report help inform this Town Plan. Copies of the Study and the Report are available at the Municipal Building.

#### *Town Hall*



The Town Hall was built in 1841 as the Universalist Church of the Restoration. In 1911, it was remodeled to serve as the town's Opera House. The granite steps that ran the entire width of the building were removed and the building was raised several feet to make a useable ground floor area out of the former cellar. The nave was converted into an open hall with a balcony and a proscenium stage was constructed in the former sanctuary area. Town and Village meetings were held upstairs through 2010. In 1950, the Town Clerk, Treasurer, and Board of Selectmen moved their offices here. The ground floor was remodeled in 1988 to accommodate the expanding needs of the town

offices. However, the need to meet safety codes, as well as new accessibility requirements resulted in the forced closing of the second floor and balcony.

In addition to Town Meeting, the building has been used as a polling place and for municipal public hearings, as well as for performances, classes, community events, and private parties.

In 2011, the Town Hall was closed due to structural problems and unhealthy levels of mold. A Town Hall Advisory Committee was appointed by the Select Board to gather information to assist the Town in deliberating the issue of what to do with the building. At the 2012 annual Town Meeting, after a review of the Town Hall Advisory Committee Report, voters approved expenditure of \$40,000 for structural repairs and energy saving improvements, \$15,000 from town funds and the remainder provided by State of VT Division for Historic Preservation, US Dept of Energy, and VT Energy and Climate Action Network. Since then the Select Board has pursued more funding through various grants and private donations.

#### *Municipal Building*



In August of 2005, the Town Clerk's Office moved to the new Municipal Building at 149 Main Street in the village. The Town purchased and renovated the building, which had previously been used as a Methodist Meeting House, a general store, and for residential housing. Built in 1819, it is one of the oldest buildings on Main Street. The first floor of the Municipal Building provides space for the Town offices and a public meeting space for the Select Board and other groups (including the Conservation Commission, Planning Commission,

Development Review Board, Recreation Committee, Sewer & Water Commission, Plainfield Town Hall Revitalization Committee, Revolving Loan Committee, Fuel Assistance Committee, and Social Concerns Committee). The second floor provides rental income as office space. It is currently rented to the Washington Northeast Supervisory Union.

The 2013 Municipal Facility Study recommends the following improvements for this building: a new roof, level second story floors; enlarge meeting room space; create a separate office for the zoning administrator; construct an interior stairway to the basement (so it can be used as storage space). A description of these improvements was presented and discussed at the 2013 Town Meeting and a resolution was adopted authorizing the Select Board to: "Prepare plans and specifications for the renovation and maintenance of the Municipal Building in enough detail so it can be voted on at a future Town Meeting." This is planned for 2015.

#### ***Fire Station***

The Plainfield Fire Station, at one time the Congregational Church and, at a later time, the High School gym, has been the home of the Plainfield Volunteer Fire Department since 1972. The two open garage bays have been used for Town Meeting on at least two occasions – most recently in March 2012, after the Town Hall was closed for repairs. However, since the Fire Station does not meet ADA or fire safety standards for public assemblies, it can only be used for Town Meetings in an emergency situation. When used as a meeting space, the garage has a capacity for 240 people.

According to the Plainfield Fire Chief, within 15-20 years the Fire Station will be too small for the needs of the community. Additionally, there are concerns about inadequate parking for emergency responders at the present site. The Plainfield Fire Chief has had very preliminary conversations with his counterpart on the Marshfield Fire Department about the possibility of a shared space for both departments at a new location on Route 2 in the long term.

In the event the Fire and Rescue Department moves to a new site, suggestions for public use for the current building are: Town Recreation Center; Town Meeting Hall; Senior Center; business incubator.

#### ***Town Shed***

The Town Shed is located off Cameron Road on 2 acres of land purchased from the Bartlett family. The prefabricated steel building was erected to replace the old wooden town shed located nearby on Brook Road. A new salt shed was built at the same site as the current town shed in 2001 to avoid storing salt near the Great Brook.

#### ***Village Trustee Building***

The Village Trustee Building, located on Route 2/School Street, is a small riverside structure that was Plainfield's first firehouse in 1911. Later it became the offices of the village government until the merger in 1982. It is now the home to the Plainfield Historical Society (PHS). The building needs a new roof and other structural repairs. The outward thrust of the gambrel roof on the Winooski River side has pushed the knee wall out of alignment. This wall needs to be pulled in and adequately braced (which should be done at the same time as the new roof is installed).

The Municipal Facilities Study has no recommendation for repairs to this building until there is a full assessment. The PHS is interested in locating a public place where a permanent display of Plainfield's history, along with genealogical records, could be housed.

#### ***Town Parks and Recreation Facilities***

The public green spaces in the village are: Mill Street Park, at the old Mill Privilege next to the waterfall; Washburn Park on Mill Street, next to the Great Brook; the Recreational Field, and the Park and Ride at the east end of Main Street. The Historic Society has begun to place granite markers at historic sites in the village. Currently, there are two in place: one at the Washburn Park and one at the abandoned Montpelier-Wells River Railroad bed at the Park and Ride. Both commemorate buildings that formerly stood at those sites.

The Russell Memorial Field on Recreation Field Road has the following amenities: a ball field, basketball court, volleyball court, tennis courts, a skateboard park, a seasonal ice rink, a children's playground and a picnic shelter. The field is used during Plainfield's Old Home Day in September, by various ball teams during the summer, and by local residents year-round.

### ***Sidewalks***

There are sidewalks on the north side of US Route 2 and on both sides of Main and Mill Streets. The Town provides the service of cleaning both the upper and lower village sidewalks during the winter. There is still no safe route between the upper and the lower village due to lack of a crosswalk on US Route 2.

### ***Pedestrian Facilities between the Lower and Upper Village***

Safety continues to be a concern for foot traffic between the lower and upper village. There are many amenities in both parts of the village. The Town will continue to work with VTrans and Central Vermont Regional Planning Commission (CVRPC) on improving this deficiency. Recently, the Town was awarded a \$25,000 grant (10% Town match) to study the possibility of a sidewalk on the south side of US 2, continuing to the lower village via a pedestrian walkway on the south side of the Main Street Bridge. The construction of the pedestrian walkway would allow for a marked crosswalk near the blinking light intersection and would provide a safe connecting link between the parking lot opposite Town Hall and the public parking in the village. The study is to extend from the Mill Street Park to the Post Office. Copies of the 2013 Broadreach study can be found at the Municipal Building.

### ***Village Traffic Calming: Brook Road/Creamery Street Intersection***

Speeding vehicles in the lower village have a drastic effect on the neighborhood, particularly during commuting hours. Families have come to several Select Board meetings to express their concerns about cars descending from the hills surrounding the village at speeds that endanger foot traffic and children at play and disturb residents' sleep. CVRPC responded to the Town's problem by commissioning Broadreach Designs

for a study to analyze existing conditions and to determine appropriate traffic calming devices for the lower village. Some of the suggested solutions include speed humps and tables, raised crosswalks, digital speed read-out signs, pavement markings, and sidewalks. An issue is the village's sensitivity to traffic signs.

This winter, a representative from VTrans drove around the village with the Select Board and made recommendations for how to bring the signs up to the State's safety standards. The Select Board is aware of residents' aversion to signs, but plans to meet the needs of the residents with the appropriate state standard.

### ***US Route 2/Main Street Intersection***

The Select Board is in discussion with CVRPC and VTrans to determine both a temporary and a permanent solution to the dangerous intersection at the blinking light. In 2005, the Town acquired an engineered design (Dubois & King) describing improvements for the intersection. The process to implement the design is scheduled to begin within the next several years.

### ***Park and Ride and Parking Lots***

The Park and Ride, located at the east end of the lower village, has approximately 20 parking spaces. Facilities and services at the Park and Ride include a US Route 2 Commuter bus stop, a bus shelter, a bike rack, an historic monument, and a recreation trail head. Recent improvements include paving, pavement markings, and LED lighting.

There are 53 designated on-street parking spaces in the lower village, Plainfield's primary retail and residential area. Of these, 26 are on Main Street between Mill and Creamery, and 27 on Mill Street between Main and the Great Brook. Two of the spaces on Main Street are in front of the Municipal Building and are designated for Municipal Building parking.

There are 18 off-street parking spaces in the town-owned lot between the Municipal Building, the Fire Station, and the village cemetery. Of those, six are designated for the Plainfield Food Co-op, while the remainder are reserved for the visitors or staff in the Municipal Building and the Plainfield

Fire Department/Fast Squad. There is usually enough parking available to meet the needs of the Municipal Building and the Co-op, except when there is an emergency call at the Fire Station.

There is a widespread perception that the number of parking spaces available along Mill Street and lower Main is inadequate for current use by tenants and by patrons of local restaurants and stores. Limited downtown parking makes it difficult for people to attend regularly scheduled activities at the Grace Methodist Church at the corner of Main and Mill. The town Park & Ride and the Recreation Field Parking Lot, while offering ample parking opportunities, are not used for overflow parking because they are located some distance from the village amenities. Improved street lighting at these lots should entice people to use them.

The Municipal Facilities Study Committee views public parking in the lower village as a priority facilities issue. On-street public parking does not meet current needs. Parking is already allowed on both sides of village thoroughfares, so additional public parking space near the village center can only be provided at off-street locations.

A survey of lots in the lower village suggests that portions of several privately-owned properties near the village center may be suitable sites for off-street parking. Since the process of acquiring and developing land for public purposes is a complicated matter that requires professional planning and extensive public conversation and deliberation, the Facilities Committee recommends that the Town seek grant funding in FY13/14 for a consultant to assist with a study of village parking.

The significant parking need in the upper village is for more parking in the vicinity of the Town Hall. More parking spaces in this area will improve access to the small businesses clustered around the intersection of Main Street and US Route 2. The Town parking lot opposite Town Hall (.21-acres) can currently hold 10 - 12 vehicles. According to a local excavation contractor, there is enough land to extend this parking area to create enough parking for another 8 - 10 vehicles.

There are properties in the vicinity of the Town Hall that could be used for parking with appropriate arrangements.

To accommodate snow plowing, overnight parking is not allowed on the public streets in the village during the winter, except at the parking area facing the Mill Street Park. Those cars must be moved by early morning to accommodate plowing. The Town encourages people to use the Park & Ride and the Recreation Field parking lot for overnight parking during the winter months.

#### *Other Property*

The Town owns 2 acres and a right of way behind the old high school building on US Route 2. The deed stipulates that the land could be used for municipal offices.

A 4.75 acre piece of land with frontage on Country Club Road was donated to the town in 2005 by the Cross Vermont Trail Association for use as a recreation and alternative transportation trail. It is a segment of the Cross Vermont Trail and is open to the public from Country Club Road to Route 14, following the old railroad bed.

In 2006 the town swapped 22 acres of land in Calais (donated to the Town in 1950 by Arthur Cutler and designated as our town forest) for 28 acres of land on Maxfield Road in Plainfield. Subsequently, the Conservation Commission developed a Town Forest Management Plan (adopted by the Selectboard in September 2011) that promotes passive, low-impact summer and winter recreation and a long-term demonstration forestry project as the primary purposes for use of this land. The Town Forest provides education and research opportunities, as well as wildlife habitat and wetland protection.

The Triple Point Natural Area, a 4.9 acre parcel tucked between Route 14, the Marshfield town line and Taylor Farm Road, consists primarily of a cedar swamp with the wet soil precluding most forms of development. Ownership of this parcel was transferred to the town by the Vermont Land Trust in April, 2006 with the understanding that it would be maintained in its current state. The management plan was approved in 2007. The primary goals for conservation of this land are

education, research, wildlife habitat, passive recreation, as a demonstration conservation project and protection of a wetland.

### ***Cemeteries***

Plainfield has five cemeteries, four of which are within the town's boundaries. The fifth cemetery, Plain-Mont Cemetery, is on Route 2 in East Montpelier just at the East Montpelier and Plainfield town line. The Center Cemetery is located in the Bartlett Hill area of town on Bartlett Road (Town Highway #22). The Village Cemetery is located off Main Street behind the Fire Station. The Bisson Cemetery is located on Lower Road (Town Highway #41), about a mile from the Barre line. The Kinney Cemetery is on East Hill Road, about half a mile beyond the former junction with Cameron Road. Only the Plain-Mont and Center Cemeteries have plots for sale at this time; the Plain-Mont has expansion capacity across Route 2 that has yet to be developed. At the current rate of usage, that capacity is sufficient for 100 years.

## **7.2 Utilities**

### ***Village Lighting***

Approximately 55 town owned lights make up Plainfield's municipal lighting system. In 2013, taking advantage of Efficiency Vermont's rebate program, the Select Board approved a change-over from High Pressure Sodium to LEDs lights, starting in the lower village. LEDs are more efficient, last longer, and require less maintenance. To date, 33 LEDs have been installed. The Town's Energy Team recommends that the remaining lights (all HPS, all in the upper village) be changed over in 2014-15.

In 2013, funded by the VTrans Enhancement Program, the lighting on the Main Street Bridge leading into the lower village was restored. It is hoped that this 'welcoming gateway' to the village will promote local business.

### ***Water and Waste Water***

The Plainfield water and wastewater districts were created in 1968 to serve what was then the Village

of Plainfield, located in the towns of Plainfield and Marshfield. The original water and sewer lines continue to serve some Marshfield customers, even though the Village formally merged with the Town of Plainfield in 1984. The water and wastewater systems have been maintained and upgraded with user fees. The Plainfield Water and Wastewater Commission has adopted regulations that allow for steady new growth and expansion in the village district by allocating a certain percentage of unreserved wastewater plant capacity for new growth each year for the next twenty years.

There are approximately 383 water connections, including Goddard College and the Northwood development off of Rt. 214. The water main running along Route 214 was replaced with a larger, four-inch diameter pipe in 2001. Much of this infrastructure is approaching 50 years of age and increased maintenance and replacement costs should be anticipated. Households purchase 60,000 gallons of water per year at a flat rate. An additional fee is charged for every thousand gallons a household uses above 30,000 gallons in 6 months. Water rates have been and continue to be below the state average. This limits the town's ability to repair or replace aging infrastructure and accommodate growth. The town has been progressively increasing water rates instead of having one large price increase. This added revenue is needed to allow for improvements and future growth. A capital fund for long-term repairs and replacement will help keep costs stable. The Water Department chlorinates the water to kill bacteria. Fluoride supplements were removed from the water supply in March 2009. As required by state law, the Department monitors water quality daily.

The main source of Plainfield Village's water is six springs on Maple Hill in Marshfield. The Source Protection Area for the spring system covers 47 acres. This is an area designated by the State of Vermont where contamination could impact our public water supplies from potential pollution. In 1994, the Town of Plainfield purchased 14 acres immediately surrounding the springs in order to protect them from contamination. The remaining 33 acres in the Wellhead Protection Area are privately owned. The Marshfield Town Land Use and

Zoning Map has designated most of this area as the Plainfield Village Watershed Area.

The second source, used for back-up purposes, is the Hood Well points, located at the base of Maple Hill, adjacent to the cemetery. A 14-acre Source Protection Area surrounds the site in order to protect the well from potential contamination. This second Source Protection Area is partly in Marshfield and partly in Plainfield. The portion in Marshfield is zoned for High Density Housing (land served by public water and sewerage system) and Agricultural and Rural Residential. The portion in Plainfield is designated Rural Residential with two-acre minimum lots.

The town developed a Source Protection Plan for these water sources that the Vermont Department of Environmental Conservation approved in 1995. The Plan uses the Source Protection areas to identify threats to the water supplies and includes a management and contingency plan to prevent the sources from becoming contaminated. This plan is updated every three years. All residents, but especially landowners living within the Source Protection Areas for the two water supplies, are urged to dispose of household's wastes and chemicals with care. For example, used motor oil and leftover paint should never be dumped out on the ground, but taken to appropriate trash facilities. Very small quantities of such chemicals can contaminate thousands of gallons of water in an underground aquifer. Underground fuel storage tanks should be carefully monitored and leaks prevented. In-ground septic tanks should be checked and pumped on a regular schedule.

The Plainfield Wastewater Department operates a wastewater treatment plant located between the recreation field and the Winooski River in Plainfield Village. The original plant was built in 1968 with a combination of state and federal funds. Goddard College helped finance the plant in exchange for rights to 22 percent of the plant's capacity. The original plant was designed to last 20 years, and it was replaced in 1999 after being in service for 29 years. The new plant is approximately halfway through its expected service life. The Water and Waste Water Commission has started to put money in a reserve fund dedicated to future replacement costs. How

much those costs will be will depend on the regulations and technology in place at the time of replacement. There are currently 353.5 sewer connections, including the Goddard College campus and the Northwood development off Route 214 in East Montpelier. In 1999, the Town built a new wastewater treatment plant. Aided by a 50% federal grant, the Town bonded for the cost, but only the ratepayers of the sewer system pay back the bond. The new plant increased the capacity of the plant from 100,000 gallons a day to 125,000 gallons a day. The new plant uses an ultraviolet light system to disinfect the treated discharge to the Winooski River.

The Plainfield Water and Wastewater Commission voted to phase-in new hookups to the wastewater plant as allowed in the Wastewater Allocation Ordinance. Plainfield has no obligation to provide additional hookups to Marshfield residents living near Plainfield's village area, although the Select Board voted in 2006 to adopt an amended wastewater ordinance that extends the district to areas within 500 feet of existing water and sewer lines, which allowed a couple sites in Marshfield to obtain sewer hookups. The Commission designated a certain amount of reserve plant capacity to be available for new connections or expansions each year for the next twenty years with an extra amount designated for the first year of the new plant's operation. Any allocation that remains unused at the end of each year is added to the total available for subsequent years.

The town no longer applies sludge to agricultural fields. Now all sludge is hauled away, usually to the Barre City municipal wastewater plant where it is combined with the much larger volume of sludge from that plant. In 2002, Barre City had a contract with a Canadian firm to haul away the de-watered sludge and compost it in Canada. The costs for sludge hauling and disposal have been increasing rapidly, adding significantly to the operating cost of Plainfield's wastewater disposal.

### ***Solid Waste Program***

The State of Vermont Solid Waste Program estimates, using data for the year 2000, that Vermonters generate 5.19lbs/person/day of municipal solid waste, of which 1.70 pounds per

person per day (32.8%) is reused, recycled or composted; and 3.49 pounds per person per day (67.2%) is disposed of. Plainfield generates an estimated 1218 tons of municipal solid waste per year, of which 399 tons are diverted and 819 tons are disposed of per year.

The Town of Plainfield is a member of the Central Vermont Solid Waste Management District(CVSWMD) and is included in the District's Solid Waste Implementation Plan. CVSWMD has adopted a Zero Waste approach to managing discarded and unwanted resources that are typically referred to as waste materials. They are engaged in a ten-year effort to restructure their programs and practices to offer communities opportunities to move closer to, and finally achieve, a no-waste region.

CVSWMD is devoting significant resources to developing organics diversion programs for residents, businesses, schools and other institutions. Organic material represents between 20% and 40% of the waste stream, depending upon the generator. In a landfill, organic material contributes significantly to greenhouse gas emissions, even when recaptured for energy during post-closure. By diverting the material, the embodied energy of this resource is captured and turned into a viable product used by farmers, gardeners, nurseries and landscapers.

As of the October of 2011, all of the public schools in the CVSWMD are diverting food waste to composting facilities. Business and residential organic collection expansion efforts will take place through 2012 and 2013. The organics programming being developed by the CVSWMD will allow all District residents and businesses to save on the cost of disposal, diminish regional contributions to global warming, and divert material to local composters, thereby strengthening local economic development and creating sustainable, environmentally friendly waste-based programming. This is the goal for all Zero Waste endeavors.

During the 2012 legislative session, Act 148: An Act Relating to Universal Recycling of Solid Waste was ratified by the Vermont legislature. This legislation contains phased bans of recyclables and organic materials from the landfill using a phased-in approach that will conclude in 2020. Other similar endeavors may be pursued including: seeking extended producer responsibility on specific products, and establishing advance disposal fees on other items that are typically dumped in roadside rural areas. Plainfield will continue to actively participate in these efforts, carefully considering which may be appropriate for implementation on a local level. While developing new programming, the District continues to provide recycling and household hazardous waste collection services to Plainfield residents and small business owners, collecting hazardous items, including mercury thermometers, fluorescent light bulbs, heavy metal batteries, pesticides, and herbicides.

CVSWMD also provides additional recycling and reuse initiatives including the Lawrence Walbridge Reuse program, school, municipal and disaster relief grants, computer collections and more. As a member of the CVSWMD, Plainfield benefits include the development of a Solid Waste Implementation Plan, which is critical in order to fulfill State solid waste planning requirements. The State requires that the plan be based upon the following priorities, in descending order: a) the greatest feasible reduction in the amount of waste generated; b) reuse and recycling of waste to reduce to the greatest extent feasible, the volume remaining for processing and disposal; c) waste processing to reduce the volume necessary for disposal; d) land disposal of residuals.

Many residents contract with private haulers to dispose of their waste and to pick up materials for recycling. Others haul their waste and materials for recycling to transfer stations in nearby towns or use Saturday "fast trash" services in Plainfield village or elsewhere. Waste is transported and disposed at the WSI landfill in Moretown, Vermont and the Waste USA landfill in Coventry, Vermont. Haulers may choose to dispose the waste in landfills or incinerators in other states if cost-competitive to Vermont landfills or if the

Vermont landfills have reached their tonnage limits for the year. Many Plainfield residents compost food and yard waste at home. Some residents burn waste in “burn barrels” and some dump waste, though both are illegal.

As a member of the Central Vermont Solid Waste Management District, Plainfield plays an active role in addressing the region's solid waste management responsibilities and problems. Plainfield expects to continue to participate in the Central Vermont Solid Waste Management District to achieve solid waste management goals and does not anticipate a crisis in the management of its solid waste. The Town does not anticipate that a regional landfill will be sited in Plainfield due to traffic issues related to increasing truck traffic from either Route 2 through the lower village or over the rural dirt roads from the Barre side of Plainfield.

### **7.3 Services & Resources**

#### ***Plainfield Fire and Rescue***

In 2013, the Plainfield Fire Department celebrated its 100<sup>th</sup> anniversary. The Town relies on volunteers to provide both fire and rescue services. Membership is an area of concern. Call volumes have increased over the past several years and more members are needed to provide these essential services. The PF&R contracts with the East Montpelier Ambulance Service. It is notable that in recent years eight percent of Vermont’s total fatal accidents have occurred on US Route 2 between Plainfield and Marshfield.

#### ***Emergency Shelter***

Currently, there are two large-scale emergency threats to the Town of Plainfield that merit strategic planning. The first is severe flooding from either the Great Brook or the Winooski. The second is a chemical or other hazardous spill on US Route 2. Both disasters would require a triage area and an emergency shelter with off-grid power capability.

The American Red Cross, Goddard College, and the Town of Plainfield established an Emergency Shelter at Goddard College. The American Red Cross is providing the Town of Plainfield the

equipment and training necessary to open a local disaster shelter quickly and independently.

The Winooski River bisects the village. Ideally, there would be a shelter on either side of the river to avoid traffic choke points during an event. Currently, the only facility on the south side is the Fire Station and supervising the use of emergency equipment while providing for displaced people would be very challenging.

The location of staging areas and shelters brings up the issue of communication and warning systems. Presently, the Plainfield Fire Chief manually directs the warning process. This has proved successful in the past and successfully avoided loss of life in the May 2011 storm event. This system will probably take on a more formal, regimented approach as the population of the Town grows and extreme weather events become more frequent. The Town has formally adopted the federal guidelines for managing these situations and has an Emergency Management Coordinator who is actively pursuing emergency shelter options and is updating the Town’s emergency response system.

#### ***Flood Advisory Committee & Flood Mitigation***

This Committee strongly recommends that the Town study ways to prevent flood hazards resulting from debris jams at narrow downstream overpasses on the Great Brook. The bridge on Brook Road between Creamery and Mill Street and the bridge on Mill Street that spans the Great Brook are the two major choke points. In 2102, the Select Board met with FEMA representatives to discuss federal funding to widen the bridges. The Town didn’t qualify as an applicant due to the lack of financial records documenting the cost of three previous flood events at each bridge. With the help of Central Vermont Regional Planning Commission, the Town is taking steps to track and digitalize past flood damage costs and is receiving assistance in application for a Community Development Block Grant for a study to develop alternatives designs for these bridges.

#### ***Town Government and Administration Resources***

Plainfield has always encouraged its citizens to participate in town government. Boards and commissions often have vacancies, as most people's daily schedules leave little time for



meetings. However, the community has several ways of keeping citizens aware of government functions: Select Board meetings are televised on the public access channel; Select Board minutes, articles about planning, conservation and energy commission meetings and/or projects appear regularly in the monthly Twinfield Field Notes and in the *Times Argus*; the Town maintains a website (<http://www.plainfieldvt.us>) as well as a presence on Front Porch Forum (<http://frontporchforum.com>). The Town posts notices of public forums and special hearings at the Town Clerk's office, the Post Office, the Plainfield Co-Op, and the Mill Street Park Information Kiosk.

### **Recreational Resources**

In addition to the Russell Memorial Field, other recreation areas in Plainfield are less defined.

Numerous trails for snowmobiling, walking, horseback riding, and mountain biking (including some Class 4 roads) crisscross Plainfield's woods and fields. Spruce Mountain and the L.R. Jones State Forest provide excellent hiking trails. Many recreation resources are located on private property and some property owners have kept their lands open for the convenience of Plainfield residents. Hunters have access to most parts of town. The Winooski River provides unique recreational opportunities to boaters and fishers. The Winooski can be accessed via the public park at the Martin Bridge in Marshfield (upstream from Plainfield village), the boat portage behind the Plainfield Coop (maintained by The Friends of the Winooski), and a pedestrian trail from western end of the Mill Street Park.

The abandoned Montpelier-Wells River Railroad bed (MWRR) is a significant recreation resource. The railroad ended operation in 1956 after 83 years of hauling granite, farm products, consumer goods and passengers between Montpelier and the Connecticut River. The former railroad bed has reverted to private property in Plainfield, but some property owners allow sections to be used for walking, snowmobiling, bicycling, skiing, and horseback riding. In other towns, much of the old railroad bed is still in public ownership. The trail is unusual because, unlike Vermont's many trails that ascend mountains, the MWRR follows the

valley. This makes the trail more accessible to the old, the young, and the physically challenged. The trail provides an off-road connection to Groton State Park and could be used by off-road travelers to Montpelier if it were contiguous. Local snowmobile clubs negotiate with landowners to define trails throughout the town that connect with other regional trails.

### **Historically Significant Sites**

Several properties in Plainfield are listed on both the State and National Register of Historic Places. Plainfield Village is recognized as a Historic District on the National Register of Historic Places, as is Goddard College's Greatwood Campus.

### **Plainfield Historical Society**

The Plainfield Historical Society (PHS) is a private, non-profit association, whose mission is to "collect, preserve, share and create materials that establish or illustrate the history of Plainfield, Vermont." In carrying out this mission, the Society helps to enrich and build community and is an important contributor to the cultural and social life of Plainfield.

In 1993, PHS published *The Town of Plainfield, Vermont: A Pictorial History, 1870 – 1940* (second printing in 2008). It has also published a booklet containing a self-guided walking tour of Plainfield village (available at the Town Clerk's Office) and an annual wall calendar featuring different historic photos for each month. PHS organizes exhibits and presentations on local history at various locations in the village.

Unlike other local historical societies, the Plainfield Historical Society does not receive funding assistance from the Town. However, it has been allowed exclusive use of a small, one-room building owned by the Town (the village's first fire station) on US Route 2/School Street. This space is used to store artifacts and printed materials that have been donated to the Historical Society over the years. The building is not equipped to display historic artifacts and serves as a repository for the Society's assortment of miscellanea and printed material which, although of local significance, are generally of limited quality and value.

The Society meets monthly in the Cutler Library and stores some of its files there. However, since the library is small and crowded with materials, there is not adequate wall space to effectively display materials and information reflecting Plainfield's history.

### ***Cutler Memorial Library***

The Cutler Library, located on US Route 2, is a not-for-profit corporation managed by a Board of Trustees. The property is owned by the Library. The Town votes to appropriate fund to the Library at Town Meeting. Currently, the Library is engaged in strategic planning and has held a well-attending public input meeting and is preparing a plan laying out its options for the future. The Select Board looks forward to reviewing this plan and to providing assistance wherever possible

### ***Goddard College***

The Goddard campus, located on 117 acres at the western edge of Plainfield's village, includes two clusters of college buildings and a community radio station (WGDR 91.1 FM). The school was initially chartered as a Universalist seminary, the Green Mountain Central Institute, (later renamed Goddard Seminary) in 1863. It was moved to Plainfield from Barre in 1938. The full time residential program ended in 2002. Goddard now offers adult learners a low-residency program for higher education. Goddard is the nation's leading low-residency college, with 10 low-residency programs and nearly 800 students enrolled at three sites: Plainfield, Seattle, WA and Port Townsend, WA. In Plainfield, Goddard employs approximately 230 people.



### ***The Health Center***

The Plainfield Health Center is one of eight community health facilities in Vermont. Open to everyone, the center provides high-quality, cost-effective care to patients regardless of their ability to pay. Payments for eligible patients are on a sliding scale. The Health Center serves an estimated 10,500 patients annually. The Health Center directly generates employment of approximately 75 full time positions and indirectly creates an estimated 25 full time jobs as a result of its total operating expenditures.

In 2012, the Health Center underwent a significant expansion with the construction of a 5,000-square-foot building, paid for by \$988,000 in federal grant funding and approximately \$200,000 in local funding.

In 2004, the Health Center injected \$2.4 million in operating expenditures into the local economy. That number doubled between fiscal years 2004 and 2009, and increased to over \$6.3 million for the current fiscal year, including the budget for the accessory building and staff. This growth directly affects the local economy, as well as producing additional indirect and induced economic activity, for an overall economic impact of \$9.6 million. This amount includes about \$7.2 million in value-added spending, including personal income.

### ***Twin Valley Senior Center***

The Twin Valley Senior Center (TVSC) is a non-profit organization providing meals, education, exercise and/or health-related programs three days a week for seniors from Plainfield, Marshfield, Cabot, East Montpelier, Calais and Woodbury. The Senior Center is located at Schoolhouse Common in Marshfield. Each Town contributes to the yearly operational expenses of the Center. It

serves approximately 33 Plainfield residents. Green Mountain Transit Agency (GMTA) provides transportation from individual homes to the Senior Center, as well as home meal delivery. The demand for meals has more than doubled in the past three years. To accommodate this growing demand, TVSC would like to own a 3,000 – 4,000 square feet facility at a location with ample on-site parking. This would allow the center to be open five days a week and provide adequate storage space for food supplies.

The Municipal Facilities Study Committee strongly suggests that the Town work with the TVSC to try to identify a suitable location for a permanent home for the Senior Center in Plainfield, to partner with TVSC on grants to assist in this process, and to explore the possibility of combining TVSC with a senior housing development.

**Child Care**

Plainfield has approximately a half dozen private child care providers throughout the town. (See Chart 7.1.) Children aged kindergarten and older also have access to Twinfield Learning Center (TLC) at Twinfield School which provides educational opportunities for children after school.

Chart 7.1

Source: The Bright Futures Child Care Information System

Plainfield Childcare Providers		
Provider Name	Contact Information	Program Type
Twinfield Union Preschool	106 Nasmith Brook Road	Licensed Provider
Washington Northeast District ASP at Twinfield	106 Nasmith Brook Road	Licensed Provider
Center School Learning Community	786 Upper Road	Licensed Provider
MacLaren, Dawna	785 Upper Road	Registered Home
Brickey, Sally	231 Bunker Hill Circle	Registered Home
Roberts, Brandi	1267 Hollister Hill Rd.	Registered Home
Welti-Darling, Amy	806 Maple Hill	Registered Home
Anderson, Chelsie	2930 VT Rte 14N	Registered Home

**Regional Services**

The agencies listed below expand the services available to residents of Plainfield:

- The Twin Valley Senior Center
- Central Vermont Community Action Council
- Central Vermont Home Health and Hospice
- Central Vermont Council on Aging
- Retired Senior Volunteer Program, People’s Health and Wellness Clinic

- Washington County Youth Services Bureau
- Battered Woman Services
- Onion River Food Shelf
- Green Mountain Transit Agency
- GMTA US Route 2 Commuter Bus Service

**Communication Capacity**

Plainfield is fortunate to be well-served by various telecommunications providers, as well as television and radio stations, newspapers, and community forums.

There are three kinds of telecommunications services available in Plainfield: telephone, cable, and wireless. The local telephone company is Fairpoint Communications. Charter Communications is a franchised, cable provider largely limited to the village area. Satellite-based wireless is available from national providers ViaSat and HughesNet. Land-based wireless is available from national, mobile carriers AT&T and Verizon Wireless, as well as by northern-Vermont (and Plainfield-based), fixed provider Cloud Alliance. With the exception of the satellite wireless providers, each wire-line and wireless telecommunications provider offers both voice and broadband services.

Plainfield has reasonable access to television over-the-air services (OTA). Most or all of the major national television networks are available on digital OTA antennas in many parts of town. Television is further available from Charter Communications cable (in the village) and DISH and DirecTV satellite-based wireless services in the Town. Streaming television is available over broadband connections as well.

Numerous radio stations are audible in Plainfield on the AM and FM bands. WGDR, 91.1FM, is a not-for-profit community radio station broadcast from Goddard College.

The town is served by two newspapers, the *Times Argus* and the *Washington World*; two online community forums, Plainfield People on Facebook ([www.facebook.com](http://www.facebook.com)) and Front Porch Forum (<http://frontporchforum.com>); and *Field Notes*, the Twinfield monthly school district newspaper. Finally, Plainfield has an information kiosk located in the Mill Street Park.

## Facilities, Utilities, Services & Resources

**Goals:** Maintain and upgrade Town property, including: historic buildings; amenities that promote healthy life styles and cultural events; amenities that promote pedestrian safety; amenities that promote alternative transportation; proper space for Town government, public meetings, and voting. Protect residents from health and safety hazards. Ensure that adequate child and Senior Citizen care services are available. Maintain and upgrade the Town's water and wastewater system, storm water management system, and emergency management system to protect public health, safety and welfare, and to achieve gradual and sustainable growth in the village.

Strategy	Responsible Party	Priority
With the aid of grant funds and fees in lieu of parking space requirements from local businesses and owners of residential rental property, acquire or create additional off-street parking spaces for the upper and lower village.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Planning Commission</li> <li>▪ Development Review Board</li> </ul>	Short Term (within 1 year)
Enact ordinances to regulate solid waste disposal and establish obligations of owners of vacant buildings and enforce them.	<ul style="list-style-type: none"> <li>▪ Select Board</li> <li>▪ Town Health Officer</li> <li>▪ Town Building Safety Officer</li> </ul>	Short Term (within 1 year)
Keep the Town's Basic Emergency Operations Plan (BEOP) updated; use the National Incident Management System (NIMS) as the basis for all incident management.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Emergency Management Coordinator</li> </ul>	Short Term (within 1 year)
Implement the Town's Pre-Disaster Mitigation Plan and review progress annually.	<ul style="list-style-type: none"> <li>▪ Fire Department</li> <li>▪ Emergency Management Coordinator</li> </ul>	Short Term (within 1 year)
Work with the Red Cross, the Central VT Emergency Management Planner, and potential funding agencies to maintain the Red Cross certified emergency shelter currently at Goddard.	<ul style="list-style-type: none"> <li>▪ Emergency Management Coordinator</li> <li>▪ Fire Department</li> </ul>	Long Term (within 3 years)
In association with the State Division of Fire Safety and with the Town's insurance company, develop and follow a regular Maintenance inspection procedure for Town facilities.	<ul style="list-style-type: none"> <li>▪ Fire Department</li> <li>▪ Selectboard</li> </ul>	Short Term (within 1 year)
Work with CVRPC and VTrans to help design and fund replacement of undersized bridges on Main and Brook to prevent debris jams.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Road Commissioner</li> </ul>	Short Term (within 1 year)
Promote the use of the Park and Ride, the Rec. Field parking lot, and the Town Hall parking lot. Seek additional parking space for events at the Town Hall.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Short Term (within 1 year)
Work with landlords, tenants, and business owners to enforce parking restrictions in the village.	<ul style="list-style-type: none"> <li>▪ Town Constable</li> <li>▪ Road Commissioner</li> </ul>	Short Term (within 1 year)
Support efforts to reduce illegal burning.	<ul style="list-style-type: none"> <li>▪ Select Board</li> <li>▪ Fire Warden</li> </ul>	Short Term (within 1 year)
Promote community-based and private child and senior citizen care facilities.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
Continue to expand the communication infrastructure in town. Ensure that new telecommunication towers are designed and sited to provide co-location of other carriers.	<ul style="list-style-type: none"> <li>▪ Planning Commission</li> <li>▪ Development Review Board</li> </ul>	Short Term (within 1 year)

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Assess the condition of the Village Trustee Building and develop a plan for repairing it for Plainfield Historical Society's use or investigate an alternative space for the PHS collection.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Planning Commission</li> <li>▪ Plainfield Historical Society</li> </ul>	Near Term (within 1-3 years)
Apply for grants to fund improvements for pedestrian safety and for additional parking in the vicinity of the Town Hall/Opera House and the lower village...	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
Develop plans and a budget for the repair and remodeling of the Municipal Building to present to voters.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
Through grants and private funds, continue to upgrade the Town Hall/Opera House into a facility suitable for cultural and municipal events.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)

## 8| Transportation

The village of Plainfield is bisected by U.S. Route 2, one of Vermont's primary east-west highways. U.S. Route 2 connects towns between St. Johnsbury and Montpelier and is a northern connecting route between I-89 and I-91/I-93. It is an important corridor for Plainfield commuters as well as for commercial trucks and tourist travel. As a result there is an increasingly large number of vehicles traveling through the village center.

The Brook Road often serves as the most direct route from Cabot, Marshfield and Danville to the Orange/East Barre area and the valley towns of Chelsea, Tunbridge, and Sharon. The Middle and Lower Roads serve the same purpose between Plainfield and Barre. Heavier use of these roads, along with increased instances of speeding vehicles, creates both unsafe conditions and nuisance from excessive dust. In 2000, the Select Board established and posted a 35 mph speed limit on all town roads outside the village. The speed limit in the lower village is 25 mph; on US 2 the limit is 30 mph.

Town roads have been renamed and signposted in compliance with the statewide E-911 emergency system, which has also made it easier for both delivery people and visitors to find rural destinations.

US Route 2 is maintained by the State of Vermont. The paved roads leading in and out of the village are Class 2 roads. There are no plans at the present to extend the amount of paved road surface in town. In the mid 1990s, the town removed the paved surface on much of the Brook Road because it was too difficult and expensive to maintain. The remaining secondary roads are Class 3 gravel roads. There is no long-range road repair/rebuild schedule and repairs are made as needed. This existing method of maintaining Class 3 roads is adequate, and all secondary roads are in good condition. Their culverts and drainage ditches are on a maintenance schedule that ensures that they are kept in good condition. Class 4 Roads receive no regular summer maintenance and are not plowed in the winter.

According to VTrans traffic studies, between 1986 and 1998 traffic volumes have increased more than 50% on US Routes 2 and 214. In 1994, a proposal to build a bypass routing commercial and through traffic around the village center had polarized opinions in town. When presented to voters in both Plainfield and Marshfield, it was approved in Plainfield and rejected by Marshfield and consequently tabled at VTrans.

In 1997–1998, VTrans adopted new Vermont Design Standards that allow the roadway to be tailored to village settings, with reduced speeds and narrower lane widths. These standards are meant to encompass a variety of traffic calming solutions. US Route 2 functions more as a Village Main Street than a highway where it passes through built-up areas. In 2012, the Town received a grant award from VTrans to study the feasibility of sidewalk construction on the south side of US Route 2 from the Mill Street parking lot to the Post Office. Sidewalks on both sides of US Route 2 would allow for construction of a safe pedestrian crosswalk spanning it, which, in turn, would provide safe access to the lower village.

In 2004, the Central Vermont Regional Planning Commission contracted with DuBois & King to prepare a study of the US Route 2 and Main Street intersection and presented options for reconfiguring the intersection at a public meeting. That study, which was completed in June, 2005, observed that, as Plainfield residents are well aware, "high traffic volumes, plus the geometry of the intersection, cause this intersection to be dangerous." The study concluded that the creation of a "T" intersection with a traffic signal and pedestrian crosswalks, along with a new sidewalk on the south side of Main Street and US Route 2, was the preferred solution to the problem. In May, 2012, at the town's request, the Transportation Advisory Committee of the Central Vermont Regional Planning Commission voted to rate this as a priority safety and traffic operations project, which means that it is now in line to be accepted as an Agency of Transportation project.

This improvement will overcome the lack of sight distance from the northeast, permitting safe pedestrian crossing of US Route 2, while safely

merging vehicle traffic onto US Route 2. It will allow easy pedestrian and highway traffic access to the town's lower and upper villages and to both the historic Town Hall/Opera House and to the town's parking lot opposite the Town Hall. Improvement of this intersection is critical to maintaining connectivity between the upper and lower villages and to the future of this landmark public building as the venue for the town's annual meeting and as well as a popular dance and performance space.

The 2005 intersection study also proposed that a sidewalk be constructed on the south side of Route 2 from the westerly termination of Main Street in front of the present Blinking Light Gallery west along US Route 2 past the town's parking lot opposite the Town Hall. Construction of this sidewalk would allow for a crosswalk to the north side of Route 2 in the vicinity of the Town Hall to be permitted by Vermont Agency of Transportation. In order to advance this project, in 2012, the town of Plainfield applied for and received funds from the Vermont Agency of Transportation for a feasibility study for this project.

The study included a pedestrian walkway over the Winooski River and a sidewalk on the south side of US Route 2, extending west to the Post Office.



**Public Transportation**

While recognizing that the automobile will remain the primary mode of transportation for most people for the foreseeable future, the town supports alternative transportation. An American Community Survey (2006-2010) showed almost 75% of commuters rode alone. (See Chart 8.1.)

In the last few years, Plainfield residents have had a public transportation option. In April of 2010, commuter bus service was established by Green Mountain Transit Authority (GMTA) and Rural Community Transportation (RCT), providing five trips a day between St. Johnsbury and Montpelier during peak commuting hours. Bus stops are located at the Plainfield Park and Ride, on Route 2 at the Post Office, and in the upper parking lot of Goddard College. In addition to Plainfield, the route includes stops in East Montpelier, Marshfield, West Danville and Danville.

Chart 8.1

Commuting to Work		
Mode	Estimate	Percentage
Car, truck, or van-drove alone	140	73.30%
Car, truck, or van-carpoled	22	11.50%
Public transportation [not available at the time of this survey]	0	
Walked	15	7.90%
Other means	0	
Worked at home	14	7.30%
Mean travel to work time (minutes)	24.9	n/a

Source: American Community Survey 2006-2010, 5-Year Estimates

The US Route 2 Commuter bus service provides accessible and affordable transportation for those traveling long distance for employment and education, as well as basic mobility for those who are transit dependent. Additionally, the service removes vehicles from the corridor, thereby reducing air-pollution and wear and tear on US Route 2 and feeder roads. The route not only serves the single corridor, but enables transfers to/from the Waterbury Commuter, Burlington Link Express, Montpelier Hospital Hill, City Commuter, Montpelier Circulator routes and Jay-Lyn Shuttle.

By October, 2012, approximately 280 Plainfield riders used GMTA and RCT commuter transport. In addition to the regular runs during the morning and afternoon commuting hours an additional mid-day round trip between Marshfield and Montpelier has been added which includes stops in Plainfield. Schedules can be found at [www.gmtaride.org](http://www.gmtaride.org).

Currently, the towns of Plainfield, Marshfield, and East Montpelier each contribute \$8,333 per year for this service.

GMTA is a nonprofit transportation company, offering door-to-door service for seniors and persons with disabilities. GMTA provides ongoing individual medical and daily needs transportation service to those who qualify for Medicaid, Elderly and Disabled funds or both. Qualifying individuals include Medicaid clients, those 60 years of age or older and people with disabilities. GMTA offers individuals the scheduling and payment of rides which are provided through GMTA volunteer drivers or bus service. Trips include coordinated service to local and long distance medical care facilities, dialysis and radiation treatments, meal site programs, senior centers, adult day care, pharmacy and shopping locations. In 2012, 38 Plainfield residents were provided a total of 2,774 trips and 20,475 miles driven.

### ***Road Maintenance***

The Select Board adopted a Road Policy in 2003 that discourages the upgrading of Class 4 Roads and Trails. This was done in order to reduce higher road maintenance costs for the town resulting from extension of the road network into previously undeveloped areas. When there is application for new driveways or curb cuts, there needs to be communication between the Road Foreman, the Zoning Administer, and the Fire Department. A site review plan should be provided.

The Fire Department has concerns about access for first responders and the liability of the town not being able to access the property with the right equipment in a timely manner. The Road Foreman has concerns about road access, driveway design, sight lines, and drainage issues caused by new construction.

Over the past twenty years, multiple projects have been completed to improve pedestrian traffic through the village. In the mid-1990s, sidewalks were constructed along the northern side of Route 2 from the Town Hall to the Post Office. The granite curb gives pedestrians an extra margin of safety, and the Town contracts with a private operator to keep village sidewalks plowed in the winter. In conjunction with the US Route 2 sidewalk construction, a gravel path was laid down from the Post Office to the Route 214

intersection. This unpaved portion of the sidewalk has become overgrown in recent years, but continues to be used by pedestrians walking between the village and Goddard College.



In 2001, the construction of the park on Mill Street included a brick patterned circle at the intersection with Main Street that had the intended effect of slowing traffic by narrowing the over-wide intersection and making the pedestrian crossing shorter and safer. The old, uneven sidewalks in the lower village were rebuilt in 2007- 2008 adding granite curbing, “bump outs”, and pedestrian crossing on both Main and Mill Street.

The former rail bed through the village has reverted to private ownership; however, the Cross Vermont Trail Association is working with landowners to extend the trail through Plainfield. This could eventually provide a trail for Plainfield residents to commute to Montpelier by bicycle.

VTrans is planning to finalize plans for improvements to the section of Route 2 from Cabot to Main Street in Plainfield in 2013. Construction can include sidewalk improvements and extensions. The sidewalk from Main Street north to the Marshfield town line on the east side of Route 2, which is not properly curbed or paved, should be included in this project. The town should participate in scoping sessions to advocate for this improvement.

The nearest railroad passenger service is Amtrak, which is located in Montpelier Junction. The nearest major commercial airport is the Burlington International Airport, which is 50 miles away. There is limited commercial aviation located at the Knapp Airport in Berlin, where the runways and infrastructure have recently been improved with the hope that more commercial regional service will become available soon.



<b>Transportation</b>		
<b>Goals:</b> Maintain safe and efficient road system that provides adequate access to rural locations in town. Promote public and alternative modes of transportation in order to minimize fuel consumption, transportation costs, and pollution and to strengthen local economic systems. Protect the scenic and rural character of the Town's roads. Support and encourage alternative transportation modes, such as bus, bicycles, and walking.		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Develop a policy for traffic management on US 2 and village roads that supports the economic health of village businesses, as well as the safety and well-being of village residents. Create safer pedestrian access from Route 2 through the village.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Short Term (within 1 year)
Coordinate new driveways and curb cuts with the Fire Department, the Zoning Administrator, and Road Foreman in the permit process.	<ul style="list-style-type: none"> <li>▪ Fire Dept.</li> <li>▪ Road Foreman</li> <li>▪ Zoning Admin.</li> <li>▪ Planning Commission</li> </ul>	Short Term (within 1 year)
Ensure that new driveways provide adequate emergency vehicle access or that a waiver of responsibility is agreed upon with First Responders in the case of limited access.	<ul style="list-style-type: none"> <li>▪ Fire Dept.</li> <li>▪ Road Foreman</li> <li>▪ Zoning Admin.</li> <li>▪ Planning Commission</li> </ul>	Short Term (within 1 year)
A Town ordinance regulating the removal of roadside trees on Town roads should be developed which provides for removal only when they present a serious danger to the public and requiring consultation and approval by the Tree Warden before any roadside tree is removed.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Tree Warden</li> <li>▪ Road Commissioner</li> </ul>	Short Term (within 1 year)
Construct and maintain roads so that the impacts of storm water runoff on nearby streams are minimized and that historic stone walls are left in place.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Short Term (within 1 year)
Implement traffic calming measures identified in the 2013 study prepared by Broadreach Planning and Design.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Short Term (within 1 year)
Maintain traffic control signs and devices.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
Build sidewalks on Creamery Street and on the Brook Road in the lower village over time as funding becomes available.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
With assistance from CVRPC and VTrans, implement the recommendations in the 2013 Broadreach Planning and Design study for safe pedestrian connections and mobility between the lower and upper village and along Route 2.	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)
Support Cross Vermont Trail's efforts to extend the trail beyond the section from Route 14 to Country Club Road through Plainfield.	<ul style="list-style-type: none"> <li>▪ Conservation Commission</li> </ul>	Near Term (within 1-3 years)
Emphasize the use of Class 4 roads as recreational trails valuable for hiking, horseback riding, bicycling, VAST trails and cross-country skiing and snowshoeing.	<ul style="list-style-type: none"> <li>▪ Conservation Commission</li> </ul>	Short Term (within 1 year)
Consider downgrading appropriate Class 4 roads to Town Trail status for low-impact recreational use only (no motorized vehicles except for snowmobiles on approved VAST trails).	<ul style="list-style-type: none"> <li>▪ Selectboard</li> <li>▪ Conservation Commission</li> </ul>	Long Term (within 5 years)
Follow the principles of Vermont's Complete Street law to safely accommodate all transportation system users regardless of modes of transportation (walking, biking, or use of transit).	<ul style="list-style-type: none"> <li>▪ Selectboard</li> </ul>	Near Term (within 1-3 years)

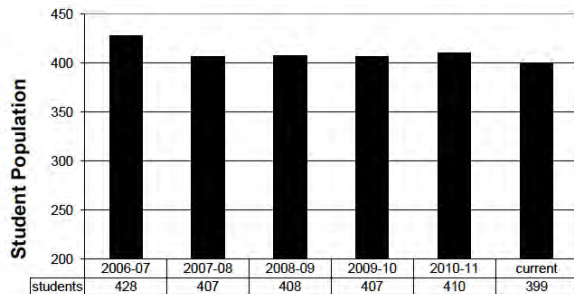
## 9| Education



Plainfield has offered public education to its children since the early 1800s. In the late 1960s, Plainfield, Marshfield and Cabot consolidated to become the Washington Northeast Supervisory Union (WNSU). As part of the Washington Northeast Supervisory Union, Twinfield shares administrative personnel (superintendent and full-time secretary, special education administrator and half-time secretary, 1.5 staff members for fiscal services) with Cabot School as well. Twinfield Union School is housed in one building in between Marshfield and Plainfield on an 88-acre campus.

Though enrollment at Twinfield increased through the 1990s, student numbers have been steadily decreasing since then. (See Chart 9.1.)

Chart 9.1



The state currently provides vocational education opportunities through a system of sixteen vocational centers serving local high schools around the state. The nearest vocational center to Twinfield is the Barre Vocational Center housed at Spaulding High School. Presently, transportation opportunities are available for Twinfield students to attend vocational programs at that facility. Goddard College provides access to a wide variety of adult education locally. The Vermont College of the Fine Arts, and Community College of Vermont are located nearby in Montpelier and also serve as locations for adult education.

Students from Twinfield score higher on the SATs than the statewide average and have a greater graduation rate. (See Charts 9.2 and 9.3.)

Chart 9.2

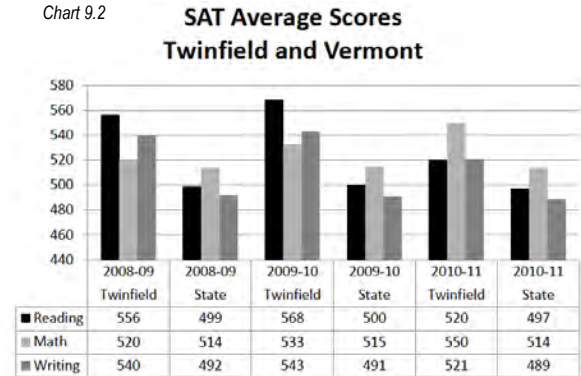


Chart 9.3

Year	Twinfield Graduation Rate	Statewide Graduation Rate
2010-11	94%	87%
2009-10	88%	87%
2008-09	82%	85%
2007-08	75%	85%

Per pupil spending is one of the primary factors that determine the tax rate. In fiscal year 2013, Twinfield spent \$12,382 per pupil, a 5% increase over the prior year. This increase is also reflected in the drop in student population, which has decreased by nearly 7% between 2006 and 2012.

Many residents are eligible to calculate some or all of their school taxes as a percentage of their income rather than on the value of their property. The “income sensitivity” rate also is derived from the amount of per pupil spending. Under Act 68, there are two gross numbers: one is the grand total and the other is an amount used to calculate per pupil spending. Certain grants and money generated through local fundraising are not counted when the state calculates each district's education spending.

**Education**

**Goals:** Encourage and promote the creative use of public and private school facilities and the conservative use of public funds. Engage students in Town projects through community service. Create and promote local opportunities for life-long learning and creative expression.

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Continue to monitor population and school enrollment trends to address future needs in an efficient manner.	Planning Commission	Near Term (within 1-3 years)
Maintain regular communication between the towns of Plainfield and Marshfield, with Twinfield Union School, and with the Northeast Supervisory Union.	Selectboard	Short Term (within 1 year)
Support and aid the Cutler Memorial Library in its educational activities and programs.	Selectboard	Short Term (within 1 year)
Work with school administrators to identify Town-related projects that would be suitable for students to undertake or to assist with.	Selectboard	Near Term (within 1-3 years)
Collaborate with Goddard College to ensure the community is made aware, in a timely manner, of free educational programs available at the college.	Selectboard	Near Term (within 1-3 years)

## 10| Land Use

Land use is one of the most critical and controversial issues confronting local communities. While decisions regarding land use are generally made by the landowner, it becomes a public concern to the extent that land use could affect adjoining properties, demand for municipal services, public safety, the local environment, the use of finite resources, the character of the community, or the quality of life of its residents. Plainfield's land area, at 13,501 acres, is roughly one half the area of traditional land grant towns. This reduced land base presents the town with particular challenges in protecting its rural character.



Plainfield developed in two distinct areas: the village and the outlying rural hills. Through most of Plainfield's history, growth has occurred in the village, which occupies 128 acres in the northwest corner of town. Over the past twenty-five years, however, virtually all new houses in Plainfield have been built outside the village, particularly along Lower Road and Country Club Road. Additional homes built on Maple Hill Road in Marshfield in recent years have contributed to the increase in car traffic through the lower village.

The village and some areas at its edges are served by the town's water and sewer lines, shown on the Utilities and Facilities map in the appendix. In 2004, the zoning was revised to allow development on lots of .25 acre in the village (previously the minimum lot size had been .5 acre). This, together with the current sewer and water hookup capacity, would allow greater density in the village district, enabling more

people to build homes close to existing public services and transportation corridors.

The historic district, containing the village's core, has always served as the social, cultural, educational, governmental, commercial and manufacturing heart of the town. Visible clues to the source of its early prosperity, the water-powered mills and manufactories, can be found in the area around the old Mill Privilege where the dam and the ruins of some penstocks remain.

Plainfield's village, practically speaking, extends into the town of Marshfield, serving the residents in the western part of that town. This area of Marshfield was part of the legal Village of Plainfield until this was dissolved in 1985. As a consequence, some residences and businesses on the Marshfield side of the line continue to be served by the Plainfield water and wastewater system. However, Marshfield declined to share in the cost of constructing the new wastewater plant, stating that they needed no further capacity. Therefore, Plainfield has no obligation to provide additional hookups to Marshfield residents living near Plainfield's village area, although the Select Board voted in 2006 to adopt an amended wastewater ordinance that extends the district to areas within 500 feet of existing water and sewer lines, which allowed a couple of sites in Marshfield to obtain sewer hookups. Since Marshfield businesses on the edge of Plainfield village are perceived by most people to be a part of Plainfield village, the Plainfield Planning Commission has requested the Marshfield Planning Commission and Development Review Board notify the Town of development proposals and planning policy changes for this area of Marshfield.

In 2012, Plainfield's sole remaining dairy farm ceased operations. While there are still non-dairy farms in Plainfield, most of the town has heavy upland soils of medium fertility. Although the land is capable of supporting various agricultural enterprises, it has generally been used for raising hay, sheep, cows, and horses. The decline of farming provides fewer economic reasons for landowners to keep large tracts of open land, and the town may continue to become less agricultural and more residential. Among the most desirable

locations for housing are those fields with dramatic views of the countryside. Plainfield has a few areas of well-drained river bottomland along the Winooski that are potentially excellent for vegetable and small-fruit production.

Two-thirds of Plainfield's land is forested. The trees not only define the appearance of the town and provide important habitat for wildlife, but also represent a valuable renewable economic asset for landowners and the town as a whole. Maps derived from aerial photographs taken in 1979 show that 8,830 acres of land in Plainfield are forested. Roughly 30 percent of this land is actively managed for timber production, either by professional foresters or by loggers cutting under open contract with landowners.

A map of Plainfield's forests, roads, and parcel lines would show that there are many places in town where a single type of forest spans several parcels. The owners of these parcels might find it advantageous to manage the forests cooperatively, thereby saving costs and maximizing the potential return from a resource that, if managed separately, might produce no return from logging at all. Additionally, there are more opportunities to improve wildlife habitat through forest management when contiguous parcels are managed cooperatively: wildlife doesn't recognize parcel boundaries, and wildlife corridors between feeding and shelter areas usually extend over property lines. A survey and map of significant natural communities would help determine appropriate land use decisions.

The Vermont's Current Use (or Use Value Appraisal) program sets a standard level at which land used for forestry or agriculture will be appraised for property taxes and reimburses towns for the difference between the amount a landowner enrolled in this program pays and what he/she would have normally paid the town in property taxes. In 2007, 53 parcels comprising approximately 5,540 acres, or 41% of the land in town, were enrolled in the Use Value Appraisal program. This program has allowed large land owners to reduce their burden in exchange for maintaining natural resources.

The land use policies of the Town Plan are implemented primarily through the zoning regulations. In November 2000, voters approved a revision of the zoning regulations that combined the former Village Zoning Regulations with the Town Zoning Regulations. In addition to meshing the two sets of regulations into a cohesive bylaw and combining superfluous zoning districts, the Planning Commission also made minor updates to the definitions and uses, and created a new use, extended home occupations, that allows for the creation of small cottage industries throughout the town. A telecommunications bylaw was added to give the town a way to deal with anticipated requests for towers. An interim zoning amendment adopted by the Select Board in 2001 added temporary structures as a new use in all zoning districts in response to community needs.

In March 2004, the town adopted subdivision regulations that incorporated several of the goals and strategies from the 2002 Town Plan. In November 2004, a zoning revision that combined the Village Residential, Commercial and Public Lands districts into one Village zoning district was adopted.

Currently, Plainfield's zoning bylaw divides the town into the following land use districts:

- **RESERVE LANDS DISTRICT:** An area with steep slopes, scenic ridge lines and high elevations, lacking good road access, suitable mainly for forestry, low-impact recreation and wildlife habitat. This district is currently limited to lands with an elevation above 2200 feet.
- **FLOODPLAIN:** Certain areas, mainly along the Great Brook and the Winooski River, designated flood hazard areas and mapped by the National Flood Insurance Program.
- **VILLAGE DISTRICT:** A mixed-use area consisting of the town's businesses, civic and religious buildings and many residences, served by town water and sewer facilities.
- **RURAL RESIDENTIAL DISTRICT:** Three areas adjacent to the Village which are served by town water and sewer but not contiguous to each other. Most of this district is in residential use, although a number of other uses are permitted, due to its proximity to the village.

This area had been in separate districts under the older town/village regulations, and a more thorough review of the current land uses and physical characteristics of the parcels affected will need to be done to be sure that the district boundaries, densities and uses are appropriate.

- **FOREST AND AGRICULTURAL LANDS DISTRICT:** An area containing all the land not included in other districts. This district encompasses 85% of the land area in Plainfield. There are large parcels of forest and agricultural land, some of which are still based on the earliest settled farms. Many large properties have been divided into smaller lots for residential use over the years. Currently this district is zoned for five-acre-minimum lot sizes. While the original intent may have been to allow smaller lots as a way of allowing the landowner to retain a large parcel still viable for agriculture or forestry the result has been a number of single homes strung along the road that in some areas is beginning to resemble a suburban neighborhood. Some towns have adopted density-based zoning, as opposed to minimum lot size requirements, to address this issue. Under such a method, a lot would be allowed to develop a certain number of dwellings or parcels, based on its original acreage, without restrictions on individual parcel size.

An analysis known as a “Build Out Study” was done by the Central Vermont Regional Planning Commission for Plainfield. A map was created showing where the potential housing units would be located if all the potential housing development took place under the existing zoning regulations. This is the Current Zoning Full Build Out Projection Map in the appendix. The Alternative Zoning Full Build Out Projection Map shows how an alternative measure of density, proximity to the village and services, plus limitations such as slope and poor soils could impact the distribution of future housing.

**Land Use – Development Location and Design**

**Goals:** Concentrate future growth in densities and locations that respect both the natural capacity of the land and the historic patterns of development, and make use of existing infrastructure, including roads. Promote a vibrant village center with a mix of businesses and homes while preserving the rural working landscapes of farms and forestry uses.

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Modify zoning through creative methods such as density-based zoning, to encourage development in areas where infrastructure already exists.	Planning Commission	Short Term (within 1 year)
Clustered development may be required in conjunction with overlay districts, as appropriate, to promote growth in appropriate areas without sacrificing the potential of lands with good agricultural soils or valuable wildlife habitat, and to protect rural and scenic character and maintain contiguous tracts of forest or open land.	Planning Commission	Short Term (within 1 year)
Develop design and siting guidelines for commercial development to encourage multi-use buildings, use of traditional materials, and compatibility with historic character of the village.	Planning Commission	Short Term (within 1 year)
Promote local entrepreneurs through the Mill Street Park kiosk and a Local Resource Directory on the Town website.	Selectboard	Short Term (within 1 year)
Inventory and map all existing conservation easements, current use and deed restrictions so the actual amount and location of conserved land is known.	Conservation Commission	Near Term (within 1-3 years)

**Land Use – Development Location and Design, continued**

**Goals:** Promote the regulation of land development that protects vital natural and community resources while allowing a range of land uses in appropriate locations.

<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Establish and maintain conservation, recreation, and agricultural areas in the zoning ordinance. Parcels within these special overlay areas would be of particular importance to the town and would be managed in a way that would protect their special values by creating siting standards for development and limiting uses as appropriate. By designing protection for specific natural features, the district’s regulations might actually permit greater flexibility in lot sizes, density, or other otherwise be available.	Conservation Commission  Planning Commission	Short Term (within 1 year)
Strive to maintain a balance between community land use regulations and the rights of individual landowners.	Planning Commission	Short Term (within 1 year)
Using educational and regulatory methods encourage the protection of natural resources including important agricultural soils, wetlands, fluvial erosion hazard areas, riparian buffers, headwater streams, steep slopes and wildlife habitat.	Conservation Commission  Planning Commission	Short Term (within 1 year)
Promote local entrepreneurs through the Mill Street Park kiosk and a Local Resource Directory on the Town website.	Selectboard	Short Term (within 1 year)
Inventory and map all existing conservation easements, current use and deed restrictions so the actual amount and location of conserved land is known.	Conservation Commission	Near Term (within 1-3 years)



**Land Use – Development Location and Design, continued**

**Goals:** Recognize that land use regulations could impinge upon individual rights and individual rights could impact land use regulation. Find a new balance between economy, ecology and culture.

Strategy	Responsible Party	Priority
<p>Create a forum that will encourage open discussion between affected neighbors and developers. Make it possible for the resolution of conflicts to take place in atmosphere of creative solutions rather than strict regulations.</p>	<p>Conservation Commission  Planning Commission</p>	<p>Short Term (within 1 year)</p>
<p>Strive to maintain a balance between community land use regulations and the rights of individual landowners.</p>	<p>Planning Commission</p>	<p>Short Term (within 1 year)</p>
<ul style="list-style-type: none"> <li>▪ Create a central database of resources relevant in guiding any planning, zoning, building or remodeling decisions, such as:</li> <li>▪ Zoning regulations and permitting requirements, plus contact information for zoning administrators, highway department, fire marshal, DRB personnel, Water/Wastewater Dept., etc.</li> <li>▪ Information about and map of all areas subject to flood inundation, fluvial erosion or other flood hazards.</li> <li>▪ Explanation and map of conserved lands.</li> <li>▪ Map of historic district and buildings, benefits and restrictions relevant to property owners.</li> <li>▪ Information about the importance and benefits of preserving prime agricultural lands, wetlands, headwaters, groundwater, riparian buffers, healthy and contiguous forest systems, wildlife habitat and connectivity, and areas hosting significant natural communities.</li> <li>▪ Information about the variety of types of development possible in different areas of town (i.e., clustered housing, hamlets, PUDs.)</li> <li>▪ List of town and other resources available to assist property owners, i.e. revolving loan fund, Conservation Fund, Current Use program, historic preservation grants, Conservation Commission’s invasive plant management program, VT Housing and Conservation Board, Vermont Land Trust, County Forester, Plainfield’s Village Center designation, etc.</li> </ul>	<p>Conservation Commission  Planning Commission</p>	<p>Long Term (within 5 years)</p>

<b>Land Use – Farming</b>		
<b>Goals: Maintain and expand farming in Plainfield as a commercially viable enterprise.</b>		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Promote the Plainfield Farmers’ Market by providing space and publicity and encouraging the establishment of a winter market.	Selectboard	Short Term (within 1 year)
Encourage events like annual farm tours to boost local recognition of Plainfield’s farms and community support for Plainfield’s farmers.	Conservation Commission	Short Term (within 1 year)
Promote new agricultural ventures by encouraging non-farming owners of agricultural land to participate in programs such as University of Vermont’s Land Link to match prospective farmers with available agricultural land.	Conservation Commission	Short Term (within 1 year)
Maintain the potential of Plainfield's good agricultural soils to be used for farming at some time in the future by discouraging their destruction or development. Promote the use of conservation easements.	Conservation Commission Planning Commission Development Review Board	Short Term (within 1 year)

<b>Land Use – Forestry</b>		
<b>Goals: Ensure the long-term sustainability of Plainfield’s forest industry.</b>		
<b>Strategy</b>	<b>Responsible Party</b>	<b>Priority</b>
Promote landowner contact with the County Forester or consulting foresters to develop woodland management plans.	Conservation Commission	Near Term (within 1 – 3 years)
Help landowners find opportunities to manage large contiguous parcels cooperatively.	Conservation Commission	Near Term (within 1 – 3 years)
Continue to promote the Current Use Program	Conservation Commission	Near Term (within 1 – 3 years)
Use the Town Forest or cooperating landowners to demonstrate proper forest management and logging practices.	Conservation Commission	Near Term (within 1 – 3 years)

## 11| Economic Development

Plainfield’s economic well being is a critical function of the planning process in order to foster an environment in which residents have access to meaningful employment within the community. Economic vitality also supports many of the recreational, cultural and commercial amenities that have attracted permanent residents to Plainfield. Such programs and resources as the Creative Economy; Goddard Arts Community; Plainfield Town Hall/Opera House form a cultural foundation for the citizens in the Town.

In the summer of 2009 the Plainfield Select Board received a Take Charge/Recharge grant to discuss economic development opportunities for Plainfield. In their grant application, the Plainfield Select Board discussed the current tension between environmental and economic concerns as they relate to land use. It was determined that a broad discussion of economic development is critical for the Town’s long-term health and viability. Also in 2009, the Plainfield Planning Commission obtained a Planning Grant from the Department of Housing and Community Affairs. This grant helped facilitate a community meeting to discuss Plainfield’s economic opportunities.

In 2007, Plainfield joined the Creative Communities Program. The program's purpose is to jumpstart local development projects by offering targeted assistance for community-led planning. The Vermont Council on Rural Development facilitated several public forums to help residents consider existing creative economy perspectives, using three key components to frame the discussion on the local economy: The Importance of Place; Creative Partnerships; Individuals' Creative Skills. From these discussions, residents prioritized three projects: to establish a Creative Economy Association (Plainfield Area Community Association) that will focus on existing resources and make connections for future projects; to promote Plainfield as a Learning Community through projects that help support the creative endeavors of the residents, including a Local Resource Directory; to make downtown more welcoming to pedestrians. Several improvements in the lower

village have been achieved through the support of PACA and the Creative Community resources. The 2007 Final Report and Action Plan, along with the Local Resource Directory (both important resource material for future projects) can be found at the Municipal Building.

### *Employment Opportunities*

Plainfield’s employment opportunities are primarily offered by small businesses, self-employment, and commuting to work in other communities. The largest employer in Plainfield, Goddard College, would be considered a small business on the national scale. All other jobs are provided by very small employers. According to the Vermont Dept. of Labor the average wage in Plainfield in 2010 was nearly \$30,000—up more than \$5000 from 2005. How the number of employees, wages and types of employment has changed from 2005 to 2010 is shown in Chart 11.1

Chart 11.1

Change in the number of establishments, employees, and average wage among the Plainfield employment base, by NAICS classification, 2005 and 2010						
NAICS Industry Type	Establishments		Employment		Average Wage	
	2005	2010	2005	2010	2005	2010
Construction	9	9	18	25	\$26,095	\$35,603
Trade, Transportation, and Utilities	9	5	46	33	\$15,490	\$13,476
Professional and Business Services	8	8	16	14	\$34,139	\$31,006
Education and Health Services	8	7	260	245	\$26,907	\$39,616
Leisure and Hospitality	3	2	70	(c)	\$12,536	(c)
Government	5	4	58	76	\$31,351	\$28,486
Total	42	35	468	393	\$24,419.67	\$29,637.40
(c)Data is confidential.	Source: Vermont Dept. of Labor					

According to the data collected by the Vermont Department of Employment and Training, unemployment increased in Plainfield at a similar rate as neighboring communities.

Chart 11.2

Unemployment figures are based on the percentage of the estimated potential working residents in a given town or region. Chart 11.2 shows the percentage of unemployed Plainfield residents versus the state of Vermont. Since 2005 the unemployment percentage has risen slightly for both Plainfield and the state.

Unemployment trends between July 2005 and July 2011				
Comparison Region	July '05	July '07	July '09	July '11
Plainfield	2.90%	4%	8.80%	5.80%
Barre-Montpelier LMA	3.50%	3.80%	6.70%	5.60%
Burlington-S.Burlington LMA	3.00%	3.30%	6.10%	5.00%
Washington County	3.30%	3.60%	6.50%	5.20%
Vermont	3.20%	3.70%	6.80%	5.70%
United States	5.20%	4.70%	9.70%	9.30%

Sources: U.S. Bureau of Labor Statistics, Vermont Dept. of Labor

While some diversification has taken place, the trends are generally stable in each employment sector. Employment in the real estate industry appears to have decreased; however, there could be other explanations, such as a shift to self-employment. Professional and Business services, Educational and Health Services (not including public education), and services such as property maintenance are all growing sectors and do indicate a healthy diversification of employment opportunities.

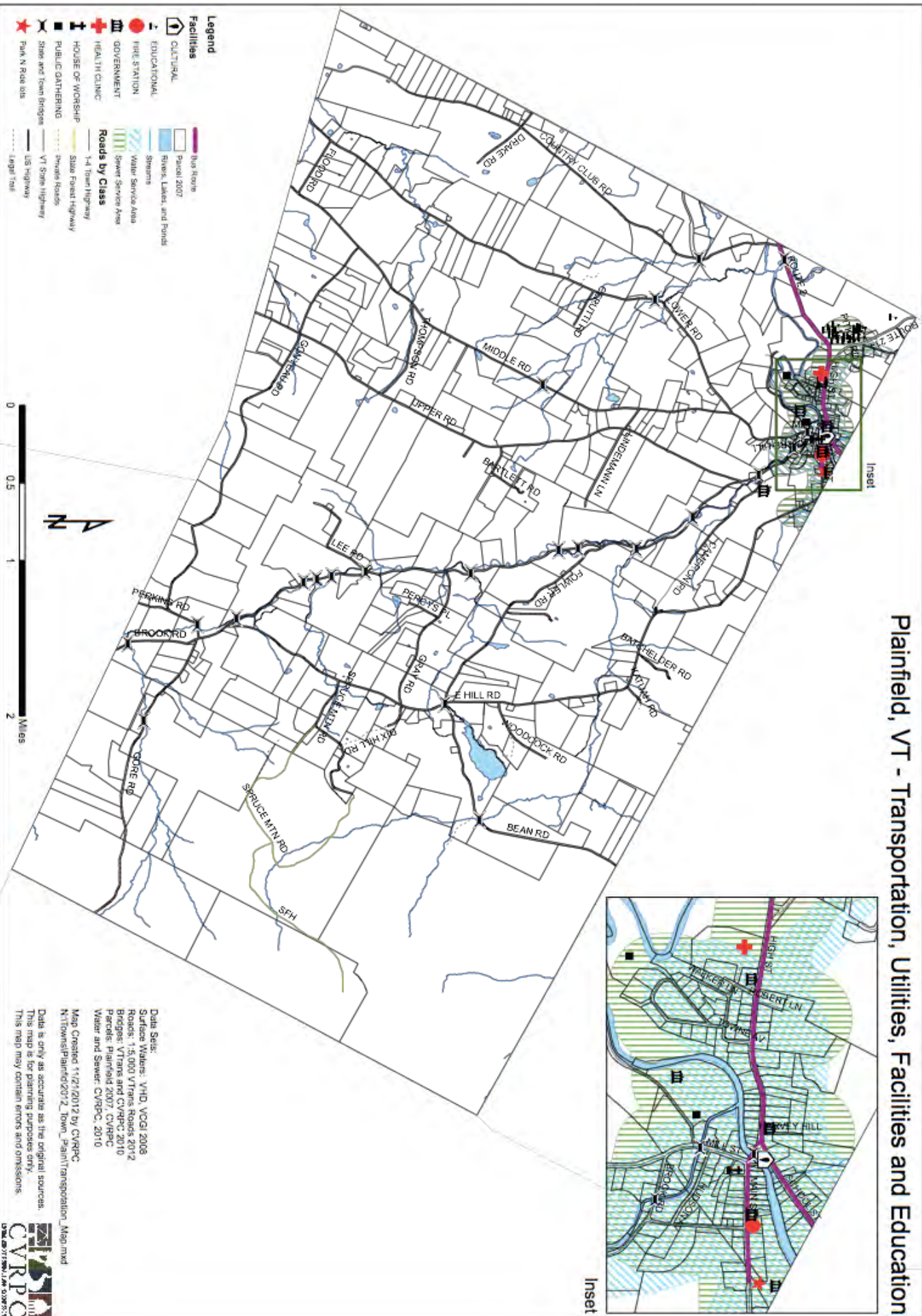
As building ownership changes in the core village area, there can be significant losses of commercial prospects. An example is the recent closure and sale of 'The Red Store' on US Route 2. The new owner has put restrictions on the property that prevent this prime location from being used as a general store or a gas station. Changes of this kind can reduce the range of services available to town residents, and can erode the Town's tax base.

**Economic Development**

**Goal:** Promote an attractive, vibrant Village and Town with a mix of businesses, homes, cultural activities, home-based businesses, environmentally friendly businesses of all sizes.

Strategy	Responsible Party	Priority
Support the village street tree program. Continue to maintain and enhance the Mill Street and Washburn Parks and other planting areas.	Conservation Commission Tree Warden	Short Term (within 1 year)
Plainfield and other town entities will work with prospective developers to ensure the economic diversity continues as strategic properties change ownership.	Select board	Long Term (within 5 years)
Plan and implement public investment in the village: sidewalks, benches, street lighting, historic preservation and crosswalks.	Selectboard Historical Society Planning Commission	Short Term (within 1 year)
Develop design and siting guidelines for commercial development to encourage multi-use buildings, use of traditional materials, the re-use of existing buildings, and compatibility with historic character of the village.	Planning Commission Development Review Board Historical Society	Short Term (within 1 year)
Promote and manage the Plainfield Town Hall as a regional center for the arts as well as a venue for private and community celebrations and activities.	Selectboard	Short Term (within 1 year)
Work to obtain a survey and map of significant and natural communities, prime agricultural soils, forest resources (soils, products, habitat), significant wildlife habitat, habitat connectivity, floodplains, river corridors, water resources and other features and develop appropriate measures for their protection.	Planning Commission Conservation Commission	Near Term (within 1-3 years)

# Plainfield, VT - Transportation, Utilities, Facilities and Education



- Legend**
- Facilities**
- EDUCATIONAL
  - GOVERNMENT
  - HEALTH CLINIC
  - HOUSE OF WORSHIP
  - PUBLIC GATHERING
  - STAIR AND TOWN BRIDGES
  - PARK & RECREATION
- Roads by Class**
- 1-4 Town Highway
  - State Road
  - US Highway
  - Light Rail
- Utilities**
- Bus Route
  - Parcel 2007
  - Rivers, Lakes, and Ponds
  - Streams
  - Water Service Area
  - Sewer Service Area



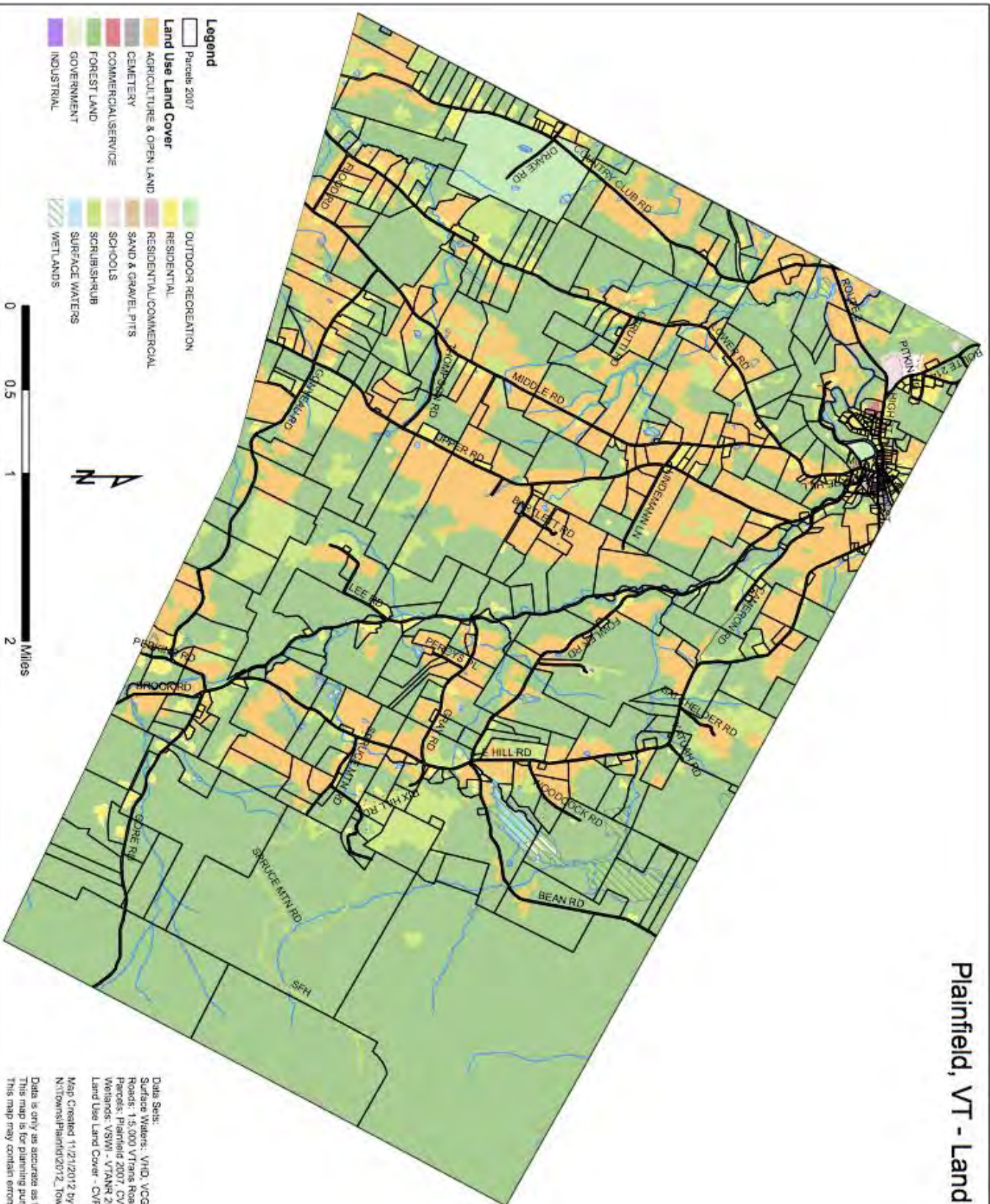
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 Roads: VTans and CVRPC 2012  
 Parcels: Plainfield 2007, CVRPC  
 Water and Sewer: CVRPC, 2010

Map Created 11/21/2012 by CVRPC  
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Data is only as accurate as the original sources.  
 This map is for planning purposes only.  
 This map may contain errors and omissions.



# Plainfield, VT - Land Use Land Cover



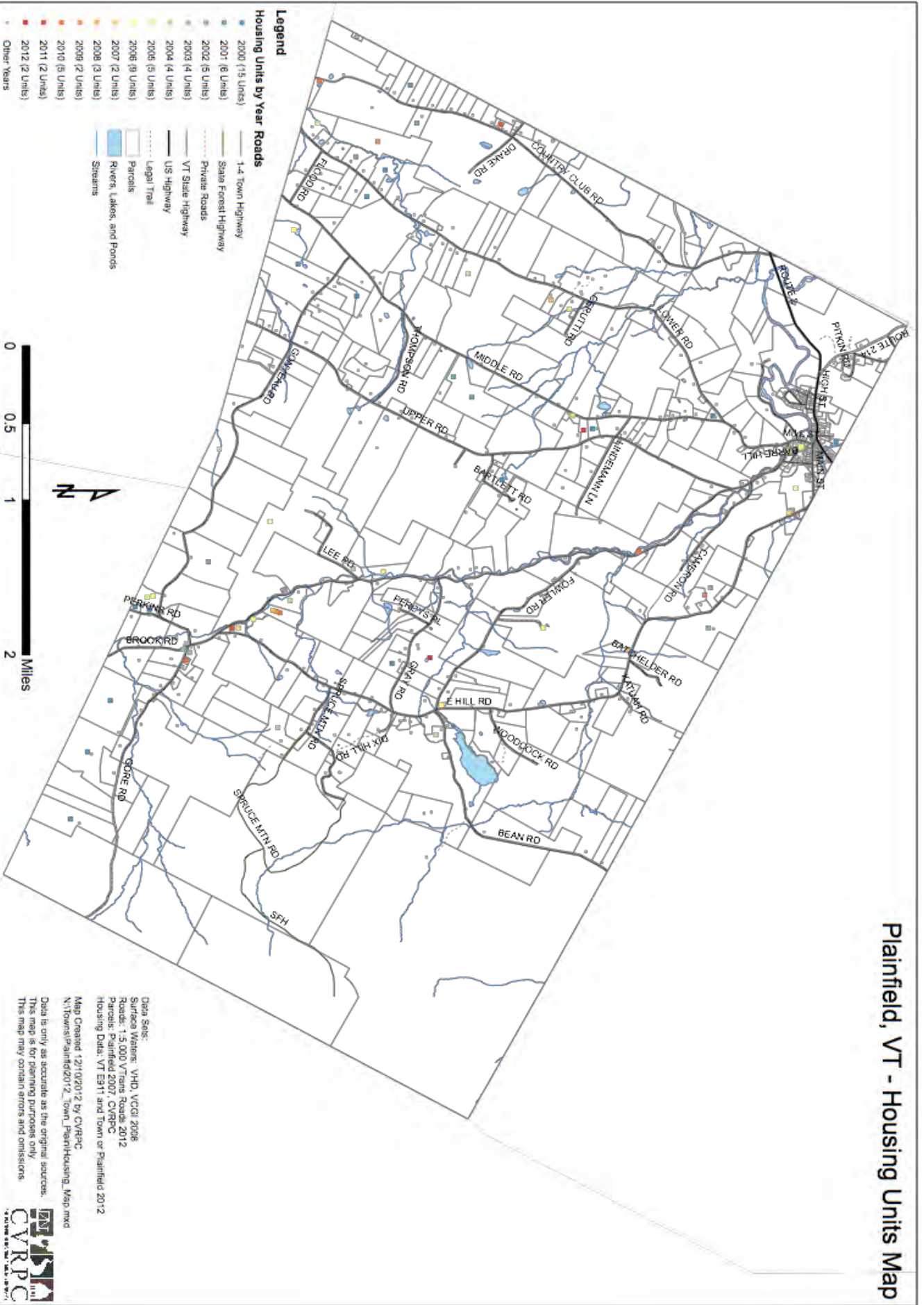
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 Wetlands: VSWI - VTANDR 2010  
 Land Use Land Cover - CVRPC, 2012

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Data is only as accurate as the original sources.  
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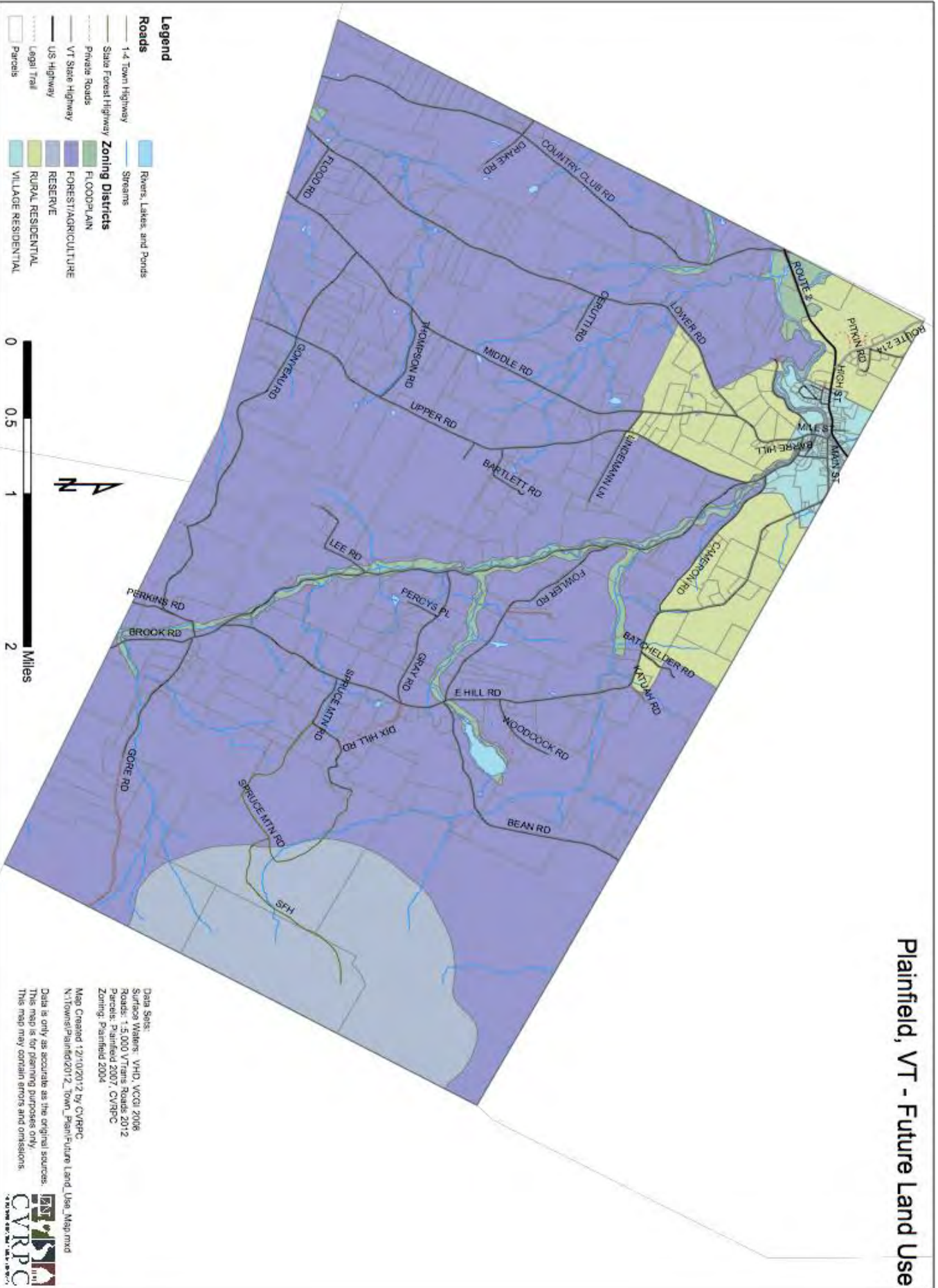


# Plainfield, VT - Housing Units Map



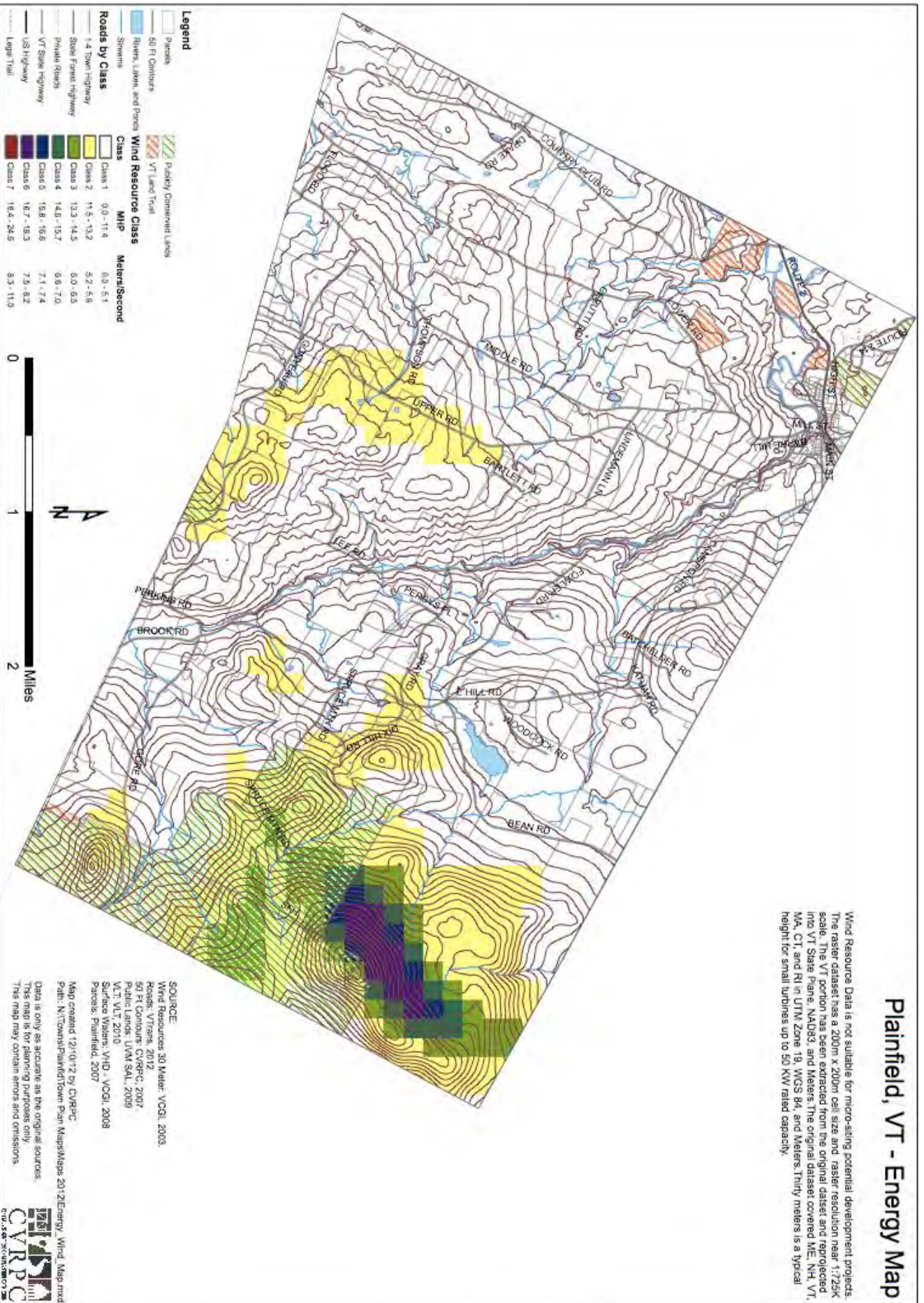


# Plainfield, VT - Future Land Use

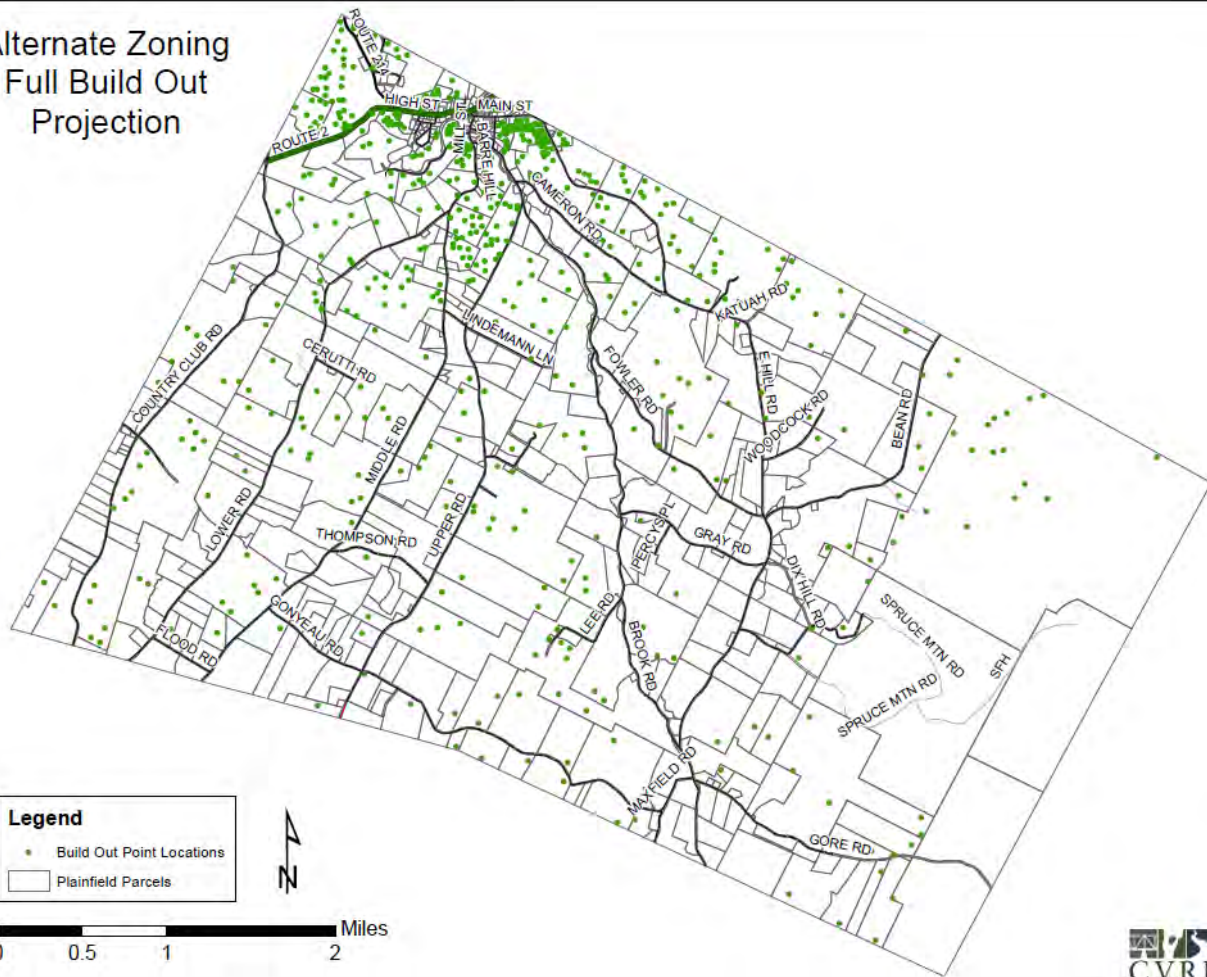


# Plainfield, VT - Energy Map

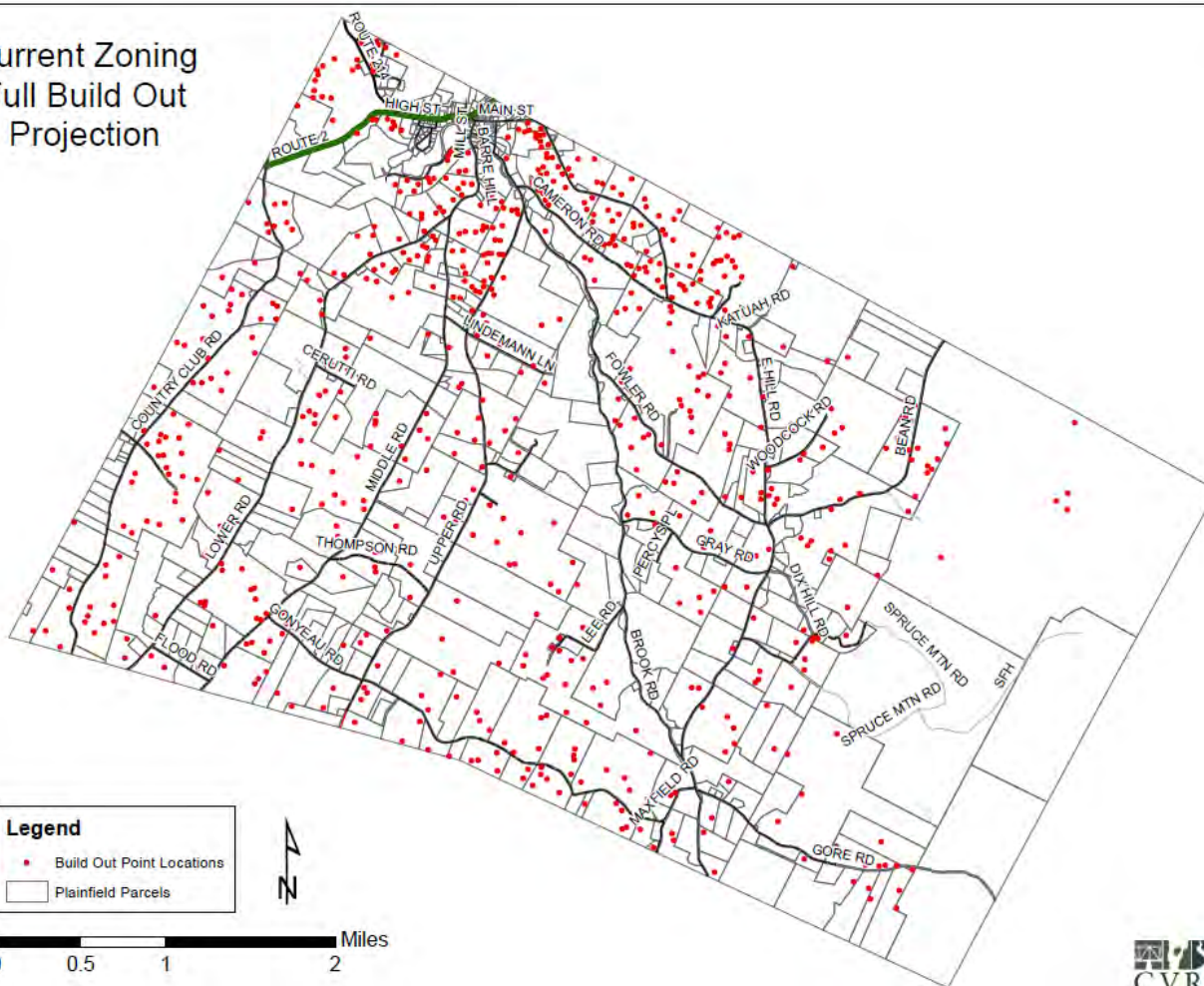
Wind Resource Data is not suitable for micro-siting potential development projects. The raster dataset has a 200m x 200m cell size and raster resolution near 1:725K scale. The VT portion has been extracted from the original dataset and reprojected into VT State Plane, NAD83, and Meters. The original dataset covered ME, NH, VT, MA, CT, and RI in UTM Zone 18, WGS 84, and Meters. Thirty meters is a typical height for small turbines up to 50 kW rated capacity.



# Alternate Zoning Full Build Out Projection

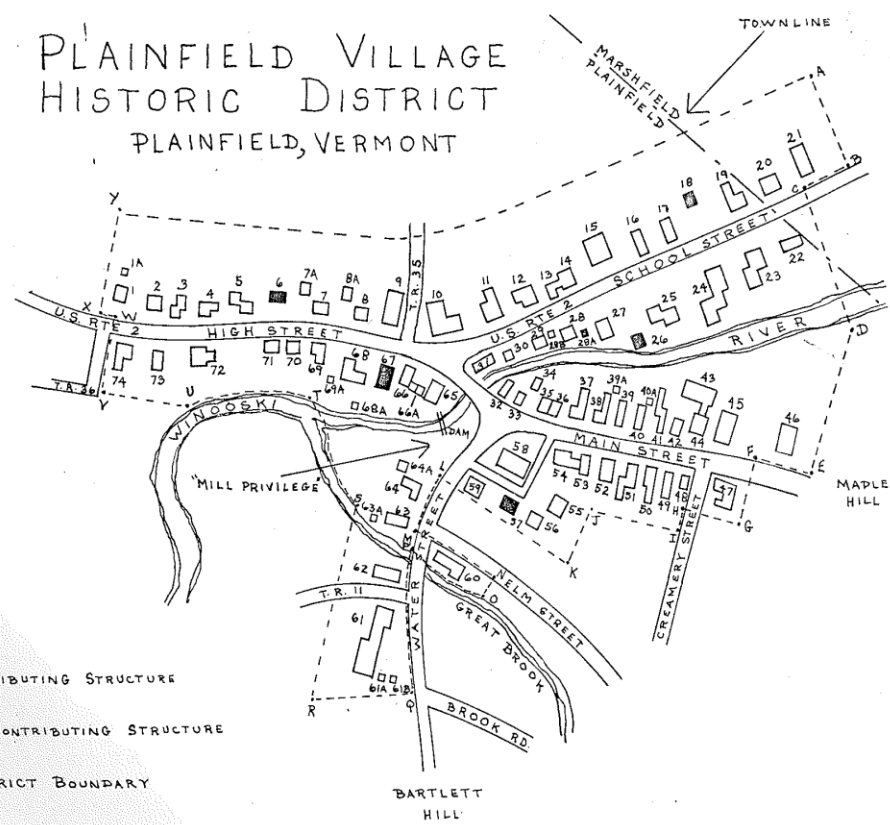




# Current Zoning Full Build Out Projection





# PLAINFIELD VILLAGE HISTORIC DISTRICT PLAINFIELD, VERMONT



- 25  CONTRIBUTING STRUCTURE
- 26  NON-CONTRIBUTING STRUCTURE

--- DISTRICT BOUNDARY

SCALE: 1 INCH EQUALS 400 FEET