2023

2023 PITTSFIELD TOWN PLAN

ADOPTED MAY 4, 2023

WRITTEN BY THE PITTSFIELD PLANNING COMMISSION
MARSHA HOPKINS, CHAIR
SARAH GALLAGHER
JENNIFER HOWARD
MICHELINE BISSELL
RYAN THOMPSON
VAUGHN MICCICHE
MARK STUGART
A.J. RUBEN, ZONING ADMINISTRATOR

WITH ASSISTANCE FROM THE TWO RIVERS-OTTAUQUECHEE REGIONAL COMMISSION, FUNDED BY A MUNICIPAL PLANNING GRANT FROM THE DEPARTMENT OF HOUSING AND COMMUNITY DEVELOPMENT.

INDEX OF FIGURES

INDEX OF TABLES

I. INTRODUCTION

A. Town Setting

The Town of Pittsfield is a triangular shaped community situated in the northeastern corner of Rutland County, comprising an area of 13,296 acres or 20.77 square miles. It is bounded by four towns: Stockbridge to the east, Chittenden to the west, Rochester to the north, and Killington to the south.

The physical setting of the Town consists of rather steep mountains rising to an elevation in excess of 3,200 feet in the west to more gradual but rugged mountains in the east, interspersed with valleys and streams in the lower elevations. In the valleys, the terrain is relatively level as compared to the rest of the Town.

B. Town History

Pittsfield was chartered on July 29, 1781, by Thomas Chittenden, then Governor of Vermont. A proprietors' meeting, held in December 1781, laid out the plots of the township, giving each proprietor 52.5 acres. A like number of acres was set aside for public buildings and reservations. Within three years of receiving his land, each proprietor was required to build a home 18' X 18' or forfeit the allotted acreage. In 1787, a further 40 acres was to be allotted to each proprietor, but it was discovered at that time that Stockbridge and Chittenden had greatly exceeded their boundaries, leaving a half township to Pittsfield. This was contested in court for years and resulted in Pittsfield becoming one of the smallest townships in Vermont.

First settlements were commenced about 1786, with the majority of the migrants coming from Connecticut and Massachusetts. Among them, Charles Goodrich, who operated one of the first mills in the village, was given the honor of naming the Town. This he did for his place of birth: Pittsfield, Massachusetts. Daniel Bow, another of the earliest settlers, deeded the village green to the Town, stipulating that no public buildings or buildings of any kind be allowed upon it, and that it be enclosed by a fence.

In 1808, the Rutland to Stockbridge Turnpike was completed, which substantially bolstered Pittsfield's agricultural economy for many decades to come. The Town's population nearly doubled after this roadway was established, reaching 615 residents by the 1850 U.S. Census. With this larger population came a significant growth in wood-frame farmhouses throughout

the White and Tweed River Valleys. Throughout this period of growth and beyond, Pittsfield's Village was typified by two distinct settlement areas: the "Upper Village" and the "Lower Village," based on both local geography and uses within each area. The Upper Village area referred to the dwellings and public buildings that grew up around the Village Green. The Lower Village, meanwhile, was comprised of buildings located further down by the river, and extended to include buildings associated with the Town's mills and other industrial sites.

The early industries of the village were the typical, somewhat crude ones of the times: saw mills, stores, taverns, and even a potato distillery that sold a poor grade of spirits. The sale of potash produced the means of trading for most necessary wares. Farms were located in the low lands along the rivers of the Tweed and the West Branch of the Tweed, and a few farms were operated in the lower parts of the mountains.

The first school house was built in 1800 to meet the needs of the Town's children. The year 1816, commonly deemed the year of "no summer" along with its accompanying sickness and famine, produced one of the first radical changes to affect the economy and population of the village. Until this time, the village boasted a population of nearly 500 people. However, the population grew in ensuing decades, and by 1876 five school houses were needed to accommodate the children of the Town. There were also two churches and their accompanying parsonages, two flourishing inns, two stores, a tannery, a blacksmith shop, and other small shops within the inns.

In 1877, a J. J. Saltery, prospecting near Gaysville, found a large amount of iron ore in the White River that he traced to its source on the west branch of the Tweed River. At the end of what is now known as Lower Michigan Road, in a village later called Peartville, Saltery founded a mining company in 1880 with a capital stock of $2,500,000. This venture of mining iron proved very successful until 1895.

W. Storrs Lee, in his book "The Green Mountains of Vermont," provides us with an excellent picture of the village in 1908:

> …a good example of a village leaning on its country store for life and legislation—a superior hamlet tucked into a fold of the Green Mountains—to the north, Wilcox Peak stood out aggressively giving a much more pompous impression than mountains of only three thousand feet usually give ... Pittsfield could boast of only one avenue, lined on both sides with houses and split by the long narrow village green. It was the green, more than an eighth of a mile long that induced strangers driving through to pause. Between April and October, something of consequence was always taking place there: lawn parties, church sales and ice cream suppers, croquet tournaments, baseball games, tennis matches... The youngsters rarely thought of going beyond the village environs for a better time. Pittsfield in its social self-sufficiency provided ample excitement... Year round there were "bees" of one sort or another and old and young, when they tired of joshing at the store, were always welcome at the hotel for sings and dances. Everyone

was on the same social level; everyone knew the four hundred and thirty-four residents of the Town.

In the early 1900s, the coming of the motorized vehicle—and the gradual but steady improvement of the roads—brought many visitors to Pittsfield for vacations, and to be in the country's peace and quiet. At that time, Pittsfield had two fine inns: The Green Mountain and the Vose House (currently operated as the Northeast House, available for private rental).[1] Much of the Town's nineteenth century architecture and overall character has been retained, in part due to the Town's relative isolation from larger, more developed towns in the region.[2] This continues to be a draw for visitors who are drawn to Pittsfield's natural landscapes, historic architectural integrity, and the Town's small village appeal.

Electric power came to Pittsfield in the late 1920s, and, by the early 1930s, roads were blacktopped, and horses and buggies gave way to automobiles. Throughout the 1930s and 1940s, farming, logging, and mills were the main businesses. Quiet came to the Town in the 1930s with the Great Depression. Summer guests would come for a couple of weeks on the train on route to Bethel or Rutland.

Everything was put into the World War II effort from 1941-1945, and most of the men between the ages of 18 and 36 served in the armed forces. There were still quite a few small farms in Pittsfield in the 1950s, and a lot of milk was trucked to the Bethel Creamery in metal milk cans. Harry Dwire picked up milk for a while and then sold his route to Kim Fifield.

Major changes came in the late 1950s and 1960s with the advent of the local ski industry. Second homes were built, and many existing properties were rented out as ski lodges, including: Colton Guest Farm, Swiss Farm, and the Fleur de Lis. The community changed further in 1968 with the closing of the Town's school. Pittsfield then joined with Stockbridge for a primary education union school. More recently, the townspeople voted to support school choice, paying tuition to local schools of choice for K-12 education. Also in the 1960s, C.W. Cairns donated an acre of land around 1966 to the Town where the fire station now stands. The fire station was erected with all volunteer labor.

Second home housing developments took off in the 1960s and 1970s, including Hawk Mountain and Townsend Brook. In 1982, Stanley Tools built their plant in Pittsfield on the field where baseball was once played. Colton Enterprises later opened as well as Pittsfield Standing Seam, and both remain in business to this day (Pittsfield Standing Steam now doing business as PFS, Inc.). The former Stanley Tools plant is now the home of Leitner Poma.

The Town of Pittsfield is home to a number of businesses that have grown in recent years. The Original General Store and the Swiss Farm Market & Gas Station on Route 100 continue to attract a significant amount of foot and vehicle traffic to the area, along with snowmobilers in the winter and cyclists in the summer. The Town is also home to many lodging and resort sites that cater, in part, to weddings and other large events.

C. Town Planning as a Concept

Pittsfield is more than a residence or a work site for the Town's citizens. Pittsfield is a way of life, consisting of the social, environmental, economic, cultural conditions and values fostered and appreciated by the people who live and work here. These conditions and values represent the major reason that many of the residents choose to live in Pittsfield.

This Town Plan is intended to serve as the framework for the maintenance of those characteristics which most of the Town's residents seem to hold dear. Additionally, state statute requires that the Town Plan be the basis of all future town regulations.

While the main design of this Town Plan focuses on the maintenance of Pittsfield's quality of life, the Plan also acknowledges that conditions change, events happen, values are altered, and population shifts occur. Thus, this Plan makes allowance for orderly, carefully considered changes under controlled conditions. Changes are welcome so long as they contribute to the betterment of Pittsfield's residents and businesses. We all are the Town, and we choose to exercise all the control we can. This Plan will help us by indicating how we want change to come about, and it tells non-residents what we, as a Town, expect.

The economic transformation in the state in recent history, and population changes associated with it, stimulate the need for Pittsfield's citizens and officials to examine current conditions and the prospects for the future. To benefit from change, the community must understand the problems and opportunities that it faces and identify goals for the future. The Town has a choice in the way it finds to provide for orderly growth, to balance the natural and built

environments, and to provide for community functions and services as well as its heritage. This Plan is an opportunity to choose a future for Pittsfield.

Two major pieces of legislation establish the framework for planning in Vermont. The first is Chapter 117 of Title 24, the Municipal and Regional Planning and Development Act. The second is Act 250 (10 V.S.A. Chapter 151). Act 250 sets forth state policies on land use throughout Vermont. The law establishes ten criteria and a development review process by which major subdivisions and development proposals must follow. The policies of the Act have been coordinated with the municipal planning process outlined in Chapter 117.

The passage of Act 200 in May, 1988 marks a historic achievement for strengthening planning in Vermont, filling Act 250's planning gap. The basic goal of the law is to create a process of integrating plans at the local, regional, and state levels. To do this, financial resources are available to all towns for planning. Act 200 originally established a planning process guided by thirty-two planning goals. In years since, some of those goals have been consolidated and new goals have been added, currently totaling fourteen goals. These are the fundamental premises on which planning decisions are to be based.

GOALS, POLICIES AND RECOMMENDATIONS

State statute requires that all plans have a "statement of objectives, policies and programs of the municipality". In this plan, this requirement is met through "goals, policies and recommendations". Goals, policies and recommendations of a plan must be viewed as an integrated system of statements that have clear relationships to each other and to the body of the Plan. The definitions of these terms must be made clear for the understanding of each plan section as well as the coordination of the plan sections with each other. The terms defined below are used throughout the Plan:

Definitions:

- **Goal**: Why something should be done—the state of affairs that a plan is intended to achieve.
- **Policy**: What should be done—an expression of how to meet a goal.
- **Recommendation for action**: How should it be done and who should do it—a specific action that is advised to be taken in order to implement a policy.

Examples:

- **Goal**: Increased public safety for pedestrians.
- **Policy**: All the crosswalks in Pittsfield should be painted with diagonal lines to alert vehicular traffic to the crossing of pedestrians.
- **Recommendation**: The Selectboard should work with the public works department to have the crosswalks painted.

The goals, policies and recommendations in the Plan are not listed in ranked order of importance; they are numbered for ease of reference.

D. The Planning Process for Pittsfield

The Pittsfield Planning Commission, in cooperation with the Two Rivers-Ottauquechee Regional Commission, has been updating the elements of this Town Plan. The planning process is continual, as the Plan must be updated by the Commission and approved by the Select Board every eight years following public hearings. The Pittsfield Community's input is a critical component to both the creation and future of this Plan. As such, the Planning Commission has consistently ensured that the Plan drafting process has been conducted in a fair and open manner, welcoming any input from local community members, employers, stakeholder groups, and other interested parties at all stages of the process.

Although this Plan is not regulatory in nature, during its eight-year life it will enable the Town to legally address the impact of development proposals that fall within the jurisdiction of Vermont's Land Use and Development Control Law: Act 250. Under the Act, before a Land Use Permit can be granted by the District Environmental Commission, it must be found that the proposed development or subdivision is in conformance with the Pittsfield Town Plan. Therefore, it is essential that the goals, policies, and recommendations of this Plan are written clearly and specifically, making the vision of Pittsfield's residents very apparent to the reader.

It is the intent of this Plan, by popular input, to establish rational and meaningful guidelines, which address growth and development concerns in the years to come.

E. Purposes and Objectives of the Plan

It is the intent and purpose of this Plan to encourage the appropriate use of all lands in the Town of Pittsfield in a manner which will promote public health, safety, prosperity, comfort, convenience, efficiency, economy, and general welfare; and to provide means and methods for the future elimination of such land development problems as may presently exist or which may be unforeseen. In addition, this Plan shall further the following specific objectives:

1. To protect the rural residential environment of Pittsfield.
2. To preserve and protect areas and sites of historic interest.
3. To protect steep slopes, soils, forests, water quality, water courses, and other natural resources, and to provide open space for wildlife habitat.
4. To ensure the floodplain and all related considerations are factored into all planning efforts.
5. To protect and preserve the historic features of the village area of Pittsfield, while encouraging appropriate civic and architectural design, to enhance the overall attractiveness of this area.
6. To ensure the availability of adequate parks and public facilities.
7. To encourage the healthful and convenient distribution of population, employment opportunities, and other activities, and to protect residential, agricultural, and other areas from undue concentrations of population and overcrowding of land and buildings from traffic, congestion, from inadequate parking and the impacts of through traffic, and from the loss of peace and privacy.
8. To encourage citizen participation at all stages of the planning process.
9. The Plan shall maintain the freedom, rights, privileges, and responsibilities of all citizens of Pittsfield.

II. Demographics

A. Introduction

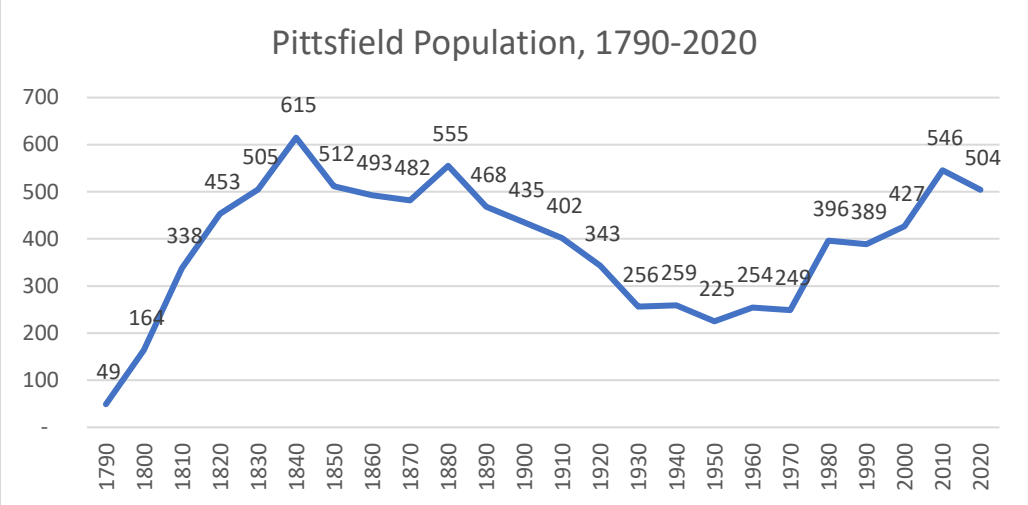
The demographic nature of a town reveals a great deal about the town and its future. To get a real-time snapshot of a town, it is important to have the most up-to-date data available. The best source of data available is the U.S. Census, which is collected every decade. For this iteration of the Plan, we have current data available from the recent 2020 Census. However, it is sometimes difficult to obtain the data during a mid-decade Town Plan update. In those cases, the Planning Commission will use the most up-to-date data available, drawing on more recent state-level data whenever possible.

B. Population

Population, when considered in terms of past, present, and future growth patterns and trends, comprises an important factor in the development of Pittsfield. Rapid or unanticipated growth can create a demand for new and expanded municipal services, straining the financial ability of the Town to provide public services economically or equitably. Accordingly, it is in the public interest to monitor population changes, and to direct these changes in a manner that does not burden the Town's ability to provide services. Outlined in Figure 1 below are some basic population statistics for the Town of Pittsfield compiled from U.S. Census Bureau data.

In the decade between 2000 and 2010, there was significant growth in Pittsfield, nearing some of the highest population levels since the late 1800s. However, Pittsfield's population in 2020 numbered 504 compared to a population of 546 in 2010, resulting in a decrease of 7.7% during that decade.

Figure 1: Pittsfield Population, 1790-2020



Source: U.S. Census 2020

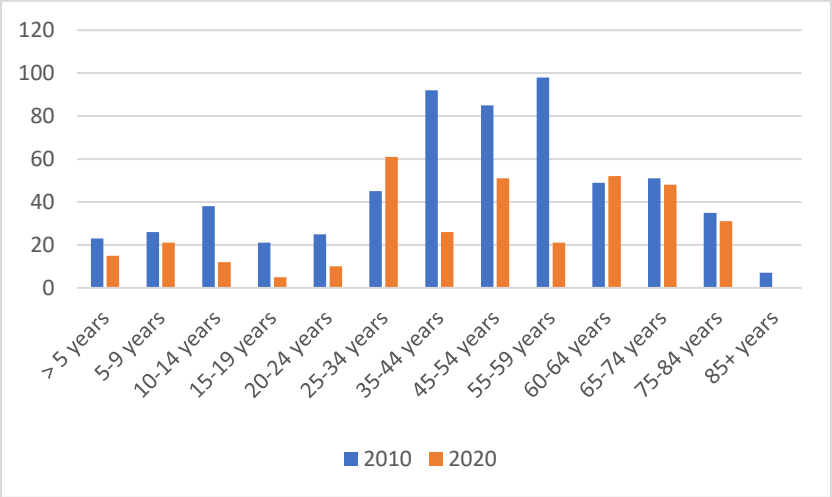
Table 1: Percent Population Change, 1980-2020									
	1980	% change	1990	% change	2000	% change	2010	% change	2020
Chittenden	927	*18.88%*	1,102	*7.26%*	1,182	*6.43%*	1,258	*-1.67%*	1,237
Killington	891	*-17.17%*	738	*48.37%*	1,095	*-25.94%*	811	*73.49%*	1,407
Pittsfield	396	*-1.77%*	389	*9.77%*	427	*27.87%*	546	*-7.69%*	504
Rochester	1,054	*12.05%*	1,181	*-0.85%*	1,171	*-2.73%*	1,139	*-3.51%*	1,099
Stockbridge	508	*21.46%*	617	*9.24%*	674	*9.20%*	736	*-2.45%*	718
Rutland Co.	58,347	*6.50%*	62,142	*2.02%*	63,400	*-2.77%*	61,642	*-1.74%*	60,572
Vermont	511,466	*10.03%*	562,767	*8.18%*	608,827	*2.78%*	625,741	*2.77%*	643,077

Source: U.S. Census, 1980, 1990, 2000, 2010, 2020

C. Age of Population

In general, the age of Pittsfield's population is similar to that of Vermont as a whole, with much of our population over the age of 35. This, in part, reflects the fact that there is a high level of migration to Pittsfield by individuals approaching or already in retirement in addition to the numerous second-home owners that have opted to become permanent residents in the Town.

Figure 2: Population by Age Group, 2010-2020



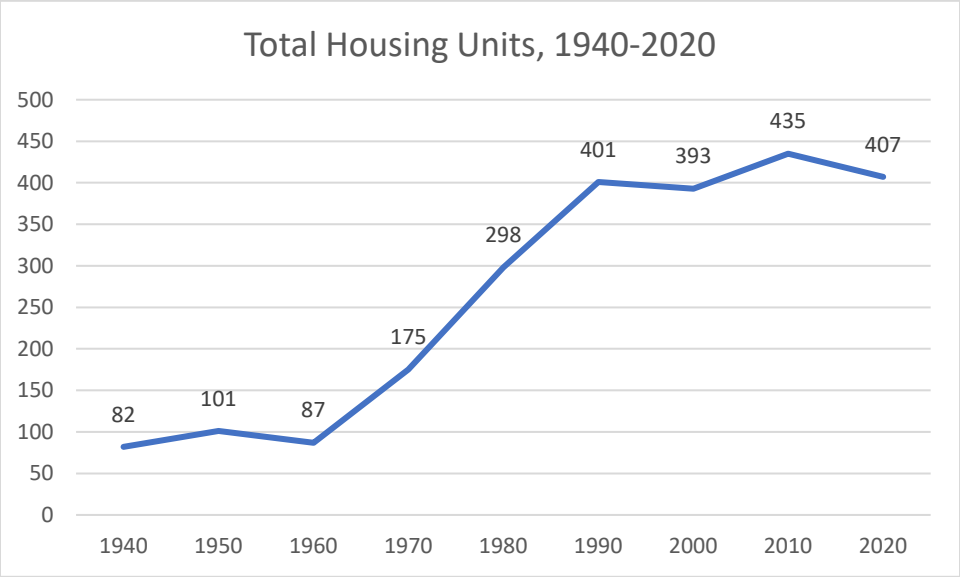
Source: U.S. Census Bureau, American Community Survey

In a trend that mirrors statewide trends, Pittsfield has an increasing aging population. In 2010, the percentage of residents over 65 years of age was 17% for Pittsfield, 15% for Rutland County, and 14.6% for Vermont. By 2020, 20% of residents were 65 and older for the state of Vermont, compared to 22.7% for Rutland County, and 20.6% for Pittsfield. An aging population may need services that are not readily available in a town like Pittsfield.

III. Housing

This section discusses the number, type, location, and availability of housing to meet the needs of the community. A housing unit, as defined by the U.S. Census, includes houses, apartments, mobile homes, and rooms for occupancy. According to 2019 ACS data, there were 407 housing units in Pittsfield. In the fifty years from 1960 to 2010, housing unit numbers increased by a staggering 348 units, equal to a 400% increase. After a slight decline in housing unit growth between 1990 and 2000, housing numbers rebounded from 2000 to 2010, when the Town saw a 10.7% increase in housing units. This was followed by another slight decline, a 6.4% decrease, from 2010-2020.

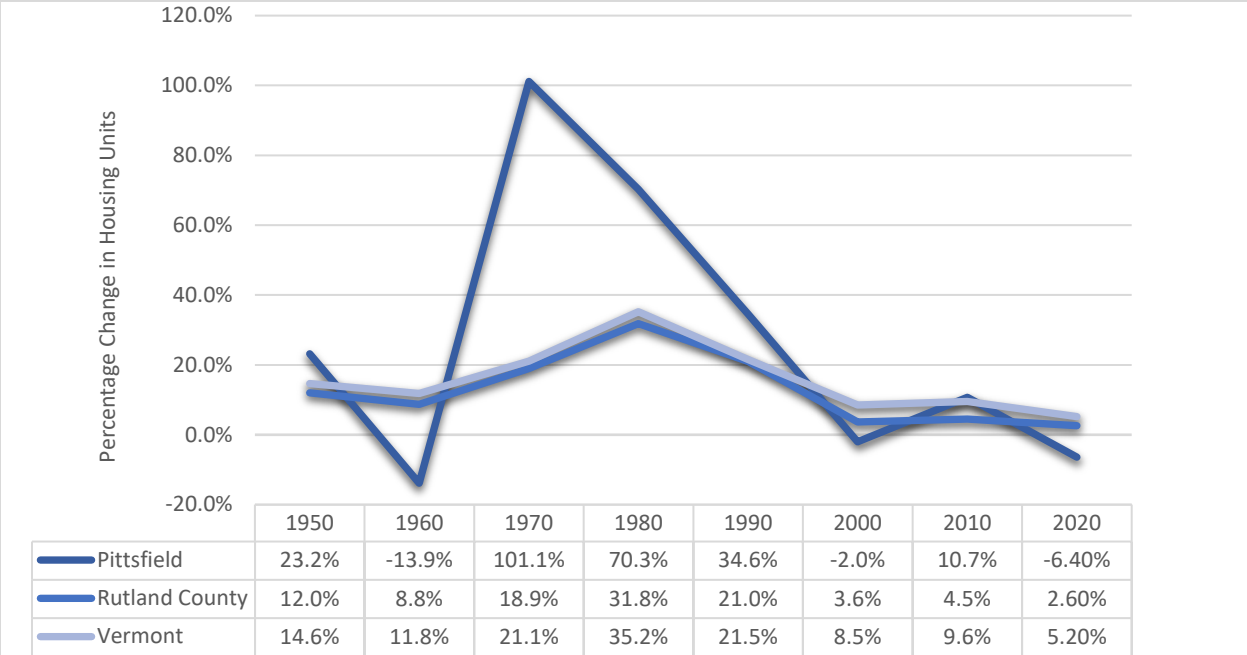
Figure 3: Total Housing Units, 1940 - 2020



Source: U.S. Census Bureau, American Community Survey

When viewed in relation to county-wide and statewide figures for housing unit growth, Pittsfield's declined whereas the County and the State both increased (see Figure 4).

Figure 4: Percent Changes in Housing, 1940 - 2020

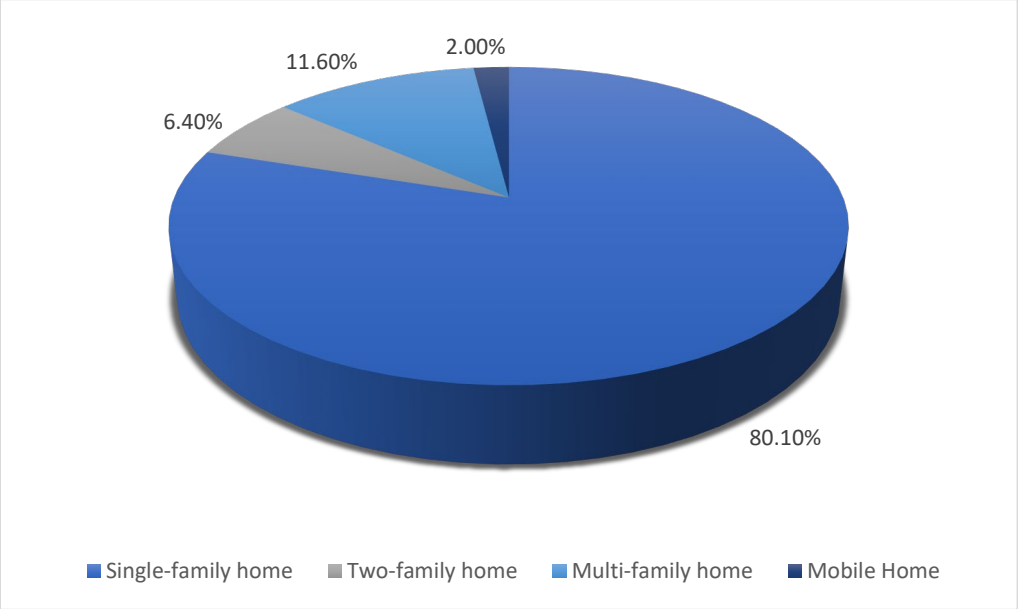


	1950	1960	1970	1980	1990	2000	2010	2020
Pittsfield	23.2%	-13.9%	101.1%	70.3%	34.6%	-2.0%	10.7%	-6.40%
Rutland County	12.0%	8.8%	18.9%	31.8%	21.0%	3.6%	4.5%	2.60%
Vermont	14.6%	11.8%	21.1%	35.2%	21.5%	8.5%	9.6%	5.20%

Source: U.S. Census Bureau, American Community Survey

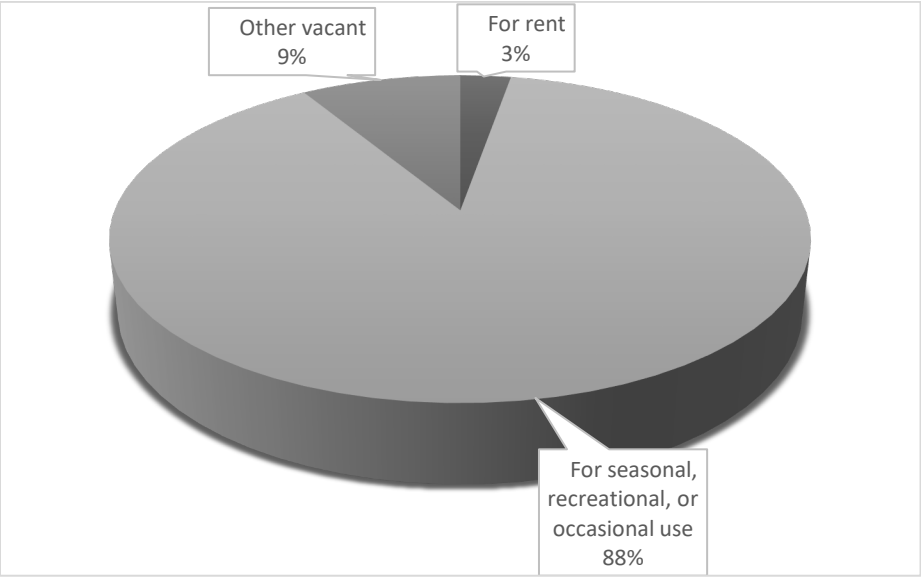
Like most Vermont towns, the bulk of Pittsfield's housing units are single-family homes. Currently, single-family homes account for over three-quarters of the Town's housing stock, a figure that has held relatively steady over the past decade. The stock of multi-family homes has increased from 4.7% in 2013 to 11.6% in 2019.

Figure 5: Housing Unit Types, 20015-2019



Source: American Community Survey, 2015-2019

Figure 6: Housing Unit Vacancy Status, 2019



Source: American Community Survey, 2019

At a vacancy rate of 3% or lower, rates are considered to be a "functional zero." The implication here is that any housing stock available at this level would be assumed to have some sort of fault that precludes it from being suitable for purchase, such as substandard living quarters. What Pittsfield's 3% homeowner vacancy rate reveals is that property turnover is precipitously low, making it difficult for future residents to gain a foothold in the Town's housing market.

In total, 19.6% of housing units in Town were renter-occupied between 2015 and 2019 (see Table 2 below). This was lower than Rutland County and Vermont as a whole. The vacancy rate for rentals during this time was low at 2.1%, which was similar to the state of Vermont, Rutland County, and the neighboring town of Chittenden.

Table 2: Housing Occupancy, Pittsfield & Surrounding Areas, 2019

	Total Units	*Owner-occupied*	*Renter-occupied*
Pittsfield	407	80.4%	19.6%
Chittenden	665	82.2%	17.8%
Killington	2,665	73.8%	26.3%
Rochester	881	80%	20%
Stockbridge	548	87.9%	12.1%
Rutland Co.	34,411	71.4%	28.6%
Vermont	334,999	70.8%	29.2%

Source: American Community Survey, 2019 5-year Estimates

The average tax appraisal value of single-family residences in Pittsfield can be calculated using data from the state's Department of Taxes, which provides valuations for various forms of property, based on lots that are either greater or less than 6 acres in size. Latest figures indicate that average property values are significantly more expensive in Pittsfield than in the neighboring towns of Rochester, Stockbridge, and Chittenden.

Table 3: Average Property Values, 2019

Pittsfield	$287,414
Chittenden	$227,305
Killington	$334,960
Rochester	$177,215
Stockbridge	$234,537

Source: Vermont Department of Taxes

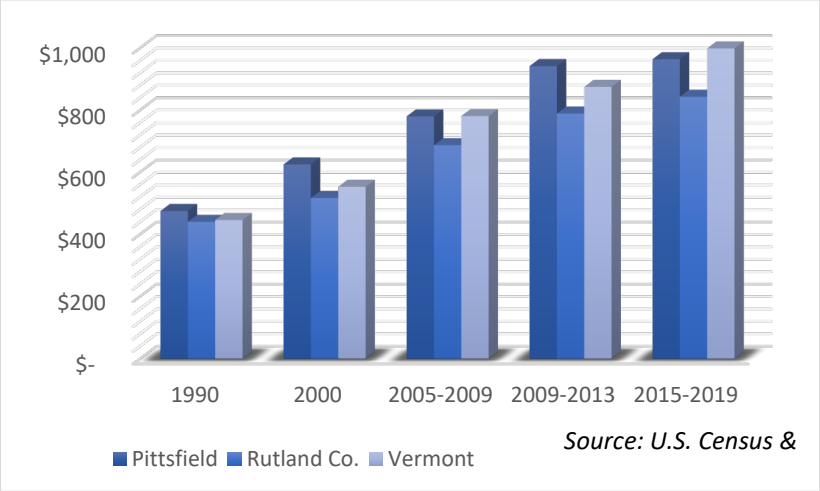
A. Housing Affordability

Affordable housing is defined as that which a household making the County median income could afford if no more than 30% of its income were spent on housing costs, as defined by the U.S. Agency of Housing and Urban Development (HUD). For homeowners, housing costs include payments for principal and interest on mortgage, taxes, etc. For renters, housing costs include rent and utilities. American Community Survey figures for 2019 put the median value of owner-occupied housing units at $177,800. With a median household income of $50,781, the average Pittsfield resident would be able to afford a property valued at $181,000 (assuming a 5% down-payment, closing costs, property taxes, private mortgage insurance, and overall affordability below the 30% HUD threshold).[3]

Rental Housing

Continued tightness in the housing market and a general lack of unoccupied units continues to result in high rental costs. In 2009, median gross rental costs had risen to $788, and had increased further to $942 by 2013. By 2019 the median gross rental cost was $964. These rental rates eclipse those of Rutland County and the State since such data was first collected in 1980. Historically Pittsfield also had higher rents than the State median, but in 2019 the State surpassed Pittsfield with a median gross rental cost of $999.

Figure 7: Median Gross Rents, 1980-2019



Source: U.S. Census & American Community Survey

In 2022, HUD calculated the fair market rent for a modest two-bedroom apartment in Pittsfield at $981 per month, which is slightly higher than the aforementioned median gross rental price of $964.

The National Low Income Housing Coalition provides calculations on housing costs and the necessary wages and hours worked to afford housing. In order for a renter in Rutland County to be able to affordably rent at $918 for a two-bedroom home (and only pay 30% or less of income on housing in 2022 at the HUD-defined affordability limit), he/she would have to make at least $36,720 annually.[4] If a Pittsfield resident earned the state's 2022 minimum wage of $11.75 per hour, he/she would have to work a 60-hour week to have the income required to pay $918 per month. According to 2020 ACS estimates, 16.2% of Pittsfield's households made less than $35,000, and would have difficulty finding affordable rental housing in Pittsfield, per HUD standards.

Alternative Housing Opportunities

With a pronounced need for affordable housing opportunities in Pittsfield and surrounding communities, there is a need to think creatively about ways to meet the Town's future housing needs. Any growth has to occur in a manner that is in line with the availability and capacity of existing municipal services. With available land being a limiting factor for the Town, owing to topography and the Green Mountain National Forest owning a significant portion of land, housing growth may need to spring from within existing properties.

Pittsfield's affordable housing needs could be met through the conversion of large, older properties in the historic village settlement area into multi-family housing; expansion or refurbishment of occupied buildings to create accessory dwelling units; or even home-sharing opportunities. Accessory dwelling units are a permitted right in all Vermont towns, per statute, and are often an underutilized housing opportunity. In order to bring any of these opportunities to fruition, it is imperative that residents become aware of the many benefits of making financial investments into projects that create new affordable housing units.

B. Elderly Housing

Baby Boomers born between 1946 and 1964 started to reach the age of 60 and their approach to retirement since 2006. The oldest amongst them will be 84 in 2030. About 20% of Pittsfield residents were aged 65 or older as of the 2020 Census, a figure that continues to rise. This dramatic shift in demographics will put added pressure on an already tight housing market. Expanding health care costs may leave seniors with even less money to spend on housing.

As the elderly (those 65 or older) become less comfortable with the tasks involved in managing their own home, they may turn to elderly housing. If health is an issue and some form of constant care is required, seniors will need to enter a nursing home or a residential care facility. Within Vermont there are several types of elderly care facilities that are subject to State regulation: nursing homes and residential care facilities. Nursing homes provide nursing care and related services for people who need nursing, medical, rehabilitation, or other special services. They are licensed by the State and may be certified to participate in Medicaid and/or Medicare programs. Certain nursing homes may also meet specific standards for subacute care or dementia care. Residential care homes are State licensed group living arrangements

designed to meet the needs of people who cannot live independently and usually do not require the type of care provided in a nursing home. When needed, help is provided with daily activities, such as eating, walking, toileting, bathing, and dressing. Residential care homes may provide nursing home level of care to residents under certain conditions. Daily rates at residential care homes are usually less than rates at nursing homes.

The Vermont Department of Disabilities, Aging and Independent Living classifies residential care homes in two groups, depending upon the level of care they provide. Level III homes provide nursing overview, but not full-time nursing care. Level IV homes do not provide nursing overview or nursing care. Nursing homes, which have full time nursing care, are considered Level II. At present, there are no options for elderly care located in Pittsfield. There are very few options in Pittsfield or the surrounding area for this type of care. Elderly Pittsfield residents in need of full-time care are forced to move away from their community, with Rutland being the closest town with available facilities. Even with care facilities within a few towns' distance of Pittsfield, the homes in Rutland only provide a total of 193 beds in level III residential care, 2 level IV residential care beds, and 406 nursing care beds. Randolph, in neighboring Orange County, only has 18 level III residential home beds and 30 nursing home beds. These facilities serve a large catchment area in Rutland, Randolph, and beyond, and are, therefore, often hard pressed to accommodate the needs of the greater regional community. This is, of course, not just a local issue. There is a lack of elderly housing throughout Vermont and the country.

Table 4: Nursing and Residential Care Facility Beds Available, 2020

	Nursing Care (II)	Residential Care (III)	Residential Care (IV)
Pittsfield	0	0	0
Chittenden	0	0	0
Killington	0	0	0
Rochester	0	0	0
Stockbridge	0	0	0
Rutland	406	193	2
Randolph	30	18	0

Source: Department of Disabilities, Aging and Independent Living

Locally, the Park House of Rochester offers a shared living residence, with no onsite medical care. Park House is equipped, primarily, to serve the needs of people over age 60. Residents have their own bedroom furnished with their own furniture, and a private bathroom. Meals are served in the Park House's common area. There is a regular waiting list for individuals wanting to reside in the Park House. Currently, there are no Pittsfield residents residing at the Park House, but the residence opened its doors to seniors from around the Rochester area who were displaced during Tropical Storm Irene. Park House operations are an essential service for elderly residents along the rural Route 100 byway.

In the Vermont Housing Finance Agency's issue paper "Housing and the Needs of Vermont's Aging Population," it is acknowledged that more seniors today want to "age in place," which

means choosing to remain at home or in a supportive living community as they grow older without having to move each time their needs increase. Considering the lack of availability of nursing homes in Pittsfield and Vermont as a whole, this may be the optimal way to address elderly housing in the future. Having the right housing includes the ability to stay active and engaged in community life, which is a great benefit not only to the individual, but to the community as a whole.

Considering the high costs of housing and the high maintenance costs associated with older housing stock in Pittsfield, aging in place in Pittsfield may not be an option that can be considered by some older residents. Further, having elderly residents continue to age in place requires that there are adequate services in place to accommodate residents remaining in their homes as they age, including home nursing and transportation needs. For those living farther from the village center, access to these essential services can become difficult to manage. There is also the added concern that there may not be the necessary housing unit turnover that would otherwise permit new residents to move to the Town if a substantial share of the housing stock is occupied by long-term tenants. Providing housing that is age and income inclusive while also centrally located has been encouraged by the likes of the Vermont Housing Finance Agency as a means of addressing affordable and elderly housing needs.

Several municipalities have benefited from planned retirement communities. Innovative land use policies and controls to address special needs are encouraged. Such land uses are best located close to the village center where basic services are available. Determining the most appropriate locations within Pittsfield to either develop or reuse existing properties for this purpose is an important first step in considering building such a community.

Seniors who are still able to maintain an active lifestyle have the Quin-town Center for Senior Citizens as a source of educational programs, live music, and other types of community interaction. The Quin-town Center also offers meals served at the Hancock Town Hall as well as a “Meals on Wheels” program.

C. Short term rentals

Airbnb and other online marketplaces for short-term rental of homes have become popular alternatives to hotels and bed and breakfasts. Airbnb allows people to list their homes (or a room within their home) online, and guests can book the home or room through the online service. At the time of writing of this plan, over 30 Pittsfield properties were listed as short-term rentals on Airbnb.

D. Goals, Policies and Recommendations

Goals

1. Provide Pittsfield residents access to safe, sanitary, and affordable housing.
2. Retain existing housing and construct new housing which meets population growth in line with the availability and planned growth of public services.
3. Preserve historic structures in ways that appropriately serve the need for housing that is balanced with energy and thermal efficiency improvements.
4. Create additional rental properties throughout Town, provided that they do not put an undue burden on Town services and facilities.
5. Encourage affordable housing opportunities, such as accessory dwelling units, within the Town's village center for a range of ages and income levels that provide for all population segments, including the Town's elderly and special needs populations.

Policies

1. Ensure the timing and rate of new housing construction or rehabilitation does not exceed the community's ability to provide adequate public facilities (e.g., schools and municipal services). Housing that is permanently affordable for a mix of households having moderate, low, and very low incomes is encouraged.
2. Appropriately sized lots, accessory dwelling units, and clustered developments that promote the creation of affordable housing are encouraged.
3. The provision of housing for special needs populations, such as the elderly and people with physical disabilities, is encouraged.
4. The location of housing, related amenities, and land uses shall be planned with due regard for the physical limitations of the site and location of current or planned public and private services, such as roads and commercial/service centers.
5. Affordable housing opportunities, such as multi-family housing buildings and manufactured homes, are to be encouraged in areas allowing for single-family dwellings.
6. Encourage conversion of larger homes into multi-family housing units to meet affordable housing needs of Town residents where the historic character and integrity of the building or surrounding neighborhood is neither destroyed nor diminished.
7. Provide housing that is age and income inclusive while also centrally located.

Recommendations

1. New housing growth in areas with public infrastructure and services shall be planned in a manner that reinforces Pittsfield's historic settlement pattern. (ZBA)
2. The development of multi-family housing, special needs group homes, and elderly housing shall be encouraged in the designated village center in close proximity to Town services. (ZBA)

3. Innovative energy efficiency standards and practices in housing rehabilitation and new developments should be reinforced and encouraged. (PC, SB)
4. The Town should make residents aware of the many benefits of making financial investments into projects that create new affordable housing units. (PC)
5. The Town should consider appropriate locations within Pittsfield to either develop or reuse existing properties for planned retirement communities. (ZBA, PC, SB)
6. The Town should collaborate with businesses and non-profit housing corporations to help Pittsfield better meet the demands for affordable housing. (ZBA, PC, SB)

IV. Education and Childcare Services

A. Overview

Pittsfield voted to discontinue providing education locally in 1968, closing their school in 1969. Over the next two decades, Pittsfield operated a joint contract elementary school with Stockbridge. In 1985, Pittsfield seceded from the Stockbridge joint contract, and began offering school choice for all students, K-12. The Town is one of twenty towns in Vermont to have no school of its own.[5] Tuition is paid in full by the Town for students seeking education through accredited public schools. The state-average tuition is paid to cover a portion of tuition for those wishing to send children to accredited independent schools, in accordance with Vermont statute.

Pittsfield has had a decrease of 30 students since the 2015-2016 academic year. Schools that receive students from towns like Pittsfield set the tuition rate based on a number of factors, including staffing and operating expenses. In order to pay for the tuition costs, Pittsfield levies taxes as part of the annual Pittsfield budget. Increases in the number of students in the Town coupled with the increased costs in educating students outside of the community has driven up the level of funding needed. In 2015, Pittsfield joined the Windsor Central Supervisory Union (WCSU) in Woodstock, while still retaining school choice for residents. This was done to bring lower administrative costs and a corresponding reduction in tax burdens.

It is undoubtedly true that parents often heavily weigh the quality of local school opportunities when selecting where to live. Having choice in schooling for children is a large draw for many families moving to Pittsfield and other choice towns in Vermont. Nationally, many families are willing to pay a premium to live where their children will have access to better schools; however, most Vermont towns offering school choice are very rural, with housing prices often being around $75,000 lower in towns without schools.[6] While this is not wholly applicable to Pittsfield, with its median home value above the state's, the Town does have more choices than some choice towns for school opportunities.

Table 5: Pittsfield Tuition for School Year 2021-22

School	*Number of Pupils*	*Tuition Amount*
Killington Elementary School	17	$272,000
Stockbridge Central School	3	$49,332
Randolph Union High School	1	$17,121
Woodstock Union High School	23	$425,500
Independent Schools	3	$50,526
TOTALS	**47**	**$814,479**

Source: Act 60

Vermont is unique in the way it addresses the funding of schools. With the passage of Act 60 in 1997 (subsequently amended), the State reformulated the way education funding was collected and distributed among its towns. In an effort to ensure equality amongst schools from town to town, education taxes are collected from each town at the same rate and redistributed to

schools, the principle being that poorer towns were unable to provide their children with the same level of education as richer towns. Thus, Act 60 (and subsequently Act 68) redistributes money from the pool to the poorer towns in an effort to bring them up to par with wealthier schools. Presently, all towns, regardless of size or property valuations, are held to the statewide education tax rate. Towns then cover any remaining difference in student tuition through local taxes.

For some towns, this has meant an increase in the amount of education taxes that they have to pay into the general education fund. Because there is a direct correlation between property values and the number of students in a town's school system, a town with high property values and few students (such as Pittsfield) will put more into the education fund than they take out, making them a "sending" town. The effect of this situation is that Pittsfield's tax rate is comparatively high.

B. Childcare

According to a Department of Children and Families (DCF) directory of registered childcare facilities in Vermont, Pittsfield has neither licensed childcare providers nor registered childcare homes. The Vermont DCF has created two classifications for registered childcare facilities in the state, as follows:

- **Registered Family Child Care Home:** A child care program approved only in the provider's residence, which is limited to a small number of children based on specific criteria.
- **Licensed Program:** A child care program providing care to children in any approved location. The number and ages of children served are based on available approved space and staffing qualifications, as well as play and learning equipment. A Licensed program must be inspected by the Department of Labor and Industry's Fire Safety Inspectors and must obtain a Water and Wastewater Disposal Permit from the Agency of Environmental Conservation. A Licensed program is considered a public building under Vermont Law. Types of licensed programs include: early childhood programs, school-age care, family homes and non-recurring care programs.

Due in part to the lack of facilities within Pittsfield and the high costs associated with childcare, it is assumed that most residents currently arrange for care outside of a designated facility. Alternatively, many residents likely opt to take their children to childcare facilities beyond the borders of Pittsfield to neighboring towns like Killington or Stockbridge. Table 6 lists nearby towns, including two large local job centers (Randolph and Rutland), and their accredited childcare facility numbers. Any future economic development that may occur in the Town or any significant increases in working families with young children will make the need for childcare within Pittsfield more pronounced. At such a time, due consideration should be given to assessing the need for childcare for residents.

Table 6: Pittsfield Area Childcare Facilities, 2021[7]		
	Licensed Providers	*Registered Homes*
Pittsfield	0	0
Chittenden	2	1
Killington	3	0
Rochester	2	0
Stockbridge	2	1
Rutland	26	11
Randolph	5	2

Source: Bright Futures Childcare Information System, 2021[8]

C. Adult Education

Providing adults with academic programs that help advance careers and keep minds occupied and sharp into old age is a vital service for residents of Pittsfield. While academically enriching, such programs also provide a much needed intellectual and emotional outlet. Presently, adult and continuing education opportunities in Pittsfield are limited. However, there are many towns within a roughly 20-mile radius from the Town that provide educational opportunities to adults, either through accredited degree programs, certificate and associate programs, or other opportunities. A sampling of these opportunities includes those in the nearby town of Randolph, which is home to both Vermont Technical College (VTC) and Randolph Technical Career Center (RTCC). Additionally, the Stafford Technical Center (STC) in Rutland offers adult and continuing education to anyone over the age of 16. Community College of Vermont (CCV) offers continuing education and degree programs around the State, including in Rutland and the Upper Valley. Osher Lifelong Learning opportunities are offered through the University of Vermont in several locations throughout the state, including Rutland, and through Dartmouth College in the Upper Valley area.

Vermont Technical College, located in Randolph Center, provides students with both full- and part-time academic programs that cover a range of subject areas, from computer programing and technology to agricultural and health care services qualifications. Degree certificates can be earned for either associate degrees or traditional four-year bachelor degrees. With respect to the school's nursing program, successful course participants may earn a one-year Practical Nursing Certificate.

The Randolph Technical Career Center is a fee-based learning center located in the heart of Randolph Village, and operates as part of the Randolph Union High School. Unlike many other institutions locally, this program offers one-off courses to adults without the need to complete a degree or certificate program, making it uniquely poised as a brick-and-mortar institution that provides hands-on instruction without a lengthy and costly curriculum. Classes are available in many academic areas, much like VTC, including mechanical technology, woodworking, and computer technology. Additionally, the school teaches courses in small business management, bookkeeping, the arts, and foreign languages. RTCC also provides locals with free basic computer instruction on a routine basis.

The Stafford Technical Center is adjacent to the Rutland High School. The adult education programs are similar to those provided by RTCC, and include business and career development classes, arts and crafts courses, computer technology, culinary arts, digital media and art, languages, literature and creative writing, medical education, and driver's education. All programs are fee based and cater to a range of knowledge levels.

For the elderly, physical barriers, namely transportation, exist that may prevent active participation in educational opportunities. Many often lack the technological literacy to competently navigate the world of online learning as well. However, for those who do have access to a computer, they may be able to take classes online or at the local library that are either offered by the University of Vermont or another institution. Additionally, for those with access, there are an array of course opportunities through the Osher Lifelong Learning Institute at Dartmouth College in Hanover.

The Gifford Adult Day program in Bethel provides care for elders, and for adults with disabilities. Among the many services Gifford Adult Day provides are activities that improve cognitive skills, provide mental stimulation, and create opportunities for participants to engage with peers while promoting overall wellness – such as live entertainment with interactive components, arts and crafts, pet therapy, music therapy, games, use of visual technology, and sensory relaxation and stimulation.

D. Goals, Policies and Recommendations

Goals

1. Provide for a safe and secure learning environment where quality educational opportunities are provided to all students of all ability levels and ages.
2. Prioritize opportunities to provide the best education to our students.
3. Ensure that the Town is fully able to budget for and afford tuition expenses and is prepared to handle any unexpected increases in costs.
4. Affordable childcare services and facilities that meet or exceed minimum state standards

Policies

1. Land development that is likely to result in large numbers of school children shall be phased or planned so as not to place an undue financial burden on the capacity of the Town to provide education services.
2. Ensure sufficient and appropriate educational opportunities for students.
3. Promote access to continuing and adult education opportunities is encouraged.
4. Encourage private sector efforts that seek to establish childcare facilities to meet the needs of Town residents.

Recommendations

1. The Town is encouraged to work with school authorities where Pittsfield students are tuitioned to maintain safe transit opportunities. (School Board)
2. The Town shall ensure the needs of all of the Town's children are incorporated into School Board budgetary planning efforts to advance free and appropriate education. (School Board)
3. The Town should work with the Regional Planning Commission to conduct a childcare needs assessment. (PC, RPC, School Board)
4. The Town should integrate childcare issues into the planning process, including childcare financing, infrastructure, business assistance for childcare providers, and childcare work force development. (PC, SB, School Board)

V. Utilities and Facilities

The provision of services and the routine maintenance and operations of public facilities in Pittsfield are the province of the local government. As such, the costs associated with support and maintenance of public facilities and services constitute a large percentage of the Town's annual budget.

It is imperative that a town plan for future municipal expenditures for infrastructure and municipal equipment. In light of this, Vermont statute enables towns to create a Capital Budget and Program to direct and plan for long-range capital planning, though not all towns have such a budget and program formally in place. These plans help guide the needs of capital fundraising efforts, while designating specific accounts for purposes outlined in a long-range budget. Furthermore, capital budgets and programs help direct efforts by prioritizing project needs in towns to where investments are most needed. Any such budgets and programs must be consistent with municipal plans and shall include an analysis of the sum effect that capital investments may have on a community's operating costs.

Future capital investment planning should take the energy efficiency of proposed projects into account, whether that is for a routine roof replacement, foundational repairs, or other needs. Incorporating these improvements into proposed projects will ensure that overall improvement costs are minimized by completing energy improvements in conjunction with regularly planned capital projects rather than accomplishing each as a standalone task.

A. Capital Improvement Plan

In 2020, Pittsfield developed a five-year Capital Budget and Program to guide municipal infrastructure investments and equipment expenditures for all departments. The Capital Budget and Program works in conjunction with the many capital reserve accounts that have been established over the years for these expenditures that can be annually funded at Town Meeting as stand-alone Warrant Articles or as part of the budget. The five-year Capital Improvement Plan is depicted below.

Town of Pittsfield 5-Year Capital Improvement Plan

Fiscal Year	Administration	Highway	Fire	Cemetery	Library	Outcome
Calendar YR 2020	Town Hall Renovations $30,000	Equipment $20,000	SCBA $4,000			SCBA tanks bought from reserve & grant

			Trucks-Replace Engine 4 & Rescue 1 $2,500			
Calendar YR 2021	Town Hall Renovations $25,000 Town Office Repairs $7,500 Listers Computer $1,800 Contingency. Fund $43,385	New Ford F-550 Truck $103,388 Replace Grader $67,000	Equipment-Turn-out Gear, thermal camera $2,100 Trucks $90,400		Color printer, Sandwich board, Book Shelving $2,600	Town Hall Reno Phase one completed Town Office painted, Library int. painted, floors refinished. Ford Truck Purchased Thermal camera & turnout gear purchased. Computer Purchased Printer, board & shelving purchased
FY 2022-23	Town Hall Renovations $38,000 Town Office Repairs $4,000 Recreation Fund $1,000 Speed-Feedback Signs $6,542	Grader $83,000	Equipment $4,500 Trucks $65,000 Paving $20,000 Snow Mobile $13,497		Wooden Shelving, Computer $3,800	Town Hall basement ceiling, walls electric replaced, Basement Foam insulated, fire alarms re-wired, windows purchased. generator, heat pumps, tankless water heater, new oil tank installed, cabinets, countertops doors and 12 light fixtures purchased from reserves and ARPA funding Speed signs purchased with ARPA. New Grader purchased.

						Fire Snow mobile purchased with ARPA. Shelving purchased.
FY 2023-24	Town Hall Renovation $10,000 Village Paving $10,000 Bandstand Painting $1,800 Computer $1,000 Town Office Repair $4,000 Recreation Fund $1,000	Reside & new windows-Garage $25,000	Equipment $2,500 Trucks $70,000	New Mower $18,274	Circulation & patron desks & seating $2,400	Bandstand Painting Scheduled Basketball Courts re-paving scheduled using reserve & state grant funds. Turn-out Gear purchased. Mower purchased with ARPA. Garage project scheduled
FY 2024-25			Equipment Target allocation $2,500 Trucks Target allocation $58,500		Additional Circulation desk segment	Target to order new mini-pumper rescue-two year build; additional turn-out gear Target to complete Town Hall Renovations &Town Office repairs

B. Municipal Buildings

Town Office

Prior to 2012, the Town Office was located in the basement of the Municipal Building. The office was forced to move to the Town Hall in September 2009 due to ADA compliance issues and environmental health concerns. Following many years of planning and the acquisition of an $845,000 municipal bond in 2010, substantial Town Office renovations were completed in October 2012.

The odyssey of the Town Office building began in 1883, when it was first built as a schoolhouse on the opposite side of Route 100 from where it now stands. The building was moved to its present site in 1934 and remained a schoolhouse until 1969. In 1973, the main floor was designated as the town library, which was in use until the recent renovation project began. A fireproof vault was installed in the 1970s, allowing the basement to be converted to the Town Office. This office was downstairs, difficult to access, lacked handicap access, and was outgrowing its space for quite a while. In 2009, the office was closed by the Selectboard due to mold issues.

From 2009 to 2012, the Town Office was moved into the Town Hall building, and a temporary vault was used for storage of the town records. To ensure that the Town Office would regain its own space, renovation plans then took on an urgency. Pittsfield voters elected to renovate the building as opposed to constructing a new building in its place. An architect was hired, and plans were drawn up to make the building handicapped compliant, move the library to the upper floor, build a new fireproof vault, and move the Town Office to the main floor. Since this was a costly project, the Town voted for a bond to finance construction. In April of 2010, with a financing plan in place, the rehabilitation project began, allowing the new office to take shape.

The Town Office renovation was completed in October of 2012, at which point the Town Office and Library were able to return to the building. Renovations were a long time coming, but well worth the trouble. Pittsfield now has a vault that is large enough to accommodate the town records for many years to come, a well-lit and accessible Town Office, and an elevator to access all three floors. The lowest floor is a brightly lit, dry space that is used by the Pittsfield Historical Society to display artifacts and hold meetings and events. In addition, the Town Hall is currently undergoing renovations after it was deemed unsafe in early 2020.

Pittsfield has gone to great lengths to modernize its Town Office facility, and as stated, has planned appropriately for the future so as to accommodate all individuals and town records. It provides a much more pleasant and healthy workspace for the town clerk and assistant clerk (who are available three days a week, Tuesday through Thursday), and the building is much more easily accessed by the general public. Renovating this building was a major undertaking that has done Pittsfield proud, preserving and repurposing a truly historic structure in the heart of the community.

Library

The Roger Clark Memorial Library has existed since 1901, and was managed and staffed entirely by volunteers until 2020, when a part-time librarian was hired. The library was located on the first floor of the Pittsfield Municipal Building, and was dedicated in September 1973. During renovations of the Town Office building, the library was closed. It is now located on the second floor of the Town Office Building and is accessible for people with physical disabilities.

The library strives to be a multi-generational community center that fosters traditional, cultural, creative, and technical literacy amongst Pittsfield's residents. It offers a mix of fiction, non-fiction, Vermont-themed literature, DVDs, and children's magazines and books. In the past decade, the Library's collection of materials has grown substantially, with hundreds of new titles added. The library currently houses 4,200 volumes, 19 audio books, 450 DVDs, 12 games and 10 pairs of snowshoes, and is open four partial days each week. High-speed internet access is available at two computer workstations, and book downloads are available from Listen-Up Vermont with a patron number supplied by the library. The library offers a wide range of programs for all ages year-round, including many children's programs and activities, a book club, a monthly yoga class and periodic adult life skills seminars.

Town Hall

The Pittsfield Town Hall (formerly a church) was built in 1830. It acts as the traditional place for all community activities. The Town Hall has a lift which was installed in 2002 that reaches all floors for handicapped accessibility. Additionally, the Town Hall and Town Office buildings are served by a common well that was drilled in 2000. Since 2020, Town Hall has undergone extensive renovation and structural repair including a new steel beam floor system, major foundation repair, outside French drain, new basement windows, walls, oil tank, ductwork, and kitchen. Utilizing one-time funds from the American Rescue Plan, a generator that will power both Town Hall and Town Office has been installed, along with two heat pumps, new duct-work and on demand water heater.

In the event of a disaster, the Town Hall can be used as an emergency shelter and heating cooling center. The building can accommodate up to 75 people during an emergency.

Town Garage

The Pittsfield Town Garage is located just outside of the village center on Route 100. The building is approximately 30' by 50' in size, and dates to 1973. There is a storage shed on site that is somewhat larger than the main garage building at 30' by 60'. A new sand shed which can hold up to 1,700 yards of sand was completed in October 2022. The Town currently owns two dump trucks (2013, 2022), one loader/backhoe/excavator (2018), and a motor grader (1995). The main garage building is slated for renovation in 2023 in which all standing seam siding will be replaced and new windows and trim installed. Most equipment is relatively new, with funds being set aside for the 2023 purchase of a new grader which is scheduled for delivery in early 2024. In addition to the large equipment mentioned above, there are associated plows, a trailer to spread liquid chloride, and a leaf blower.

C. Parks and Public Lands

Recreational opportunities abound in Pittsfield. Whether it is enjoying Town-owned Park space along the Village Green, access to the local rivers, visiting nearby ski resorts, or venturing into the adjoining Green Mountain National Forest (GMNF), residents have a wealth of recreational

opportunities to enjoy year-round. Continued access to these sites and opportunities is important to the Town, as its rural, riparian, and mountainous terrain is integral to the social and economic fabric of the community.

Parks

Pittsfield owns three parks: the 5-acre field situated behind the Town Hall, the original park/common bounded by Route 100 and the Village Green, and the Tweed River Open Space. The field is available for summer little league, basketball, and other playground activities (including horseshoe pits). The park is used principally in the warmer months for band concerts, auctions, bazaars, and flea markets. Pittsfield residents take a great deal of civic pride in the upkeep and appearance of their park grounds, bandstand, and war memorial. New posts and backboards were recently added to the basketball court located in the field behind the Town Hall, including one backboard that is adjustable to accommodate children. A state grant along with funds put away in the Recreation Reserve Fund will pay for re-paving the basketball courts which is scheduled for mid-2023. A new fence will also be installed so the court can also be utilized for pickle-ball and an ice-skating rink in the winter.

Following Tropical Storm Irene in 2011, the Town bought out a number of properties that were severely damaged by flood waters. With Federal Emergency Management Agency (FEMA) funding and technical assistance from both Two Rivers-Ottauquechee Regional Commission and the White River Partnership, Pittsfield made plans to reuse three contiguous properties located off of Route 100 as public park space. Completed in 2019, the Tweed River Open Space allows for improved public access to the Tweed River, while also restoring the riparian buffer along the waterway.

An ongoing project, the Velomont Trail will connect existing mountain bike trail networks and double-track dirt roads to create comprehensive trail access for everyone. This trail will connect existing trail networks and pass through at least 30 towns and villages with initial trail development focused on central and southern Vermont. The project will be completed by 2030.

Public Lands

Approximately 8,000 acres of all land in Pittsfield is part of the GMNF, comprising around 60% of the Town's acreage. Activities within the GMNF are owned and managed by the U.S. Forest Service. Parts of the GMNF are open to the public for recreation including hiking, biking, skiing, snowmobiling, and camping. In recent years, many improvements to access on these federal lands have occurred, including work by the Vermont Youth Conservation Corps to improve mountain biking trails (on the Hayes Brook Trail off of Upper Michigan Road) and snowmobile system improvements completed by the Tweed Valley Travelers.

D. Cemeteries

The Town of Pittsfield is home to one public cemetery, commonly referred to as the Pittsfield Cemetery, and one known private cemetery on Forsha Road that is maintained by the Town Historical Society. The Pittsfield Cemetery is located off of Route 100, across from the Village Green, and is owned by the Town. It is currently considered to be in excellent condition, with a large number of available plots. A new section was recently opened at the cemetery to accommodate future needs. The proposed cemetery fund budget for 2021 was projected to be $5,780, most of which was allocated for wages and stone cleaning line items. Each year, a Memorial Day remembrance ceremony is held at the cemetery.

E. Public Sewer Systems

To date, there are no publicly owned sewer systems in the Town. Homeowners and businesses provide their own disposal systems, most frequently consisting of a septic tank-soil leaching arrangement. Private septic systems are regulated by the State of Vermont under the Potable Water and Wastewater permitting program.

F. Public Water Systems

There is no publicly owned water system in the Town. Because of the high costs associated with the construction, operation, and maintenance of community water systems, even with the aid of federal and state funding, Pittsfield will likely continue to rely on individual and/or private water systems. It is therefore critically important that all private water sources be protected from existing or potential contamination.

G. Communication Facilities

Landline Communications

Most of the telephone related services in Pittsfield are still offered via traditional telephone lines and poles (landline) despite the increased popularity of and reliance on cellular service as a primary means of telecommunications. Coverage over landlines in Pittsfield is provided by Consolidated Communications, Inc. and ECFiber.

Cellular Communications

There are no cell towers located in Pittsfield, but there is spotty coverage in some areas in Town. Cell phone service in Pittsfield largely comes from towers located to the south in Killington on Pico Mountain, providing both AT&T and Verizon Wireless customers some reception.

Pittsfield has a cell tower ordinance that would guide the location and design of any towers that might be developed; however, any cellular provider who is creating a network of cell towers is

exempt from local land use regulations under V.S.A Title 30, Chapter 5, § 248a. A Section 248 review addresses environmental, economic, and social impacts associated with a particular project, similar to Act 250. In making its determination, the Board must give due consideration to the recommendations of municipal and regional planning commissions and their respective plans. Accordingly, it is appropriate that this Plan address these land uses and provide guidance to town officials, regulators, and utilities. Specific language in this plan relating to the siting and development of cellular communications facilities is located in Chapter IX, Section E of this Plan.

High-speed Internet

There are presently five ways to access the internet in Pittsfield: landline, DSL, satellite, cellular internet, and fiber internet.

- **Dial-up** - Dial-up access is still a commonly available service to residents. However, speeds over a telephone modem are very slow, and, given the need for bandwidth in day-to-day use of the internet, it is not practical for more than checking e-mail. The faster and more stable options available to residents are via satellite modem, DSL, and fiber internet.

- **DSL (Digital Subscriber Line)** - DSL is very similar to cable internet in speed. It is less subject to decreases in speed caused by heavy internet traffic because a certain amount of bandwidth is dedicated for each user. DSL is provided to those within the service area of Consolidated Communications, but only within three-line miles of the Consolidated switching station in the village.

- **Satellite Internet** - Provided by companies such as Dish Network and DirecTV satellite internet is an option for residents who are unable to access the internet via cable or DSL, provided they have a clear view of the southern sky from their location. Although bandwidth over satellite is on average three times faster than a dial-up connection, it is more expensive than other methods of access and it can be affected by heavy weather, such as torrential rains and blizzards.

- **Cellular Internet** - With the growing amount of bandwidth available to smartphone users via cellular phone networks, cellular providers are offering the ability to utilize their network for internet access. The nature of cellular connections is such that they are less susceptible to disruption from weather conditions than satellite internet. However, a clear and strong connection to a cellular tower is required in order to utilize this service. The State of Vermont has put a substantial amount of support behind the notion of providing internet access via this medium to those areas that are currently underserved. As is the case with cellular phone service, this internet service is limited for many Pittsfield residents.

- **Fiber Internet** - In recent years, fiber internet has become the highest standard of reliable internet service globally, touting the fastest connection speeds available. The East Central Vermont Community Fiber Network (EC Fiber) has extended a fiber optic network to many towns in the Upper Valley and surrounding area, including Pittsfield. As of July 2017, all of Pittsfield has access to reliable, community-owned high-speed internet and phone service.

H. Municipal Solid Waste Management

In 2021, the Town voted to leave the White River Valley Solid Waste Alliance and become part of the Rutland County Solid Waste District. Residents can purchase permits for a small annual fee and the facility on Gleason Road in Rutland is open 6 days a week for garbage and recycling drop off. Recycling is free and garbage is paid for by the bag. The Town had been paying close to $60,000 a year to be part of the White River Valley Solid Waste Alliance, so the move to RCSWD represented a large savings in the Town's budget.

In 2012, the Vermont Legislature passed Act 148, commonly referred to as the Universal Recycling Law. This new legislation bans the disposal of recyclables in landfills. Roll out of this legislation was an iterative process, with new rules coming into effect in the summer of 2014 and continuing through the summer of 2020. Over this seven-year time frame, conventional recyclables (glass, aluminum, plastics, and paper products) have become accepted at all transfer stations and other waste facilities, and organic materials (food scraps, yard waste, and clean wood debris) will eventually be diverted to certified facilities. As a result of this legislation, a new statewide Materials Management Plan (MMP) was written, which came into effect in June 2014, and was most recently updated in November 2019. Waste management districts are now in the process of rewriting and adopting revised SWIPs to conform with the latest MMP.

Pittsfield lacks any waste facilities for recycling, composting, or that serve as a transfer station or landfill. Effective July 1, 2015, residents are responsible for private waste removal. Residents have the option of either contracting with a private hauling company or taking waste to the Rutland transfer station or the Royalton (Waterman Road) transfer station. The latter facility is owned and operated by the Towns of Bethel and Royalton in accordance with approvals and certifications from the Agency of Natural Resources.

Pittsfield's current capacity to handle its solid waste is adequate for the short-term future, although it is unclear how the Universal Recycling Law changes will impact the Town. It is in the long-term interest to continue to participate in the RCSWD and to coordinate waste management and recycling programs with neighboring communities and the private sector to assure sound management practices. Furthermore, the general public needs to be continually educated as to the value of recycling of glass, newspapers, metals, plastic, cardboard, and other materials, particularly with new statutory requirements. Pittsfield has a mandatory recycling

ordinance, which addresses source separation of trash, but more can be done to make recycling options more ubiquitous throughout Town and reinforce the need to keep recyclables from the waste stream.

I. Goals, Policies and Recommendations

Goals

1. Provide public services and facilities that meet the community's needs at a rate that does not create an undue burden on taxpayers or on the scenic, environmental, and cultural resources of the Town.
2. Encourage universal broadband and cellular communications access to all Town residents in a manner that respects the rural character of the Town.
3. Reduce municipal and household waste through reuse and recycling.

Policies

1. The Town shall continue to provide residents with safe, effective, responsive, and affordable municipal infrastructure, facilities, and services that are consistent with other Town goals, and, wherever possible, encourage and work with other public and private utility or service providers to do the same.
2. The Town will continue to effectively plan for future investments and upkeep of community facilities so as to avoid overburdening taxpayers due to unexpected maintenance costs.
3. Continue to support efforts to expand high-speed internet coverage for the benefit of all citizens in Pittsfield.

Recommendations

1. The Selectboard has developed a capital budget and will update annually as needed with input from the PC, Road Commissioner, Parks Commissioner, Fire & Rescue, Library and Town Clerk for future municipal investments in utilities and facilities that is consistent with this Town Plan. (PC, SB)
2. The Town shall continue to participate in the RCSWD and support its evolving programs. (SB)
3. The Town should support continued efforts to expand broadband and cellular service access when such growth does not place an undue adverse impact on the rural character of the community. (SB)
4. All private water sources should be protected from existing or potential contamination. (ZBA, SB, ANR)

5. The Town should educate the general public as to the value of recycling glass, newspapers, metals, plastic, cardboard, and other materials, particularly with new statutory requirements. (PC, SB)
6. The Town should make recycling options more ubiquitous throughout Town and reinforce the need to keep recyclables from the waste stream. (PC, SB)

VI. Health and Emergency Services

A. Health Care Facilities

The lower population density of Vermont's rural countryside and the larger area over which the population is distributed can make providing adequate health care more difficult, particularly for those who may not be able to drive themselves to major health care facilities. Likewise, in rural areas, emergency care for severe trauma or major acute illnesses may take longer to arrive than in more populated locations, risking potential loss of life.

There are very limited options in terms of health care services in a town of Pittsfield's size. Most residents seek their health care services in other towns, including Rutland, Randolph, Bethel, and Rochester. Gifford Medical Center hosts health clinics in two neighboring towns: the Bethel Health Center and the Rochester Health Center. Both provide primary health care services to nearby communities under the auspices of the Gifford Primary Care arm of the medical center. There is a large-scale community hospital in Rutland (Rutland Regional Medical Center), and a tertiary care facility in Lebanon, NH (Dartmouth-Hitchcock Medical Center).

B. Pittsfield Volunteer Fire and Rescue

Pittsfield Volunteer Fire and Rescue is a public organization that serves Pittsfield. It is financed through the Pittsfield town budget, community fundraising activities, and donations. The department is widely considered to be equipped to meet most of the Town's needs, and is under sound leadership, as evidenced by the high level of service it provides to the community. The department is a member of the Rutland County Mutual Aid Organization, a mutual aid network, and also works cooperatively with Stockbridge and other surrounding towns' departments. In the event of a more catastrophic event, the department is heavily reliant on neighboring partners for more technical support, manpower, and equipment.

Staff

Pittsfield Volunteer Fire and Rescue is staffed by volunteers. The department needs additional volunteers to serve, but, like many volunteer fire departments in Vermont, finding new members is increasingly difficult. The effects of an aging population, the increased number of residents working outside the town limits, and the many State and Federal requirements for training have taken a toll on the pool of interested volunteers.

Many surrounding towns have moved to a stipend-style compensation in an effort to entice volunteers to join the department, where Pittsfield does not.

Fire Station and Equipment

The Pittsfield Fire Station is located at 3596 Route 100, in the village of Pittsfield. The station was built in 1970 and contains three bays for fire and rescue vehicles. The fire station was

dedicated to Eugene Martin at the Memorial Day ceremony in 2010. The station and all departmental vehicles and equipment are owned by the Town. Some of the equipment must be replaced over time like breathing systems which need replacing every 15 years.

In the event of a disaster, the fire station will double as an emergency shelter until the Town Hall renovations are completed allowing the Town Hall to serve as an Emergency Shelter, equipped with a backup generator and relevant supplies.

Future plans for improvements to the Station include adding drainage and paving a truck-length portion in front of the truck doors to solve water issues, and adding a single bay to create more space for equipment as well as a meeting space.

Funding

The Pittsfield Volunteer Fire and Rescue Squad is a municipal department. The voters elect a chief and the department elects officers. The Department's budget is included as part of the annual municipal budget. Recent major purchases include a 2019 Kenworth Tanker which was paid off in 2023. The department also purchased a new 2021 Can-Am Defender 6x6 with a Kimtek Wildland fire skid unit and Pro-line trailer, and are proud to report that this purchase was made using fundraiser and donation funds only. A fund was established in 2020 to replace the 2008 F350 (Rescue 1) and 1990 International pumper (Engine 4) with one new mini rescue truck and first response vehicle by 2025 as part of the Capital Improvement Plan. Replacement of the 1995 International Pumper (Engine 1) is planned by 2033.

C. Police Protection Services

Pittsfield has two constables, each elected by town vote on Town Meeting Day. Supplemental police coverage in Pittsfield is provided by the State Police out of the Rutland barracks.

With significant increased mobility of Pittsfield's population, it is recommended that the Town periodically review the law enforcement system that is in place to determine if a more sophisticated approach is warranted to maintain a reasonable level of law and order. For instance, the Town's constables lack the legal authority to enforce the law and are dependent upon the availability of local sheriffs and state troopers.

D. Emergency Medical Services

Pittsfield Volunteer First Response Squad

Emergency medical calls are answered initially by the First Response Squad of the Pittsfield Volunteer Fire & Rescue Department. The squad has a few technicians trained in handling situations of a medical nature. The purpose of the rescue squad is to provide immediate response to emergencies while White River Valley Ambulance is on route to an accident or

situation. EMS services in Pittsfield respond to calls using rescue equipment housed at the fire house.

There are concerns that the lack of staffing on the Pittsfield First Response Squad may lead to lack of availability and quality of EMS coverage in town. Trainings in First Response are available and while the cost for training is expensive, the department is more than willing to fund training for individuals who show interest.

White River Valley Ambulance

White River Valley Ambulance, Inc. (WRVA), is a private, non-profit emergency ambulance and rescue service composed of paid full-time, part-time, and volunteer staff. Emergency medical service is provided to a geographical area encompassing 280 square miles and approximately 10,000 residents. In addition to Pittsfield, WRVA covers Barnard, Bethel, Braintree, Brookfield, Granville, Randolph and Stockbridge. WRVA currently has three fairly new ambulances for their response needs. The Town of Pittsfield pays WRVA for its services. The per capita rate of funding required to support continued WRVA coverage stood at $61.00 in 2021. It should be noted that those who use the ambulance will be charged for WRVA's service on an individual basis in addition to the fees paid by the Town. WRVA is located in Bethel about 17 miles away from Pittsfield.

DHART

The Dartmouth-Hitchcock Advanced Response Team is a medivac service based in Lebanon, NH at Dartmouth-Hitchcock Medical Center, providing air medical transportation services to the medical communities of Northern New England. In addition, DHART flight crews respond to public safety agency requests for medical evacuation of trauma patients from scenes of injury and will transport to the closest Trauma Center in the region's five states. Operating 24 hours a day and seven days a week, DHART Crews transport adult, pediatric and neonatal patients to any appropriate medical facility in New England.

E. Emergency Management Planning

Disastrous events, both natural and man-made, can occur at any time in Pittsfield, with little to no warning and with wide-ranging impacts for both the Town and the entire region. Proper emergency management practices can help lessen the impacts of future events in the Town, in addressing four key areas:

- **Preparedness** - includes emergency personnel acquiring suitable equipment and conducting training and exercises. Preparedness is also a responsibility of residents, business and government. Simple preparedness measures, like having disaster supplies on hand, installing smoke detectors and generators, having emergency fuel for generators and vehicles and knowing basic first aid will all help to lessen the impact of a disaster. Preparing emergency plans is also a preparedness activity.

- **Response** - refers to the initial emergency response to save life and property during and immediately after the disaster and is initiated by local emergency crews and then followed up by outside forces if necessary. Response operations are greatly enhanced by proper preparedness. Most emergencies of any scale will require towns to work together, and often to work with state or federal agencies. Practicing with all of these partners before an actual emergency is critical to smooth emergency operations.
- **Recovery** - constitutes the more long-term process of putting life back to normal, and includes many state and federal agencies, especially the Federal Emergency Management Agency (FEMA) in large disasters. As events like Tropical Storm Irene showed, recovery can take a long time and is hindered if a disaster is severe or widespread. Recovery also involves much more state and federal assistance than is commonly thought and requires a substantial coordination effort at the municipal level. The best strategy is to avoid disaster-prone behavior in the first place.
- **Hazard Mitigation** - includes any sustained action that reduces or eliminates long-term risk to people and property from natural or human-caused hazards and their effects. Mitigation planning begins with an assessment of likely hazards, and then targets activities to reduce the effects of these hazards. Given that the largest threat in Vermont is flood related, good mitigation measures include proper road and drainage construction, as well as limiting development in flood prone areas.

Emergency planning efforts at the local level should focus on and address all four areas of emergency management noted above. Outside of goals, policies, and recommendations contained within this Plan, the Town should utilize and maintain emergency management planning documents. In particular, the Town should ensure that they routinely have the two following plans up to date, adopted, and approved to address emergency management concerns:

- **Local Emergency Management Plan (LEMP)** - Local Emergency Management Plans have been previously called Local Emergency Operations Plans and Basic Emergency Operations Plans (BEOPs). LEMPs provide towns with a listing of municipal emergency contacts, designated shelters, vulnerable sites/population, and a listing of the municipal officials that may play a role in disaster response. Though not typically a public document (owing to the sensitive personal information it may contain), the individuals with roles to play in the event of an emergency should always have access to a hard copy(s). The Town Select Board should be tasked with updating the LEMP annually and ensure that all areas of municipal government that would be active during a hazardous event are aware of the LEMP and the information contained therein (e.g., the Selectboard, emergency responders, the Town road crew, and shelter coordinators).
- **Hazard Mitigation Plan (HMP)** - HMPs are documents with five-year lifespans that address actions that towns may take to address the effects of specific man-made and natural disasters. HMPs detail the forms of disaster that a town is most vulnerable to, and the steps that may be taken to reduce disaster costs, including damage to property

and loss of life. The most recent draft of the Pittsfield HMP was adopted and approved by FEMA in January 2021.

Thanks in no small part to the quality of the LEMP that was in force when Irene hit, response efforts were well coordinated and well executed.

F. Goals, Policies and Recommendations

Goals

1. High quality emergency medical care should be available to all Pittsfield residents.
2. Ensure the protection and safety of the citizens of Pittsfield against crime and violations of the law.
3. Maintain appropriate fire and ambulance service.

Policies

1. Support local health care facilities and counseling services to help residents obtain health care as close to home as possible.
2. Support programs that expand or improve medical services for Pittsfield residents.
3. Encourage the development of assisted living or other facilities or services dedicated to supporting the elderly in Pittsfield.
4. Support efforts to decrease response times for emergency services.

Recommendations

1. Ensure medical transport providers are providing safe response times, quality care at affordable taxpayer costs. (First Response, SB)
2. The Select Board shall review and should update, where necessary, the town Local Emergency Management Plan on a yearly basis. (SB, Emergency Manager)
3. The Town should consider earning Red Cross designation for its three shelters. (SB)
4. The Town should keep the Hazard Mitigation Plan current. (Emergency Manager-Coordinator, SB)

VII. Flood Resilience

A. Introduction

What does “resilience” mean and more importantly, what is meant by “flood resilience?”

For the purposes of this chapter, flood resilience will mean the ability of Pittsfield to effectively understand, plan for, resist, manage, and recover from flooding in a timely manner.

The Town of Pittsfield has a long history of flood events with varying extents of damage, as is true of much of Vermont. The main waterbody in the Town is the Tweed River, a tributary of the White River. Like most towns in the region, Pittsfield is home to a number of other streams, creeks, brooks, and ponds of varying sizes. Flooding in the Town has typically occurred as a result of heavy downpours that lead to flash-flooding, excessive run-off from snowmelt, the occasional destructive ice jam, or other issues. These issues are often exacerbated by other mitigating circumstances, such as ice build-up, natural or man-made debris, or already saturated water tables or frozen soils.

Pittsfield Flood History

On Sunday August 28, 2011, unprecedented rainfall brought north by Tropical Storm Irene caused significant flooding throughout the State of Vermont. When the warm tropical and moisture laden air cooled as it climbed the heights of the Green Mountains, it dumped upwards of 11 inches of rain. All branches of the Tweed River and its feeding streams breached their banks, collapsing bank slopes in places, bringing tons of debris into the channels, and causing many bridges and culverts to become clogged with debris. Several houses were destroyed, and more still were rendered uninhabitable. Many other structures and properties were severely- to moderately-damaged. Numerous roads, bridges and culverts were overrun, clogged, washed out, and/or destroyed. Route 100 south of the village and Route 107 east of town were both rendered impassable by major washouts. There was neither power nor telephone for several days. Pittsfield, along with twelve other Vermont communities, was truly isolated and left to fend for itself.

All told, the Town’s damage from Irene totaled $1,062,516.07, according to FEMA’s Public Assistance Database, which captures an amount greater than or equal to 70% of the total damage sustained during the storm. Bridges and culverts have been repaired and/or are being replaced by bigger structures that are capable of passing greater amounts of water (and debris) than before the storm. In the end, seven homes in Pittsfield were destroyed. The seven homeowners opted to participate in the FEMA buyout program, wherein they received 75% of the pre-flood value of their homes. The Town of Pittsfield took title to those properties with the conditions of the program prohibiting any future development of those sites. The site of two contiguous properties that were destroyed became a public riverside access and rest area, the Tweed River Open Space. A community wide celebration was held on the one-year anniversary

of the flood with Governor Peter Shumlin, Senator Bernie Sanders, and Representative Peter Welch attending. The contingent from Chittenden was honored, as were many local citizens. The community picnic event has been repeated in the years since.

In April 2019, a flash flood hit the region, causing scattered road washouts across Rutland County, causing an estimated additional $1 million of damage.

B. Background

Types of Flooding

There are two types of flooding that impact communities in the State of Vermont: inundation and flash flooding. Inundation flooding occurs when rainfall over an extended period of time and over an extended area of the river's basin leads to flooding of flatter bottom lands along major rivers, inundating previously dry areas. This type of flooding occurs slowly, but flood waters can cover a large area. Inundation flooding has warning time and builds gradually, allowing for emergency management planning, if necessary.

Flash flooding occurs when heavy precipitation falls on the land over a short period of time. Precipitation falls so quickly that the soil is unable to absorb it and infiltrate it into the ground, leading to surface runoff. The quick-moving runoff collects and the water level rises quickly and moves further downstream. Flash flooding typically does not cover a large area, but the water moves at a very high velocity and the flooding manifests quickly, making flash floods particularly dangerous. Due to the velocity of the water, a flash flood can move large boulders, trees, cars, or even houses.

All rivers move over time, and this needs to be taken into account when we plan development. Rivers will migrate within the floodplain but FEMA maps assume they will not. Efforts to "hold" rivers in place only lead to river instability as rivers try to dissipate contained energy by eroding their banks. Flash floods can also mobilize large amounts of debris, plugging culverts and leading to even greater damage. In Vermont, most flood-related damage is caused by flash flooding and fluvial erosion (erosion of stream banks). Due to our topography, Pittsfield is vulnerable to flash flooding and fluvial erosion.

Implications of Climate Change and Flooding

According to a white paper produced by Vermont Agency of Natural Resources (VT ANR)'s Climate Change Team, climate change will likely bring about conditions that exacerbate flooding in Vermont.[9] The frequency of heavy precipitation events is likely to increase in all seasons, with the heaviest precipitation events occurring during the summer months.[10] Perhaps more importantly, precipitation will likely occur in shorter, more intense bursts and, consequently, will produce precipitation that runs off the land more than it filters into it.[11] This provides additional opportunities for flash flooding and inundation flooding to occur, and places

Pittsfield at greater risk for flood-related damage. Lastly, expected increase in precipitation during the winter months may lead to added snowmelt and flooding in the spring.

C. Flood Hazard and River Corridor Maps

There are two sets of official maps which can be used to govern development in the floodplain in Vermont and in Pittsfield. They are the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Maps (FIRMs) and VT Agency of Natural Resource's River corridor area maps. Towns participating in the National Flood Insurance Program (NFIP) must use FIRMs. The FIRMs show the floodplain that FEMA has calculated would be covered by water in a 1% chance annual inundation event, also referred to as the "100-year flood" or base flood. This area of inundation is called the Special Flood Hazard Area (SFHA). FIRMs may also show expected base flood elevations (BFEs) and floodways (smaller areas that carry more current). FIRMS are only prepared for larger streams and rivers. Pittsfield has areas of mapped flood risk by FEMA, owing largely to the Tweed River and numerous streams and brooks that flow through the Town. Unfortunately, these maps rely on outdated data. The state will be updating these maps over the next few years.

Recent studies have shown that a significant portion of flood damages in Vermont occur outside of the FEMA mapped areas along smaller upland streams, as well as along road drainage systems that fail to convey the amount of water they are receiving. Since FEMA maps are only concerned with inundation, and these other areas are at risk from flash flooding and erosion, these areas are often not recognized as being flood-prone. Property owners in such areas outside of SFHAs are also not required to have flood insurance. Flash flooding in these reaches can be extremely erosive, causing damage to road infrastructure and to topographic features, including stream beds and the sides of hills and mountains, and also creating landslide risk. The presence of undersized or blocked culverts can lead to further erosion and streambank/mountainside undercutting. Change in these areas may be gradual or sudden.

Vermont ANR's river corridor maps show the expected susceptible areas to these erosion hazards which may be inside of FEMA-mapped areas, or extend outside of this area. In these areas, the lateral movement of the river and the associated erosion is more of the threat than inundation by floodwaters. Elevation or flood-proofing alone may not be protective of structures in these areas as erosion can undermine structure. Vermont ANR issued statewide river corridor maps in the latter part of 2014.

As of the date of this report, there are 24 residential (three mobile homes, twenty single-family dwellings and one multi-family dwelling) and 3 commercial/industrial/public structures in the FEMA defined 500-year floodplain, which equal $6,972,000 if all properties were damaged/destroyed in a severe flooding event. Additionally, there are 6 structures located within the river corridor.

To help reduce the risk to health, structures, and road infrastructure, it is important to restore and improve the flood storage capacity of existing floodplains and to increase the overall area for retention of floodwaters in Pittsfield.

Flood Hazard Regulations

In order for property owners to be eligible for federal flood insurance though the NFIP, municipalities must adopt and enforce a floodplain management ordinance, often called "flood hazard bylaws," "flood hazard area regulations," or "flood hazard overlay districts" in Vermont.

The Town of Pittsfield currently has Flood Hazard Area Regulations that were adopted by the Select Board in February 2014. The existing bylaws place limitations on floodplain development within the Special Flood Hazard Areas with an outright prohibition on new principal residential structures and new net fill. Further, the bylaw has limitations on development that may occur within the River Corridor Protection Area. Lax enforcement of these laws can place lives at risk of injury or death, place infrastructure and property at risk of damage or destruction, and can create undue risk and liability on the part of the community.

While Pittsfield is responsible for administering its flood hazard regulations, one of the ultimate goals for the NFIP is to reduce flood damage and make communities safer along the length of a body of water. Therefore, it is important for Pittsfield and surrounding towns to properly administer and enforce their flood hazard regulations to not only protect their own community, but to help prevent damage to downstream communities.

Home/Property Buyouts

Following the flood damage caused by the 2011 spring flooding and Tropical Storm Irene, a number of property owners in Vermont applied for property buyouts, which were funded by FEMA's Hazard Mitigation Grant Program (HMGP) and HUD's Community Development Block Grants for Disaster Recovery (CDBG-DR). Over the course of this process, over 130 damaged or destroyed residential properties in the state of Vermont were bought out with this grant funding. As a stipulation of the HMGP funding, FEMA requires that the structure(s) on each buyout property be demolished, and ownership of the empty parcel of land then be transferred to the town/municipality. Future development on these sites will be restricted.

The home/property buyout process has both positive and negative impacts on a town and the community at large. The TRORC region was particularly hard hit by the flooding caused by Tropical Storm Irene, and had the greatest number of property buyout applicants in Vermont. Pittsfield has done 8 buyouts since Irene. Because the properties eligible for a buyout were heavily damaged by flooding, the buyout process is an effective way to reduce a community's vulnerability to flooding and therefore improve the community's overall resilience to flooding. As a result, a number of communities in the region have been made safer.

While the buyout process of an at-risk home makes a community less vulnerable to flooding, there is an inherent conflict between home buyouts and the tax and housing base of a town. For many towns in the region, a fiscal issue may arise with the loss of a few homes or properties from their tax base. As a result, some towns may need to raise taxes for the remaining landowners in order to maintain the town's level of service provided to the community. Higher taxes may make a specific town less attractive to some potential home buyers.

Another consequence of home buyouts is the loss of a town's housing base. Many towns in Vermont and in the region are located in valleys surrounded by steep slopes. Some homes are built on the hillsides, but due to topographic constraints, many homes are built in the valleys, near rivers and streams. This location places the structure and inhabitants at risk of flooding damage or injury caused by either inundation flooding or by fluvial erosion. Often times, affordable or low-income housing is located in these higher risk areas. During a major flooding event, these homes have a higher probability of being damaged or destroyed; therefore, they may be good candidates for a home buyout. However, when the structure is razed as part of the buyout process, it is removed from a town's housing base, and, in addition, may be removed from a town's affordable housing base. This situation may present challenges to the town in the future.

The buyout of homes at high-risk of flood damage is an important step in improving the resilience of a town and community to flood damage. If a town's home buyouts have significantly impacted the housing base, it is important that the town have a thoughtful and creative approach to rebuilding its housing base in a safe location that will maintain its improved flood resilience and conform to the town's future land use visions or settlement patterns.

Lands That Help to Prevent Flooding

Wetlands

Wetlands are a vital component for maintaining the ecological integrity of land and water. In addition, they provide an array of functions including flood and storm water control.

In Pittsfield, only 1.2% percent of the land area (160 acres) has been identified by the State of Vermont as "significant" wetlands, eligible for state protection under the Vermont Wetlands Rules. The largest tract of wetlands in the Town is actually contained within the GMNF, and smaller areas dot the Town's landscape along the Tweed River and its branches. The Planning Commission recognizes the critical value of wetlands in flood prevention, health of water, wildlife and plant resources in Pittsfield, the wider region, and to the ecosystem as a whole.

Riparian Buffers and Lands Adjacent to Streams

Naturally vegetated riparian zones (vegetated buffer strips next to surface waters) are essential for healthy and resilient river corridors. Vegetated riparian buffers provide a number of "ecosystem services" including: floodwater attenuation; providing habitat for aquatic and terrestrial organisms; providing river bank support and stabilization; helping prevent bank undercutting and bank collapse; reducing flood and ice damage to stream channel, and adjacent lands and structures; shading the river channel; intercepting, absorbing, and filtering out pollutants; and slowing surface water runoff. The maintenance and enhancement of streamside and lakeside vegetation is the easiest and most effective means of protecting the many benefits and values associated with surface waters.

Moving outside of the riparian buffer, lands adjacent to streams also provide benefits, especially during flooding events. Once water crests the river or stream channel, these areas help to dissipate flood water. This slows the velocity of the floods by allowing the water to expand laterally over the land area, instead of moving down the river or stream channel. They also collect ice or debris during floods, helping river or stream channels to stay clear. Of course, much of Pittsfield is steep and mountainous and, therefore, does not have an abundance of flat lands surrounding rivers and streams. Nevertheless, the riparian areas and lands adjacent to streams and rivers in Pittsfield should be preserved and protected.

Upland Forests

Healthy and well-managed upland forests reduce flooding by intercepting rainfall, absorbing water in rich soils, taking water up into trees, and infiltrating rainwater, thereby reducing and slowing the flow of rainwater into small, headwater streams. These streams are notoriously "flashy" and are often responsible for fluvial erosion, particularly within mountainous areas. The Vermont Department of Forests, Parks and Recreation's Forest Watershed Program emphasizes the importance of healthy forests and sustainable forestry practices as a way to improve or maintain water quality.

Stormwater and Impervious Surfaces

Impervious surfaces are areas that prevent the infiltration of water into the soil. Man-made impervious surfaces include parking lots, rooftops, roads and severely compacted soils. Man-made impervious surfaces exacerbate flooding events by increasing the amount and velocity of stormwater runoff.

Managing stormwater runoff the way a healthy and intact environment would— by slowing it, spreading it, and/or sinking the runoff into the ground significantly reduce peak flood flows.

While widespread impervious surfaces are detrimental to water quality, impervious surfaces in some areas critical in order to maintain the dense development of our village centers. However,

it is also important to understand the stormwater runoff issues that exist and understand the ways to mitigate their effects through various approaches.

D. Goals, Policies and Recommendations

Goals

1. Apply sound planning practices to address flood risks and protect citizens, property, the Pittsfield economy, and the quality of the Town's rivers as natural and recreational resources.
2. Pittsfield is able to recover from flooding quickly and in a manner that improves flood resilience.
3. The creation of impervious surfaces and development in wetlands or upland forests in Pittsfield is lessened, and, where it does occur, is done in a manner that does not worsen flooding.

Policies

**Mapped areas, unless corrected by FEMA.*

1. All new fill and construction of buildings in Pittsfield's mapped flood zones* outside of river corridors increases flood risk and is discouraged, and, at a minimum, must comply with the Association of State Floodplain Manager's No Adverse Impact policy.
2. All new buildings, other than accessory structures, in mapped flood areas* must have the lowest floor at least one foot above base flood elevation.
3. Natural areas, non-structural outdoor recreational and agricultural uses are the preferred land uses within Pittsfield's River corridor areas due to the dangerous erosive nature of these areas. Commercial, industrial, and residential uses within river corridors are strongly discouraged outside of Pittsfield's village center.
4. New buildings within Pittsfield's mapped floodways* shall be prohibited.
5. In order to lessen the conflict between roads and streams, Pittsfield should consider moving or abandoning at-risk roads when there are more cost-effective solutions or other routes available.
6. Pittsfield should only rebuild/install culverts and bridges that are designed at least to VTrans Hydraulics Manual and ANR Stream Alteration Standards.
7. Pittsfield's emergency services and municipal buildings shall not be built in the Special Flood Hazard Areas unless flood-proofed or elevated to at least 2 feet above the base flood elevation and designed to withstand erosion risk.
8. Vegetated buffer strips should be maintained in riparian zones surrounding streams and rivers. Rock riprap and retaining walls should only be used to the extent necessary and when bioengineering techniques may not be adequate to prevent significant loss of land or property.

9. Pittsfield's upland forests and watersheds should be maintained predominately in forest use to ensure high quality valley streams and to ensure that flood flows are absorbed.
10. Outside areas of existing compact development, new development must preserve vegetated riparian buffer zones that are consistent with State riparian buffer guidelines.
11. All wetlands which provide flood storage functions shall remain undeveloped or have compensatory storage constructed so as to achieve no net loss of such wetland function. In the long term, restoration and enhancement of additional wetlands should be pursued in order to improve Pittsfield's flood resilience.
12. Structural development or intensive land uses shall not occur in Class I and Class II wetlands unless there is an overriding public interest.
13. Pittsfield should adopt road and bridge standards to the 50- or 100-year storm level for identified critical transportation routes.
14. Emergency planning for flood response and recovery is encouraged.

Recommendations

1. Pittsfield should work with the Regional Planning Commission when new maps are produced to strengthen our Flood Hazard Regulation Bylaws in order to mitigate risks to public safety, critical infrastructure, historic structures, and municipal investments from inundation and erosion. (PC, RPC)
2. Pittsfield should work with VTrans and the Regional Planning Commission on advocating for and improving the flood capabilities of State or Town-owned transportation infrastructure. (SB, RPC, VTrans, Road Commissioner)
3. Pittsfield should continue working to develop mitigation plans, and emergency preparedness and recovery procedures from flooding. (SB, Emergency Manager)
4. Existing homes and businesses at serious risk of flood damage in Pittsfield should be identified and prioritized in concert with the ANR River Management Section and the Regional Planning Commission for mitigation actions such as elevation/relocation or purchase and demolition. (ANR, RPC)
5. Areas not designated in either FEMA's maps or in VT ANR's maps, but which are flooded during a weather event, should be recorded by the Pittsfield Planning Commission and may be added to local flood regulations. (PC)
6. Watershed-level planning should be performed by the Town with assistance from the Regional Commission to evaluate natural and constructed flood storage options upstream of existing areas of concentrated development that are at risk of flooding. (PC, SB, RPC)
7. Pittsfield shall work with ANR, the Regional Planning Commission, and landowners to lessen flood risk by restoring natural channel functions through berm or dam removal or intentional lowering of streambanks. (SB, RPC, ANR)
8. Pittsfield shall work with the Regional Planning Commission to understand the impact stormwater runoff has on the Town, and then work to address impacts from impervious surfaces through increased retention and infiltration. (SB, RPC)

VIII. Transportation

A. Introduction

The Vermont Agency of Transportation and the Pittsfield Select Board jointly determine road classification. There are four road classifications used by the State of Vermont. The classification determines the rate of State financial aid in the repair and maintenance of Town roads (there is no State aid for Class Four roads). The classes are:

- Class 1: town highways that form the extension of a state highway route and that carry a state highway route number.
- Class 2: important town highways, often paved, with the primary purpose of linking towns and high traffic areas such as village settlements and state highways.
- Class 3: all traveled town highways other than Class 1 or Class 2 highways that are negotiable under normal conditions, all seasons of the year by a standard manufactured pleasure car.
- Class 4: all other town highways on which public use is limited.

B. Town Roads and Road Maintenance

Pittsfield has a total of 14.72 miles of Class 3 highways. This does not include the 4.87 miles of Vermont Route 100 that runs through Pittsfield and is maintained by the State, nor does it include Class 4 roads and legal trails, or those roads deemed as "not up to standard" (the Town's Class 3 roadways that are considered to be functionally equivalent to Class 4 town highways).[12]

Table 7: Pittsfield Roadway Level Mileage, 2018

Roadway Classification Level	Mileage of Roadway Level
1	0
2	0
3	14.72
4	5.82
Not up to Standard*	4.43

**The sections of the town highways listed as "not up to standard" are legally Class 3 roads, but have been deemed functionally Class 4 Town Highways, including town highway numbers: 2 (1.66 miles), 3 (1.81 miles), 6 (0.4 miles), and 13 (0.56 miles).*

Source: VT Dept. of Transportation, 2018 General Highway Map

Most of Pittsfield's residential properties are located on Class 3 roads. There are about 20 residential properties on Class 4 roads in Pittsfield, half of which are either full-time residences or second homes. In general, it is the policy of the Town to limit the amount of maintenance that occurs on Class 4 roads. For example, the Town is not responsible for plowing Class 4 roads. Class 4 roads often play an important role in recreational activities, such as

snowmobiling, hiking, cross-country skiing, riding, and other legal outdoor activities. As such, they are a valuable asset to the community.

The quality of Town roads and their level of maintenance affect not only the Town tax rate, but also the type and rate of Town development. Funding sources come from local tax procurement, state and federal gas tax receipts, and other state and federal allocations. The bulk of funding comes from federal sources, and is applicable for Classes 1-3, owing to Class 4 roadway maintenance not being required.

Overall, the condition of the roads in Pittsfield is good. In 2015, the Town of Pittsfield worked with staff of the Two Rivers-Ottauquechee Regional Commission to complete an inventory of culverts. The town's culvert inventory will be continually updated, and it allows the road crew to track the condition and changes to any culverts. In an independent evaluation of the Town's culvert and drainage system in 2008, it was acknowledged that "Pittsfield has one of the best systems of Town culverts and drainage facilities in the region." Of the 233 culverts in Pittsfield, only 6 were classed as being in "poor" or "critical" condition and, therefore, in need of repair.

C. Ancient Roads

The legal status of so-called "ancient roads" has become increasingly contentious in many Vermont towns. Points of view diverge sharply on the access rights to these hard-to-locate roads. To some, these roads should remain a public asset even though they have not been maintained or used as roads over many decades, even centuries. To others, the town should no longer retain public rights to lands that are not in active use and have been presumed by landowners to be privately held. Additional information can be found in the Orange Book.

D. Public Transportation

Pittsfield, like most Vermont Towns, has limited public transportation opportunities. Tri-Valley Transit offers regular bus service in Addison, Orange, and Northern Windsor Counties. Tri-Valley Transit also offers a Dial-A-Ride service, public transportation in the form of special requests for individuals who need transportation for medical reasons, etc. This program focuses on elderly, persons with disabilities, and low-income families and individuals. Depending on eligibility, Dial-A-Ride may be free or subsidized. This program affords the elderly and residents with disabilities opportunities to socialize and take care of routine shopping, errands, and medical appointments.

Given that much of Vermont is aging, the need for an affordable source of public transportation that can bring the elderly to major medical facilities like Rutland Regional Medical Center, Dartmouth Hitchcock and larger commercial centers for day-to-day shopping needs is important.

E. Pedestrian and Bicycle Transportation

Pittsfield is a hiker, snowmobiler, stroller, and biker paradise, owing to close proximity to parkland and trails (such as the Vermont Association of Snow Travelers [VAST] trails and the Green Mountain National Forest). However, in Town, it is often difficult for residents to safely access shops and amenities, owing in part to a lack of a walkable village center and high traffic volumes along Route 100. During previously held public forums, residents have indicated that they would like to see the village be more walkable for improved access as well as for overall health and well-being. This would require the addition of sidewalks, which would most likely be difficult for the Town to fund out of their own budget. However, the State of Vermont's Transportation Enhancement Program, when active, may offer a percentage of the funding to build sidewalks.

F. Rail and Air Travel

Pittsfield is a short drive to a passenger rail station or an airport. The nearest Amtrak passenger railway stations are located in the towns of Randolph and Rutland, with service to cities throughout the Northeast and, in due course, possible linkages to Montreal. The nearest airport, meanwhile, is the Rutland-Southern Vermont Regional Airport. Additional airports exist throughout the region that many utilize, including Lebanon Municipal Airport (New Hampshire), Burlington International Airport, Manchester-Boston Regional Airport (in New Hampshire), and Boston Logan International Airport (in Massachusetts). Boston Logan is the largest regional airport hub, and can be reached by car, train, or coach bus service (the Dartmouth Coach).

G. Access Management

According to the VTrans definition, access management is a process that provides or manages access to land development while simultaneously preserving the flow of traffic on the surrounding road system in terms of safety, capacity needs, and speed. Access management is an important process to provide reasonable accessibility to adjacent land uses while maintaining a safe and efficient flow of traffic. Transportation professionals have established that a single, well-designed access to a public highway presents few concerns for the traveling public. However, if access has been poorly designed and/or its frequency increases, the road's health declines proportionally. The result is increased traffic congestion, crash rates, and road maintenance obligations to handle surface water that is improperly channeled to the road surface or shoulders. Ironically, these factors eventually compromise access to all land uses along the affected roadway. In many instances, towns are forced into costly highway expansion projects.

Developers must get a permit from the Town to create new access Town roads, but there are no formal criteria for design. The Town recognizes the value of access management and can implement access management strategies through its planning and public works related ordinances and policies. The following are some of these strategies for all public and private

transportation and development projects impacting local and state public roads as well as private roads:

- Utilize State of Vermont design standards for all temporary and permanent access, to include emphasis on drainage, sight distance, and access for emergency services;
- Encourage use of shared driveways and/or permitting access that may result in a future shared driveway;
- Require the review of access for existing development whenever a change of use or other application process is brought before the Town;
- Encourage commercial properties to use existing development nodes in order to preserve or create road segments with few accesses;
- When practical, approve subdivisions with private and public road designs that allow shared access with other adjacent subdivisions and/or have the private rights-of-way reserved so an access may be built to connect to existing and future development;
- Encourage permanent landscaping and roadside enhancements to visually define access points and contribute to the roadway's aesthetic character;
- Use sight-distance standards based on the actual travel speeds and not the posted speed limits. If no such data exists or is not current, then the Town will work with the Regional Planning Commission to obtain the appropriate data.

H. Vermont Scenic Byway

Route 100 through the Town of Pittsfield has been included in the Scenic Route 100 Byway that runs the length of Route 100 as well as a portion of 100A in Vermont. The Vermont Scenic Byway designation program provides travelers with historic, cultural, scenic, and recreational information and waypoint centers in the towns and villages that dot the Byway route. The Scenic Route 100 Byway is a joint effort of town representatives from Pittsfield, Killington, Bridgewater, Plymouth, Ludlow and Andover. It also includes Okemo Valley Chamber of Commerce, Office of Killington Economic Development and Tourism, local businesses, and the Southern Windsor County and Two Rivers-Ottauquechee Regional Planning Commissions. The Scenic Route 100 Byway was designated as Vermont's 8th Scenic Byway in April 2011 and was expanded in the spring of 2013 to include a more extensive range of Route 100 communities. The byway now runs from Granville south to the Massachusetts border, and incorporates 20 towns along Route 100.

The Scenic Route 100 Byway has a Corridor Management Plan which outlines the management goals for economic development, transportation, natural and scenic land use, and historical areas. All towns have approved these Corridor Management Plans that aim to enhance village areas, and promote tourism and economic development while also preserving the rural character found along the Byway.

I. Parking

There are municipal lots in close proximity to the Town Office, and an officially designated Town park-and-ride. The park-and-ride is located off of Route 100 on the Village Green. It is paved, well-lit, accommodates up to 18 vehicles, and has handicapped-accessible parking available. Additional parking in front of local store fronts and the town's gas station do provide some on-site parking for patrons, but these lots are often full to overflowing. Managing these sites to ease congestion is a priority for aesthetic, safety and functional purposes.

J. Goals, Policies and Recommendations

Goals

1. Maintain a transportation system that is safe, energy efficient, meets the needs of residents, and complements the other goals and policies of this Plan.
2. Future development must not unnecessarily or unreasonably impact public investment in Town and regional transportation systems or facilities (including highways, bikeways, trails, and rail) or adversely impact public safety.
3. Support local, regional and statewide efforts to provide public and private transportation systems that are cost-effective and meet the needs of all population segments, integrating the needs of all modes of travel (auto, pedestrian, bicycle, and mass transit).
4. Encourage carpooling and creative alternatives for sharing transportation resources to minimize transportation energy consumption.
5. Provide pedestrians with safe areas to travel within the Village of Pittsfield.
6. Provide regular maintenance and upgrades to road equipment and facilities, provided that the costs do not put an undue burden on the people of Pittsfield.
7. Recognize the importance of balancing the need to have safe roadways with the desire to maintain appropriate widths and the health of existing vegetation in its role as a structural component of the roads.

Policies

1. Prior to a final decision to proceed with a major capital transportation project, policy makers should first analyze the project against reasonable alternatives and include public input. In examining the alternatives, investigation should focus on the environmental, public safety, energy, social and investment costs and the extent to which such costs meet the goals and policies of this Plan.
2. Any new access, new construction, change of use, and any development of a land parcel that would impact Pittsfield's road system shall be reviewed by the Town. Where such development requires improvements to Town highways, such costs shall be borne by the developer, in consultation with the Select Board, and the Select Board shall have sole power to change the classification of the road.
3. Minimize curb cuts to insure the proper function and performance of a Town highway.

4. It is the policy of the Town that the design of access roads and related facilities provide for proper alignment of new or relocated driveways along Town roadways.
5. Any new residential or commercial development or changes of existing use must provide adequate off-road parking.
6. The Town shall seek public input in any decision to substantially change the maintenance level or surface treatment of any town road.
7. The Town, as written in V.S.A. Title 19 Section 310, does not maintain Class 4 Highways, excepting bridges and culverts. The policy of the Select Board is that, before the Town would consider adopting a new road or upgrading an existing highway, the abutting property owners shall be responsible for the cost of improving and/or building the road to Town specifications. Final decision regarding the nature of the improvement rests with the Select Board, with input from the Road Commissioner.
8. Given the interest in and benefits from biking, hiking, snowmobiling, cross-country skiing, and other outdoor recreational activities, the Town should, as an alternative to complete discontinuance of a highway, give full consideration to preserving Class 4 roads for recreational use by downgrading their status to a legal trail and thus retain the public's interest in them.
9. An integral scenic element of the rural countryside is the network of backroads that comprise the Town's highway system. These byways are both visually and economically important to the Town. If improvements are needed to accommodate increased traffic, the Town shall consider the relationship of the road to the surrounding features of the landscape.
10. Strip development is a prohibited land use pattern. Such development occurs in a linear path along a right-of-way which restricts visual and physical access to interior lands.
11. The health of trees along Town roads shall be periodically reviewed. Trees that are unhealthy or otherwise pose a substantial risk to travelers shall be removed.

Recommendations

1. Cooperate with other communities in the region through TRORC and its Transportation Advisory Committee to ensure that the region's transportation system is developed in a well-coordinated manner that recognizes and balances the needs and desires of each community. (SB, Road Commissioner, RPC)
2. Continue to routinely update inventories to roads, bridges, and culverts to ensure appropriate safety and usability of all roadways and supporting infrastructure, along with short- and long-range planning for necessary replacements and enhancements. (Road Commissioner)
3. Encourage participation in the Regional Transportation Advisory Commission as well as the TRORC Road Foreman's meeting program. (Road Commissioner)

IX. Energy

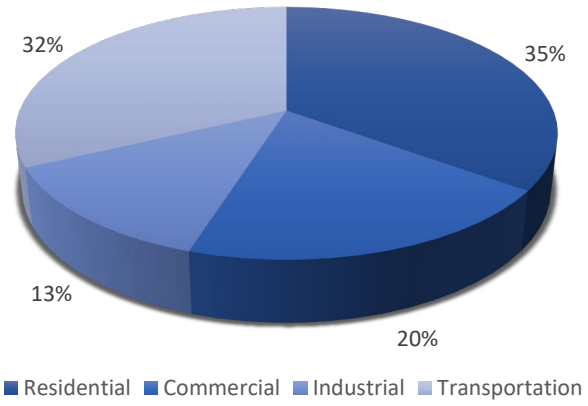
A. Background

As energy prices continue to rise, everyday activities such as home heating and travel by car become increasingly burdensome for the average Pittsfield resident.

While the Planning Commission recognizes that energy supply and demand are directed largely by economic forces at the state, federal, and international levels, the manner in which Pittsfield plans for future growth can have an impact on how much energy is needed and used in this community. For example, a highly dispersed and unplanned pattern of land use can waste both land and energy resources. By planning the location of jobs, public services, and housing in close proximity to growth centers, the consumption of fuel and the need for additional roads can be reduced. The siting and design of buildings and the selection of energy systems can influence efficient use and conservation of energy.

Although new technologies may enable energy providers to extract oil from locations that were previously impossible to reach, there is most likely a finite amount of oil, which means that Pittsfield should prepare for a much less oil-dependent future.

Figure 8: Vermont Energy Consumption by End-Use Sector, 2018



Source: Energy Information Administration, State Energy Data System

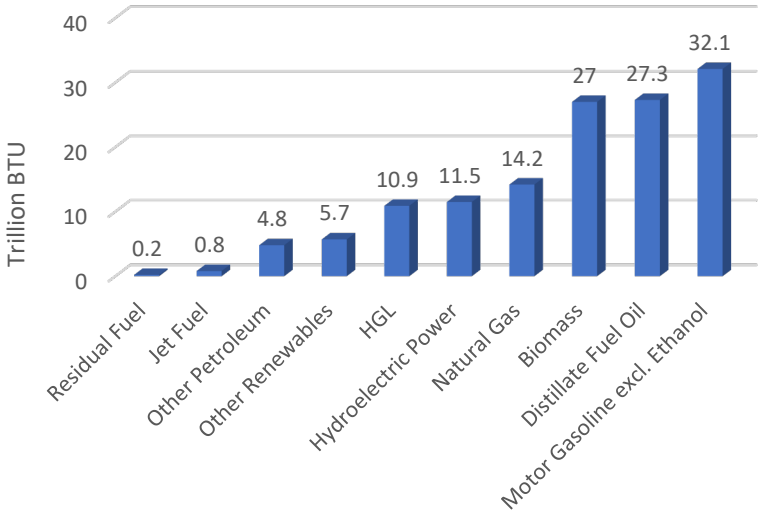
Pittsfield, like the rest of the world, should prepare for a very different future. Principles of energy, energy conservation, stewardship, and energy independence, as well as global climate change, underscore the need for good planning and active discussion about energy alternatives.

B. Energy Demands

As reported in November of 2020, 54% of the State's net electricity generation came from hydroelectric power, while the remaining 46% was produced by other renewable energy

generators. Much of the hydropower used in Vermont comes from Hydro-Quebec, a large-scale hydro-power facility in Canada.

Figure 9: Vermont Energy Consumption Estimates, 2018



Source: Energy Information Administration, State Energy Data System

Energy demand in Vermont grew at 1.8% from 1990 to 1999. According to the 2016 Vermont Comprehensive Energy Plan (CEP), energy use had decreased by 5% since 2000. The combination of State energy efficiency programs and the 2007–2009 recession probably helped to reduce energy demand across most end-use sectors in Vermont.

C. Current Energy Use

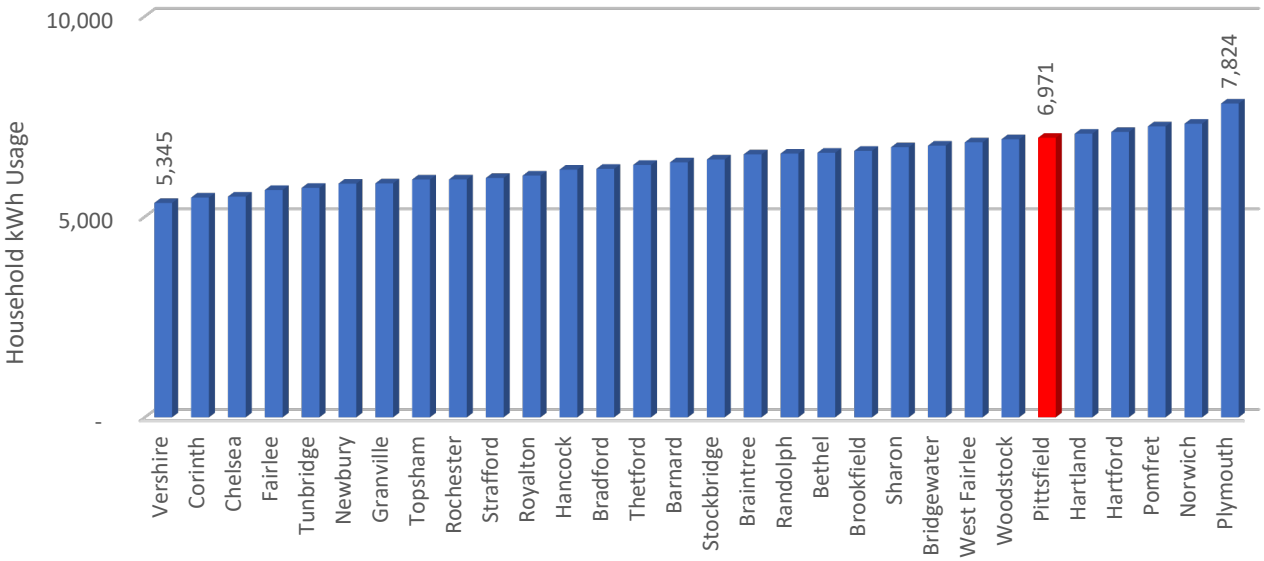
Transportation and thermal energy (heating and cooling) are the largest contributors (approx. 70%) to the State's greenhouse gas emissions. This plan assumes that this state-level analysis applies to Pittsfield as well. According to the 2019 Progress Report by the Energy Action Network, Vermont greenhouse gas emissions had not started to decline until 2016. Addressing transportation and thermal energy are critical to achieving the goals for the reduction of GHG emissions and of energy consumption.

Electrical

In 2019, the town of Pittsfield ranked 25th out of 30 towns and villages in the Two Rivers-Ottauquechee Region in terms of average annual energy use levels. This data (limited only to residential energy use) determined that Pittsfield households averaged 6,971 kWh of energy used, which was 602 kWh more than the average usage of all the towns in the TRORC region.

Pittsfield's energy use was especially high when compared to other nearby White River watershed communities along Route 100, such as Hancock and Granville.

Figure 10: Average Residential kWh Usage per Household, 2019



Source: Renewable Energy Atlas of Vermont, Efficiency Vermont

Table 8: Current Electricity Use (KWH) for MWH divide by 1,000			
Sector	**2017**	**2018**	**2019**
Commercial & Industrial	828,845	866,511	819,194
Residential	2,766,290	2,802,501	2,809,486
Total	3,595,135	3,669,012	3,628,680

Source: Efficiency Vermont

The following Electricity Efficiency Targets were calculated using data from the regional Long-range Energy Alternative Planning (LEAP) Analysis. Note the decrease in the first target year. This plan encourages residents to conserve energy and switch to more efficient systems. This is due to LEAP modeling showing that efficiency trends are outpacing the electrification trends. In spite of this, the average residential electricity usage for Pittsfield in 2017 was 6,797 kWh, which was lower than the 2019 average residential usage. Using the 2017 average as the baseline, the goal for 2035 is to reduce the average residential electricity usage down to 6,410 kWs.

Table 9: Electricity Efficiency Targets			
	2025	**2035**	**2050**
Increase in Energy Conservation	-0.6%	5.7%	9.9%

Thermal

According to the U.S. Census, 2015 American Community Survey 5-Year Estimates, the major heating fuels consumed in Pittsfield are oil (42.3%), propane (31.4%), and wood (21.4%). Per capita energy consumption for residential heating and transportation purposes is about the same as in the Northeast. About 76% of all energy used is for these purposes. Almost 80% of residential energy is dedicated to space heating and domestic hot water. State energy officials estimate that simple conservation measures incorporated in new housing could result in a 20% to 30% reduction of energy usage statewide.

Table 10: Residential Heating Use

Fuel Source	Pittsfield Households (ACS 2011-2015)	Pittsfield % of Households	Pittsfield Square Footage Heated	Pittsfield BTU (in Billions)
Natural Gas	2	0.9%	246,720,000	0
Propane	69	31.4%	8,184,240,000	8
Electricity	0	0.0%	0	0
Fuel Oil	93	42.3%	10,587,960,000	11
Coal	0	0.0%	0	0
Wood	47	21.4%	5,503,080,000	6
Solar	0	0.0	0	0
Other	9	4.1%	880,920,000	1
No Fuel	0	0.0%	0	0
Total	**220**	**100%**	**25,402,920,000**	**25**

Source: American Community Survey

Table 11: 2017 Estimated Commercial Heating Use

	Commercial Establishments in Pittsfield (VT DOL)	Estimated Thermal Energy BTUs per Commercial Establishment (in Billions) (VDPS)	Estimated Thermal Energy BTUs by Commercial Establishments in Pittsfield (in Billions)
Municipal Commercial Energy Use	21	.725	15

Source: Vermont Department of Labor (VT DOL) and the Vermont Department of Public Service (DPS)

Table 12: Heating Efficiency Targets			
	2025	2035	2025
Residential - Increased Efficiency and Conservation (% of Pittsfield households to be weatherized)	33%	67%	100%
Commercial - Increased Efficiency and Conservation (% of commercial establishments to be weatherized)	6%	9%	18%
Renewable Energy Use - Heating	51.7%	63.7%	92.1%
New Heat Pumps (in units)	22	59	124

Targets were calculated using data from the LEAP analysis and ACS. Target for new efficient wood heat systems was calculated at negative values due to a forecasted decrease in wood use, thus are omitted from the table.

Transportation

Although public transportation in Pittsfield is very minimal, consideration of alternative methods such as park & rides, car-share services, carpools and bicycling to get to and from your destination is essential.

Recognition by Pittsfield of the clear connection between land use patterns, transportation and energy use is essential. The traditional Vermont landscape is defined by densely populated villages and downtowns, surrounded by open countryside. Concentrated development patterns that utilize public transit services such as bike lanes, sidewalks, and walking paths can lower energy need and make it easier to meet energy reduction targets. Embracing smart growth that directs development into existing centers reduces energy use and provides cost savings while creating vibrant communities and preserving natural resources.

Because transportation is such a substantial portion of local energy use, it is in the interest of the community to encourage any new development adjacent to existing roads and infrastructure. Bicycles are used both for transportation and recreation and need to be considered as a component of reducing energy consumption and GHG emissions in the Transportation area of this plan. Throughout Pittsfield and the Upper Valley region, many bicyclists can be seen riding. Bicycle transportation is used for work, school, or conducting errands. Recreational users include residents who see the health benefits of the sport and visitors who come to Vermont to experience the outstanding scenery.

Pittsfield benefits by promoting bicycle use, ranging from tourism opportunities to mitigating vehicle congestion. Bicycles do not create air pollution, produce little noise, add diversity to an automobile-dominated road system, and rarely cause traffic congestion. Bicycle use contributes to a better-functioning transportation system and renders a community more attractive to all residential and commercial uses.

Bicycle facilities fall under three general categories: road improvements, such as the addition of bicycle shoulders, bicycle path networks, and designated bike lanes; transportation service improvements, such as bus bike racks; and land use development accommodations, such as

commercial-center bike-storage facilities. All these improvements encourage more citizens to bicycle.

The priority is accommodating bicyclists along the existing roadway network, rather than providing separate facilities that are more costly. The State also stresses accommodation of bicyclists with on-street or off-street facilities, connecting bicycle paths to adjacent developments, and providing areas for bicycle parking and/or storage.

Table 13: Current Transportation Energy Use

Transportation Data	Pittsfield Data
Total # of Vehicles (ACS 2011-2015)	408
Average Miles per Vehicle (Vtrans)	11,356
Total Miles Traveled	4,633,248
Realized MPG (2013 - VTrans 2015 Energy Profile)	18.6
Total Gallons Use per Year	249,099
Transportation BTUs (Billion)	30
Average Cost per Gallon of Gasoline (RPC)	$2
Gasoline Cost per Year	$575,420

Source: ACS and VTrans

The rural nature of our region leads to long commutes for work, shopping and services. Long commutes impact the number of vehicle miles traveled (VMT) and corresponds to the amount of gasoline and diesel fuels consumed. The transportation sector is responsible for 37% of the total energy consumed in Vermont, comprised mostly from gasoline (76%) and diesel (20%). To reach local, regional and statewide renewable energy goals, residents will need to shift away from petroleum-powered vehicles to electricity and biofuels.

The following table identifies the number of electric and biodiesel vehicles that are needed in town to meet the overall renewable energy goals:

Table 14: Transportation Fuel Switching Target

	2025	2035	2025
Electric Vehicles	38	268	557
Biodiesel Vehicles	66	125	211
Transportation Renewables	9.6%	23.1%	90.3%

Targets were calculated using data from the regional Long-range Energy Alternative Planning (LEAP analysis and ACS

D. Non-Renewable Energy Sources

Fossil Fuels

Pittsfield, like most other towns in Vermont, depends primarily on fossil fuels for heating and transportation. Fossil fuels account for more than half of all energy consumed in Vermont, much of which is used in transportation, but a substantial portion of non-transportation related fossil fuel use is used in heating.

Of greater concern is Vermont's high usage of oil as a fuel for heating. Nearly three-fifths of all Vermont households (154,026 of Vermont's 256,711 total households) use fuel oil, which means a substantial portion of Vermonters are subject to the price and availability instabilities of a reliance on oil. Of the total $885 million spent on residential energy in the State of Vermont, just over 50% ($445.8 million) was spent on fuel oil, kerosene, or light propane gas. Vermont's economic system is so closely tied to the availability of fossil fuels that even modest price increases can lead to inflation, a slowdown in economic growth, and monetary instability. This can have unanticipated adverse impacts at the municipal and residential level in all communities, including Pittsfield. For example, increasing fuel prices make it more expensive for a town government to provide traditional public services and maintain existing facilities. Additionally, rising prices can also make it difficult for residents to heat their homes, commute, and put food on the table (the price and availability of food is usually influenced by fuel prices).

Nuclear Energy

A properly maintained nuclear power facility can, to some extent, represent a cleaner form of energy production than fossil fuels. However, the mining, processing and disposal of nuclear materials continues to raise questions regarding the viability of nuclear energy; nuclear generated electricity produces various long-lived radioactive wastes that are highly toxic and require extraordinary precautions for safe storage. Existing technology does not assure safe disposal. The industry has not completely resolved economic and safety issues regarding the decommissioning of nuclear power plants.

E. Renewable Energy Sources

The 2016 Vermont Comprehensive Energy Plan has set the goal for Vermont to utilize 90% renewables by 2050. This is a lofty goal, but one that will benefit all Vermonters if achieved. For the municipality, individual, or small group of homeowners, the key to sustainable energy production will be renewable sources of energy. The term "renewable energy" refers to the production of electricity and fuels from energy sources that are naturally and continually replenished, such as wind, solar power, geothermal (using the earth's heat to create power), hydropower, and various forms of biomass (trees, crops, manure, etc.).

Vermont can successfully claim that a substantial amount of the power used statewide comes

from renewable sources when compared to other states. Although the majority of Vermont's renewable energy is generated through Hydro-Quebec, some hydroelectric power is generated in Vermont. Additional sources of renewable energy include several utility-owned commercial-scale wind, solar farms, landfill and on-farm methane projects.

Although initial set-up costs for renewable energy generation systems can be high, these systems can save users money over the long term, and they reduce the consumption of carbon-based fuels, which helps to protect our environment and reduce our reliance on centralized energy. In Vermont, some of these energy sources are more readily available than others, and some are more cost-effective for the individual energy producer.

Table 15: Pittsfield Renewable Energy Generation

Source	Number of Sites	Total Generation (MWh/year)
Solar	12	10.31
Wind	0	0
Hydro	0	0
Biomass and Methane	0	0
Other	0	0
Total	**12**	**10.31**

Source: Renewable Energy Atlas of Vermont, 2019

Solar Energy

According to 2019 data in the table above, renewable energy generated in Pittsfield was strictly limited to solar energy installations. The majority of solar energy was produced through roof-mounted photovoltaic panels installed at residences.

Solar energy has the potential to provide clean, reliable, and safe energy, even in Vermont's climate. Most areas in Vermont have the potential for some solar energy production, at least at the residential scale. According to the Vermont Energy Atlas, in Pittsfield, if all potential opportunities to develop roof top solar energy production were taken advantage of, the Town would have the potential to generate roughly 567,134 kWh of power spread over a total of 404 residential, commercial, industrial, and public sites. There are a number of solar systems to choose from, including: passive heating and lighting, water heating, and electricity generation.

There are no large-scale solar electricity generation facilities in Pittsfield. Because of the nature of solar arrays, they are in some ways more desirable than wind towers. This is primarily due to the fact that they do not need to be located on high ground and are therefore less visually prominent. In addition, these facilities can be located in areas that are less rural in nature, requiring fewer access roads and reducing adverse impacts on wild lands.

If not properly sited, large solar facilities can impact soil and water resources, as well as wildlife habitat and corridors. Considerations must also be given to public safety. Because photovoltaic collectors are reflective, they have the potential to create harsh and blinding lights that could be a hazard to nearby buildings or road traffic. Commercial solar facilities should be developed so as to avoid negative impacts on the rural character of the area in which they are proposed to be located. Developers should make all possible efforts to minimize damage to important natural areas as identified in the Natural Resources section of this Plan. Additionally, such facilities should be located as close to existing roads as possible to avoid creating an increased need for town services, such as road maintenance.

Wind Energy

Power generated from wind is done through a wind turbine, which is installed on top of a tall tower, where it collects and converts wind into electricity. Towers for home use are generally 80-100 feet in height and are far less obtrusive than larger, commercial "wind farms" that have become a subject of great debate throughout Vermont.

Table 16: Potential Wind Development Areas (Acres) in Pittsfield

	Class 1 (10-11 mph)	Class 2 (12-13 mph)	Class 3 (13-14 mph)	Class 4 (15-16 mph)	Class 5 (16-17 mph)	Class 6 (17-18 mph)	Class 7 (19-25 mph)
Residential (30-meter)	2736	1280	434	266	88	207	69
Small Commercial (50-meter)	0	88	86	26	0	0	0
Large Commercial (70-meter)	0	0	7	56	9	0	0

Source: Renewable Energy Atlas of Vermont

Similar to solar, wind energy is an intermittent resource and its generation fluctuates in response to environmental conditions. The amount of energy produced by a specific wind tower can depend greatly on location, height of the tower, and proximity to other obstructions. Nevertheless, most modern wind turbines (when properly sited) are able to generate electricity 95% of the time.

There are multiple levels of potential wind energy generation, ranging from Class 1 (10-11 mph) to Class 7 (19-25 mph). Pittsfield's topography and distance from the more windy areas of the State makes it a poor location for wind energy generation at the small commercial or large commercial scales. Owing to these constraints, commercial windfarms are not recommended for the Town. Further, while the Town may be suitable for residential wind generation, according to the Renewable Energy Atlas of Vermont, finding suitable siting in the Town may be problematic.

Biomass & Biogas Energy Generation

The term 'biomass' refers to biologically-based feedstocks (that is, algae, food or vegetable wastes, grass, wood, methane, and more). Biomass can be converted into an energy source to fuel vehicles (e.g. biodiesel), heat homes, or even generate electricity. According to the 2016 Vermont Comprehensive Energy Plan, those using wood for primary heating consumed about 4.8 cords in 2014–2015, while those using wood as a supplementary source used 2.1 cords. In that same year, Vermont households burned about 126,000 tons of wood pellets, with primary-heat-source consumers burning 4.4 tons and supplementary-heat-source consumers burning 3.3 tons for the season.

There are no biomass energy generation facilities in Pittsfield. Community-scale biomass has the potential to offer cost-effective heating in small, clustered areas. Some towns have implemented combined heat and power systems that run on biomass to heat multiple municipal buildings, which may be of interest to Pittsfield.

Commercial biomass energy generation facilities should be located close to available biofuels to reduce transportation impacts and costs. A biomass power plant would require a great deal of space to accommodate the various stages of collection and conversion of the mass into fuel before burning it to produce electricity. Water can also pose a problem as biomass facilities require large quantities to handle the recycling process of waste materials. Materials would have to be transported to and from the facility; therefore, truck traffic should be a consideration in selecting a site. Additionally, before a biomass energy generation facility is located in Pittsfield, developers should prove that their proposed project will not negatively impact the rural character of the community or the local road system.

Biofuels

In addition to using biomass for heating, the use of biofuels, particularly biodiesel, is becoming an increasingly popular option for municipalities attempting to cut costs and reduce the environmental impacts associated with vehicle emissions. According to the Vermont Biofuels Association, biodiesel is a clean-burning alternative fuel, produced from domestic, renewable resources, such as soybeans, sunflowers, canola, waste cooking oil, or animal fats. Biodiesel contains no petroleum, but it can be blended at any level with petroleum diesel to create a biodiesel blend, which can be used in colder weather. It can be used in compression-ignition (diesel) engines or oil-fired boilers or furnaces with little or no modifications. Growing biomass to use in biofuels may be a viable way to encourage farming in Pittsfield as well; however, balance should be sought between growing for energy demands and for human and animal consumption.

Agriculture

The agricultural sector has the potential to become a net generator of energy by growing crops that can be used for biofuel, by contributing cow manure to the process of methane digestion

(also known as “Cow Power”). Cow Power is especially popular in Vermont; however, it requires a significant upfront financial investment and is generally only effective when utilized by a large-scale farm. One of the key advantages of methane digestion is that it reduces the amount of methane released into the environment. Large-scale cow farms, though, can also have adverse impacts on the environment, which should be carefully considered when weighing the benefits and drawbacks of setting up a methane digestion system in the community.

Hydropower

Many locations in Vermont, including Pittsfield, once depended on hydropower to grind grain, run mills and even supply electricity to homes. With the onset of centralized power, most small-scale power generation facilities have been replaced by massive hydro facilities, such as Hydro Quebec.

There are no sites in Pittsfield that are considered “in-service” hydropower facilities, meaning that they are not actively producing power but have the basic infrastructure to do so. Retrofitting such sites presents the most effective means of adding potential hydropower while keeping environmental impacts low.

Hydroelectric development necessitates balancing priorities. While the benefits of generating electricity from local renewable resources are evident, they are not without associated costs. The power output from a given stream must be moderated by environmental considerations. A minimum stream flow that is adequate to support aquatic life needs to be maintained and impoundments need to be designed with water quality, land use, and recreation considerations in mind.

Hydropower generating facilities are regulated by the Federal Energy Regulatory Commission and stringent federal water quality standards. As a result, the regulatory process for hydro facilities is extensive and time consuming. Further, streams are public trust resources, and the potential impacts of hydro projects warrant significant consideration. Any hydropower development proposed in Pittsfield shall not result in an undue adverse impact to riverine ecosystems and water quality.

F. Permitting Considerations

Energy generation in Vermont is subject to a number of different permitting requirements, most of which are limited to State level permitting. On the municipal level, state statute protects residential renewable energy generation systems from regulations that will completely prohibit their development.

Section 248

Distributed power generation facilities, such as hydropower dams, fossil fuel plants, as well as wind power or solar systems owned by utilities, are subject to review and approval by the

Vermont Public Service Board (30 VSA § 248). Under this law, prior to the construction of a generation facility, the Board must issue a Certificate of Public Good. A Section 248 review addresses environmental, economic, and social impacts associated with a particular project, similar to Act 250. In making its determination, the Board must give due consideration to the recommendations of municipal and regional planning commissions and their respective plans. Accordingly, it is appropriate that this Plan address these land uses and provide guidance to town officials, regulators, and utilities.

For all energy generation facilities, the following policies shall be considered:

1. **Preferred Locations**: New generation and transmission facilities shall be sited in locations that reinforce Pittsfield's traditional patterns of growth, of a compact village center surrounded by a rural countryside, including farm and forest land.
   - On top of existing buildings, landfills, parking lots, brownfields outside of the village center, reclaimed quarries or gravel pits, a site that was previously covered by a structure or impervious cover in compliance with setbacks and any additional preferred areas set by the State of Vermont.
   - A joint letter by the Pittsfield Planning Commission, Selectboard, and TRORC may designate a site as preferred if it is not visible in the growing season from Town or State highways, is not actively in agriculture, and is not part of a priority or high priority forest block or habitat connector.

2. **Prohibited Locations**: Because of their distinctive natural, historic or scenic value, energy facility development shall be excluded from the following areas:
   - Floodways shown on FEMA Flood Insurance Rate Maps (except as required for hydro facilities);
   - Fluvial erosion hazard areas shown on Fluvial Erosion Hazard Area maps (except as required for hydro facilities);
   - Wetlands as indicated on Vermont State Wetlands Inventory maps or identified through site analysis; and
   - Rare, threatened, or endangered species habitat or communities.

3. **Significant Areas**: All new generation, transmission, and distribution facilities shall be sited and designed to avoid or, if no other reasonable alternative exists, to otherwise minimize and mitigate adverse impacts to the following:
   - Historic districts, landmarks, sites and structures listed, or eligible for listing, on state or national registers.
   - Public parks and recreation areas, including state and municipal parks, forests and trail networks.
   - Municipally designated scenic roads and viewsheds.

- Special flood hazard areas identified by National Flood Insurance Program maps (except as required for hydro facilities).
- Public and private drinking water supplies, including mapped source protection areas.
- Primary agricultural soils mapped by the U.S. Natural Resources Conservation Service.
- Necessary wildlife habitat identified by the state or through analysis, including core habitat areas, migration and travel corridors.

4. **Natural Resource Protection**: New generation and transmission facilities must be sited to avoid the fragmentation of, and undue adverse impacts to, the Town's working landscape, including large tracts of undeveloped forestland and core forest habitat areas, open farm land, and primary agricultural soils mapped by the U.S. Natural Resource Conservation Service.

5. **Protection of Wildlife**: Designers must gather information about natural and wildlife habitats that exist in the project area and take measures to avoid any undue adverse impact on the resource. Consideration shall be given to the effects of the project on: natural communities, wildlife residing in the area and their migratory routes; the impacts of human activities at or near habitat areas; and any loss of vegetative cover or food sources for critical habitats.

6. **Site Selection**: Site selection should not be limited to generation facilities alone; other elements of the facility need to be considered as well. These include access roads, site clearing, onsite power lines, substations, lighting, and off-site power lines. Development of these elements shall be done in such a way as to minimize any negative impacts. Unnecessary site clearing and highly visible roadways can have greater visual impacts than the energy generation facility itself. In planning for facilities, designers should take steps to mitigate their impact on natural, scenic and historic resources and improve the harmony with their surroundings.

G. Residential Energy Efficiency

There are a number of ways that the Town of Pittsfield can reduce its local energy demand.

Decreasing Energy Use by Changing Behavior and Implementing Energy Efficiency

Raising awareness to replace wasteful energy behaviors with energy saving ones can reduce the strain on existing energy resources, and help residents and businesses save money, making the Town a more affordable place to live with a higher quality of life.

For those necessary or desired services that require energy, we can apply the principles of energy efficiency to ensure that we use less energy to provide the same level and quality of service. Examples include:

- Having an energy audit done to identify the greatest ways to save energy.
- Implementing the air-sealing and insulation recommendations of the energy audit;
- Not heating unused areas of your home.
- Insulating with high R-value (or heat flow resistance) material.
- Using high-efficiency windows;
- Installing energy efficient appliances like refrigerators, freezers, front loading washing machines, gas heated clothes driers and heating systems without blowers.
- Using high efficiency lighting.
- Using gas and/or solar hot water heaters.
- Siting buildings to make use of existing wind blocks and natural cooling patterns derived from the landscape's topography.
- Siting buildings with maximum southern exposure to capture passive solar energy.

New residential development in the State of Vermont is required to comply with Vermont Residential Building Energy Standards (RBES). Commercial development is subject to similar code regulations. Some examples of the types of development the RBES applies to include:

- Detached one- and two-family dwellings;
- Multi-family and other residential buildings three stories or fewer in height;
- Additions, alterations, renovations and repairs;
- Factory-built modular homes (not including mobile homes).

In order to comply with the RBES, a home, as built, must meet all of the Basic Requirements and the Performance Requirements for one of several possible compliance methods. If the home meets the technical requirements of the RBES, a Vermont Residential Building Energy Standards Certificate must be completed, filed with the Town Clerk and posted in the home. If a home required by law to meet the RBES does not comply, a homeowner may seek damages in court against the builder.

H. Municipal Role in Energy Efficiency The relationship between a municipality and its energy use creates opportunities for local energy reduction.

Pittsfield Energy Committee

Pittsfield does not have an active Energy Committee (EC), but all Vermont towns are statutorily enabled to create one. An EC is an independent group created for the purpose of establishing

and implementing the Town's energy goals, working either independently or upon formal appointment by the Town's Select Board. A Pittsfield EC's work may include conducting energy audits on municipal buildings, implementing the audits' recommendations, tracking energy use for municipal buildings, installing LED streetlights, and working with the Planning Commission on a Pittsfield Energy Plan. One of the most important benefits of an EC is that it can help the Town save money while also saving the Town and its residents' energy.

Property Assessed Clean Energy (PACE)

Vermont enacted legislation in May 2009 (Act 45) that authorizes local governments to create Clean Energy Assessment districts. Once created, municipalities can offer financing to property owners for renewable energy and energy-efficiency projects. Eligible projects include the installation of solar water and space heating, photovoltaic panels (PV), and biomass heating, small wind, and micro-hydroelectric systems. Property-Assessed Clean Energy (PACE) financing effectively allows property owners to borrow money to pay for energy improvements. The amount borrowed is typically repaid via a special assessment on the property over a period of up to 20 years; if the property owner wishes to sell the parcel before fully repaying the obligation, then the obligation is transferred to the new property owner at the time of sale. Pittsfield is not currently part of the PACE program.

Capital Budget Planning

Given the potential expense of energy efficiency improvements, it is essential to wisely budget town funding to cover these costs. State statute enables communities to create a Capital Budget and Program for the purposes of future planning and investing. Although most communities have some form of capital account where they save money, many do not have a true Capital Budget and Program. As previously stated in this Plan, a capital budget outlines the capital projects that are to be undertaken over a five-year period. It includes estimated costs and a proposed method of financing those costs. Also outlined in the Program is an indication of priority of need and the order in which these investments will be made. Any Capital Budget and Program must be consistent with the Town Plan and shall include an analysis of what effect capital investments might have on the operating costs of the community.

When planning for routine major facility investments, such as roof replacements, foundation repairs, etc., it is important to consider making energy efficiency improvements simultaneously. The cost to replace or renovate a community facility will only be slightly higher if energy efficiency improvements are done at the same time, rather than on their own.

The Town of Pittsfield's formal Capital Budget and Program helps guide investments in community infrastructure and equipment. The Planning Commission may make recommendations to the Select Board with regard to what capital investments should be considered annually. Throughout the life of this plan the town will continue to explore greater energy efficiencies which include cost barriers, scarcity and implementation.

Policy Making for Change

In addition to reducing the energy use related to facilities, Pittsfield can implement policies that lower energy use by Town staff or encourage greater energy efficiency. Examples include:

- **Energy Efficient Procurement Policy** – A policy of this nature would require energy efficiency to be considered when purchasing or planning for other town investments. Purchasing Energy Star-rated equipment is a well-documented way to increase energy efficiency.

- **Staff Policies** – Towns can also implement policies that are designed to reduce wasteful energy practices. Through policy making, local government can set a clear example for townspeople and encourage sustainable behavior that will ultimately result in both energy and financial savings. Please see the goals, policies, and recommendations section for more ideas.

I. Energy and Land Use Policy

The Vermont Municipal and Regional Planning and Development Act (24 V.S.A. Chapter 117) does not allow communities to impose land use regulations that prohibit or have the effect of prohibiting the installation of solar collectors or other renewable energy devices. However, statute does enable Vermont's municipalities to adopt regulatory bylaws (such as zoning and subdivision ordinances) to implement the energy provisions contained in their town plan.

Zoning bylaws are designed to control the type and density of development. It is important to acknowledge the connection between land use, transportation, and energy, and creating zoning ordinances and subdivision regulations that encourage energy efficiency and conservation. High-density and diverse uses in and around existing built-up areas will lead to more compact settlement patterns, thereby minimizing travel requirements. At the same time, zoning bylaws must be flexible enough to recognize and allow for the emergence of technological advancements, which encourage decreased energy consumption, such as increased use of solar and wind power.

Zoning bylaws may contain provisions for planned unit developments (PUDs). PUDs are a grouping of mixed use or residential structures, pre-planned and developed on a single parcel of land. The setback frontage and density requirements of a zoning district may be varied to allow creative and energy efficient design (i.e. east-west orientation of roads to encourage southern exposure of structures, solar access protection, use of land forms or vegetation for wind breaks, and attached structures), and to encourage the construction of energy efficient buildings.

Subdivision regulations are one of the most effective tools for encouraging energy efficiency and conservation. Subdivision regulations, like PUDs, involve town review (through the DRB) in

the design process. Because subdivision regulations govern the creation of new building lots, as well as the provision of access and other facilities and services to those lots, a community can impose requirements that a developer site their building to maximize solar gain. Likewise, subdivision regulations can require that landscaping be utilized to reduce thermal loss.

J. Energy and Transportation Policy

It is important that communities recognize the clear connection between land use patterns, transportation, and energy use. Most communities encourage the development of residences in rural areas, and these are in fact coveted locations to develop because of the aesthetics that make Vermont special.

American Community Survey data from 2019 shows that 87.4% of Pittsfield residents drive to work, all of which drive alone. Of the energy dedicated to transportation, over 50% is used to fuel private cars for residents (as opposed to being used for public transit, road maintenance, or another public purpose). This fact reinforces the need for clear policies that take into account the transportation implications of land use decisions in this community.

Because transportation is such a substantial portion of local energy use, it is in the interest of the community to encourage any new developments that are proposed in Pittsfield to be located adjacent to existing roads. In particular, dense residential developments should be located within or adjacent to existing village centers or within designated growth areas. Commercial development that requires trucking and freight handling should only be located on roads which can effectively handle the size of vehicle needed.

K. Energy Scarcities and Costs

There are no scarcities of energy foreseen in the 8-year life of this plan. Our electrical providers have plenty of power supply resources either under contract or available to purchase at this time. Total energy demand is likely to shrink modestly in the near term as population is not expected to grow much and efficiency is constantly improving. There should be ample amounts of heating and transportation fuels for the life of this plan, but we must encourage a shift away from fossil fuels to meet our goals, Wood is a plentiful local source of heating fuel, and many more cords could be sustainably harvested than are being cut now. Plenty of sun and wind are available if we decide to use them.

This is not to say that plentiful energy will be cheap. Fossil fuels have varied widely in price over the last several years, and the overall trend is for dwindling supplies. The cost of energy is not an issue for some families but is still an issue for many, and will be less of an issue for all if targets for better insulating. buildings, switching to EVs, and using heat pumps and advanced wood heat systems are met. An EV has much less maintenance costs, as they have no engine or exhaust system, and the cost of electricity to power a car comes out to the equivalent of about $1.50 per gallon (in today's value), much less than current gasoline prices.

For many, the cost barriers are not the daily or monthly energy costs but implementing these changes to the buildings and vehicles we have now that use our energy. There are rebates and programs available that are income-based, and even for those that have too much income to qualify over time these investments will pay off, but they still require getting financing or having considerable savings on hand.

L. Goals, Policies and Recommendations

Goals

1. Ensure the long-term availability of safe, reliable and affordable energy supplies to increase energy efficiency, and to promote the development of renewable energy resources
2. Reduce energy consumption; the community's reliance on fossil fuels and greenhouse gas emissions that contribute to climate change.
3. Limit the adverse impacts of energy development and use on public health; safety and welfare; Pittsfield's historic and planned pattern of development; environmentally sensitive areas; and our most highly valued natural, cultural, and scenic resources.
4. Encourage a continued pattern of settlement and land use that is energy efficient.
5. Promote the construction of energy efficient residential and commercial buildings and increase awareness and use of energy conservation practices through educational outreach to the public.
6. Encourage increased public transportation opportunities throughout the community, including park-and-ride access, bus service, biking paths, and sidewalks.
7. Promote greater use of existing public transportation services by community members.

Policies

1. Town officials should participate in the Public Service Board's review of new and expanded generation and transmission facilities to ensure that local energy, resource conservation, and development objectives are identified and considered in future utility development.
2. Any commercial energy generation facility proposed in Pittsfield must be developed so as to avoid negative impacts on the rural character of the surrounding area. Developers should make all possible efforts to minimize damage to important natural areas as identified in the Natural Resource section of this Town Plan. Additionally, such facilities should be located as close to existing roads as possible to avoid any increase in the services provided by the town.
3. Pittsfield supports the development and use of renewable energy resources for town business' and residential properties – including, but not limited to, residential wind, solar, biomass, micro-hydro, and cogeneration – at a scale that is sustainable; that enhances energy system capacity and security; that promotes cleaner, more affordable energy technologies; that increases the energy options available locally; and that avoids

undue adverse impacts of energy development on the local community and environment. Due to topographical limitations, the development of commercial scale windfarms in Pittsfield is not consistent with this Plan.

4. Town officials should support the establishment of a Pittsfield PACE program and other similar statewide programs designed to make energy efficiency improvements more affordable and more likely to be implemented. Town officials should support efforts to educate homeowners about what resources are available to them for energy efficiency improvements.
5. The rehabilitation or the development of new buildings and equipment should use proven design principles and practices that promote energy efficiency, lowered environmental impact, and with the lowest lifecycle costs (cost of owning, operating, maintaining, and disposing of a building or a building system over a period of time).
6. Generation, transmission, and distribution facilities or service areas should be encouraged only when they complement the recommended land use patterns set forth in this Plan and are deemed to be of enough benefit to the town.
7. New, significant public investments (including schools, public recreational areas, municipal facilities, and major commercial or residential developments) must be located within or in close proximity to the village and shall utilize existing roads whenever possible.
8. Encourage the use of broadband services to support energy efficient businesses.
9. Promote energy efficient travel for residents by encouraging carpooling, increased use of public transportation, telecommuting, home businesses, and safe bike routes.

Recommendations

1. Town officials and volunteers should work to increase public awareness and use of energy conservation practices, energy-efficient products and efficiency and weatherization programs through educational efforts aimed at local residents and businesses. (PC)
2. The Town should consider municipal or community-based renewable energy generation, to include municipal or district biomass heating systems, and the installation of individual or group net metered generation facilities on Town buildings and property to serve Town facilities. Sources of funding for municipal power generation could include third-party financing, municipal funds, bonds, grants, and available government incentive programs when the existing infrastructure needs to be replaced. (SB)
3. The Planning Commission should identify areas in Town that are appropriate for large scale renewable energy production, such as solar. (PC, SB)
4. The Select Board should formally designate a town Energy Committee as a Town committee to develop an Energy Action Plan as a supplement to the municipal plan. (SB)
5. The Select Board should authorize a Pittsfield Energy Committee to track municipal energy use and costs (for example: through the EPA's free Energy Star® Portfolio

Manager program) and develop an overall energy budget to manage the Town's energy consumption, which may also include the development of local generating capacity**.** (SB)

6. The Town should continue to implement energy efficiency measures recommended by the Energy Committee for existing and future facilities. (SB, Energy Committee)
7. The Town, with help from the Energy Committee, should develop municipal procurement and purchasing policies that emphasize products that are energy efficient (e.g., Energy Star® rated). (SB, Energy Committee)
8. The Town should continue to develop facility maintenance and operation policies that maximize energy efficiency while maintaining comfort levels for employees and visitors. (SB)
9. The Select Board should discuss PACE at a future meeting and decide whether the program should be placed on the ballot for Town Meeting. (SB)
10. The Town should continue to explore the potential for public transit opportunities. (SB)

X. Economic Development

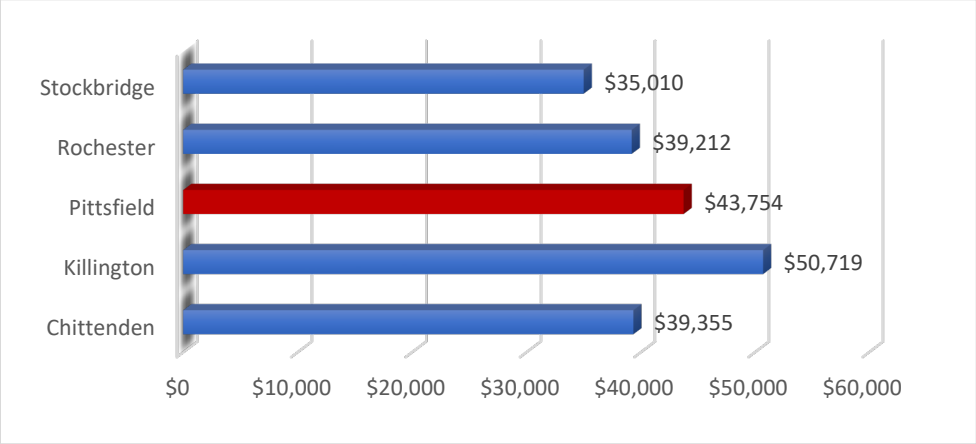
A. Background

Pittsfield is a rural town in Vermont. There is a post office, gas station, multiple restaurants and Inns, multiple industrial-infrastructure business', wedding venues as well as many cottage industries. The nearest destination for goods and services is the City of Rutland which is about 20-25 minutes away. Although it is unlikely that Pittsfield will become a hub of commerce like larger towns or cities in Vermont, it certainly can encourage continued economic development in Town.

B. Income Statistics

When viewed in relation to neighboring towns, Pittsfield has the second highest average adjusted gross income (AGI). The 2020 average AGI per exemption was $43,754. The federal poverty guideline that is set annually by the U.S. Census Bureau for a family of four was $26,500 in 2021. Lower income levels of many town residents can have serious implications on families' ability to afford housing, transportation expenditures, and residents' ability to pay for other necessities in everyday life, as previously discussed in this Plan's Housing chapter.

Figure 11: Average Adjusted Gross Income per Exemption, Pittsfield and Surrounding Towns, 2020



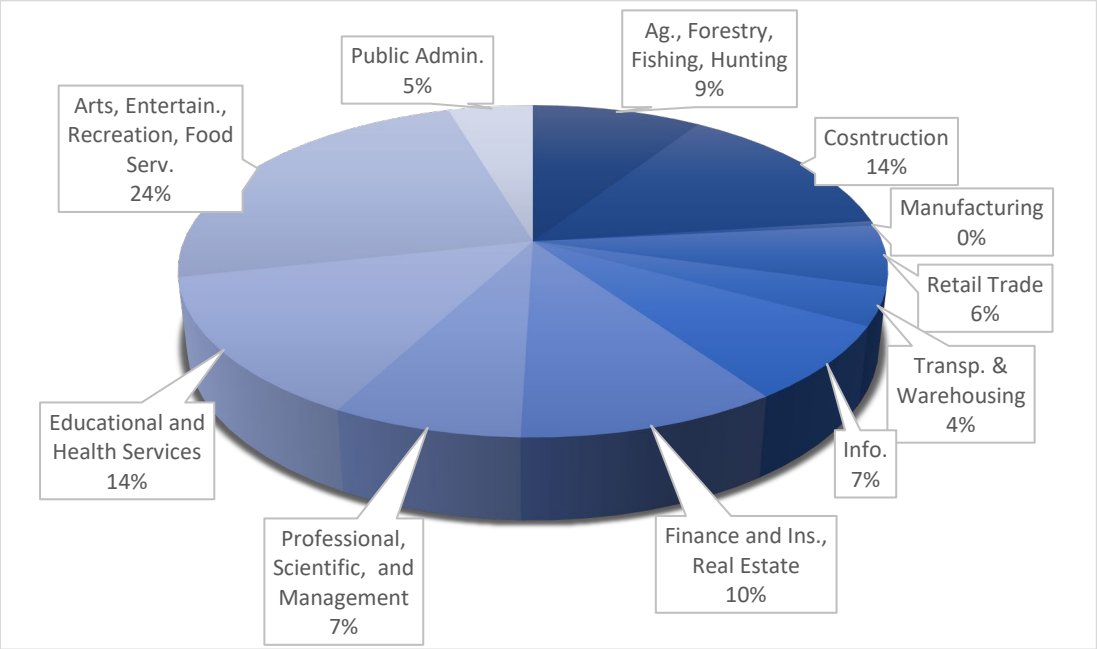
Source: VT Department of Taxes, 2020

C. Occupations in Pittsfield

While Pittsfield is largely a bedroom community for larger regional employment centers, such as Randolph and Rutland, the Town's residents work in a wide range of professional fields.

Figure 12 shows the wide array of residents' occupations. The largest percentage of residents work in the arts, entertainment, recreation, accommodation, and food services industry, followed by educational and health services.

Figure 12: Pittsfield Occupations, 2019



Source: 2015-2019 American Community Survey 5-Year Estimates

American Community Survey data for 2015-2019 demonstrates that 83.9% of Pittsfield residents travel by car, truck, or van to work and 13.8% work from home. Only 2.3% of residents walk or bicycle to work. This does not necessarily correlate with an intentional avoidance of these commuting methods. Rather, it may reflect a lack of multi-modal transportation opportunities for residents beyond being in a personal vehicle. Over 50% of residents commute under 25 minutes to work, indicating that most residents likely work within a one-to-two town radius of Pittsfield.

D. Farming, Forestry and the Economy

Pittsfield has a history as an agricultural and silvicultural center dating back to its founding, as do most towns in Vermont. These industries helped to shape both the character and the landscape of Vermont and its people. Despite declines in the number of farms and forestry operations in the past century along with constantly evolving market forces that drive demand for Vermont-based goods, these industries still play an important role in the local economy. How we maintain the working landscape and support agricultural and forest-based industries will have a long-term impact on our landscape and our local economy.

An economic restructuring or a shift away from agriculture to the service and tourism industries has placed economic pressure on farm owners in towns like Pittsfield in recent decades. The higher cost of owning land makes it difficult to rationalize conventional farming, even with incentives available. Owners of forestland most often are faced with a tax bill on land that exceeds its economic value for timber production. This, coupled with a need for house lots or development land in general, has prompted landowners to place their land on the market for these purposes.

Conserving or otherwise wisely using and managing forest and farmlands in the Town, whether in "current use" or not, will help promote environmental integrity, protect fragile natural features, and maintain Pittsfield's landscapes, particularly along the riparian lands in the Town's valley. These industries can help to sustain Pittsfield's rural character while also creating potential jobs and providing creative recreational and educational opportunities. Promoting agricultural and forestry through farmers markets, community supported agriculture, or other means of patronage, is encouraged.

E. Creative Economy

Creativity and innovation are the heart of the Vermont brand, attracting tourists and new residents, creating jobs, and advancing economic growth. The Vermont Arts Council has set up the Vermont Creative Network, which has divided the State into six different regional zones. Pittsfield (and all of Orange and Windsor counties) is part of the 3CVT Zone. A major statewide research study in 2019 on Vermont's creative sector found that the 3CVT Zone has the highest creative sector employment statewide and the highest growth rate in creative employment statewide. Employment in the creative industries is about 10.8% percent of the 3CVT Zone's total employment.

The creative industries as identified in the creative economy report included: visual arts and crafts, media and digital arts, design and fashion, performance arts, literary arts, museums and cultural heritage, and artisanal foods.

Pittsfield Community Connections is a local organization whose mission is to promote and encourage arts and other local creative endeavors. The group also provides a platform for residents to fundraise and engage in activities focused on community building and betterment.

F. Trails Tourism

Pittsfield attracts many visitors which frequent local businesses and housing rentals year-round for trail-based recreational activities. There are local trail groups that maintain some of these trails along with the landowner relationships that make them possible. These include the

Ridgeline Outdoor Collective in Rochester (formerly R.A.S.T.A, mountain biking and back country snow sports) and The Tweed Valley Travelers (Snowmobiling).

The Green Mountain Trails are a privately owned, multiuse, public network of singletrack trails over varied terrain in Pittsfield and Stockbridge. The 25 miles of trails can be used to mountain bike, trail run, hike, and snowshoe with the Vermont Association of Snow Travelers (VAST) snowmobile trails running through part of this trail group as well. VAST trails snake through town changing yearly as trail corridors are impacted by nature and changes in landowner preferences change. The Velomont is another up-and-coming trail system which will connect the trail systems in Rochester, Pittsfield, and Killington with construction beginning 2022 to connect the Rochester and Pittsfield systems through Green Mountain National Forest (GMNF). The town is also gateway to camping, fishing, and hunting throughout the Chittenden basin in GMNF.

G. State Designation Programs

Village Designation

A State designated village supports the revitalization efforts of small to medium-sized historic centers. Pittsfield's designation brings financial incentives, training and technical assistance needed to attract new business and vitality. Participation in this program provides several benefits to businesses located within a designated boundary. Being a designated village supports the traditional Vermont development pattern of a compact village center surrounded by rural countryside, as well as the Town Plan's goals of continuing to support historical economic and land use patterns in Pittsfield.

Village Designation Benefits include:

- 10% Historic Tax Credits - Available as an add-on to approved Federal Historic Tax Credit projects. Eligible costs include interior and exterior improvements, code compliance, plumbing and electrical upgrades.
- 25% Facade Improvement Tax Credits - Eligible facade work up to $25,000.
- 50% Code Improvement Tax Credits - Available for up to $50,000 each for elevators and sprinkler systems and $12,000 for lifts. Eligible code work includes ADA modifications, electrical or plumbing up to $25,000.
- 50% Technology Tax Credits – Available for up to $30,000 for installation or improvements made to data and network installations, and HVAC reasonably related to data or network improvements.
- Priority Consideration for various ACCD, VTrans and ANR grants and incentives including, ACCD's Municipal Planning Grants, State Historic Preservation grants, Vermont Community Development Program (VCDP) grants, VTrans Bike/Ped and Transportation Alternatives grants, Northern Border Regional Commission

Grants, ANR Water and Wastewater subsidies and loans, and various other state grants and resources.
- Priority Consideration by State Building and General Services (BGS.

Downtown Designation

State designated downtowns receive state support for local revitalization efforts. The State provides technical assistance and funding to help designated municipalities build strong communities. Additional benefits for a downtown designation include traffic calming and signage options, special assessment districts, and reduced criteria under Act 250. As of the publication of this plan, Pittsfield does not have a designated downtown.

H. Encouraging Economic Development

Historically, Pittsfield residents have indicated that they would like to have a greater variety of small businesses that have little impact on the aesthetics or environment of the town. New businesses in Pittsfield would offer more localized employment opportunities to residents. Having more businesses in Town would likely result in a greater need for more services and would make the Town attractive to further economic growth.

Encouraging economic development in a rural town like Pittsfield is somewhat difficult. Because of its location and small population, Pittsfield is unlikely to become a hub for commerce similar to larger towns like Randolph or Killington. However, Pittsfield's 82 registered business' provide varied services across many genres. There is a small core of vacation and recreation related businesses in Town, which along with Pittsfield's proximity to Killington and other recreational destinations means it will most likely remain a tourist destination for years to come.

Key figures in the community, including small business owners, representatives of Town government, and realtors can join forces with active citizens to help create a vision for the economic future of Pittsfield. However, because economic development takes time, all who participate in the process must be committed to a common vision.

In order to begin the process of economic development planning, citizens will have to identify what the key needs are, determine what the Town's assets are and finally whether key needs can be realistically offered locally. Using this information, the Town should develop a mission that will help guide those involved toward the ultimate goal of encouraging economic development in Pittsfield.

The Green Mountain National Forest (GMNF) over 50% of the land mass, represents a value for the Town of Pittsfield as it is a prime recreational area. Local businesses offer nature tours and various outdoor activities including hiking and biking. Campers utilize campsites within the GMNF in Pittsfield. In winter, snowmobilers have access to a wide range of trails throughout

Pittsfield and the GMNF. All of these tourists bring dollars to local businesses and should continue to be supported. In addition to tourism, there is a substantial amount of wood material that, with the permission of the GMNF, could be sustainably harvested to support local wood manufacturing facilities.

The Pittsfield Village Green offers an excellent opportunity to bring people into Town as a location for special events, such as farmer's markets and bazaars. The value of Pittsfield's Village Center is further bolstered by the availability of high-speed internet. In 2005, the village of Pittsfield was granted Village Designation status by the State of Vermont. The Downtown/Village Designation program offers tax credits to commercial developers for the substantial redevelopment of structures located within a downtown or village center, as well as priority consideration for a number of State grant programs. In order to maintain this designation, the town shall not allow principal retail outside the village. Principal (primary retail) means a use whose primary use is the supply of merchandise or wares to the end consumer for use off site. Examples include but are not limited to supermarkets, hardware stores (without lumberyards), dry goods stores, pharmacies, big box stores, etc. Principal retail does not include online sales, land consumptive intensive and resource based commercial uses, service businesses, restaurants, retail as a home occupation or secondary retail. Secondary retail is a business whose primary use is not retail sales but contains a component that is clearly secondary to the primary use. Examples include (but are not limited to) eye doctor's offices, veterinarian's offices, small engine repair shops, manufacturers with a small showroom, etc. The term also includes a retail within a multi-story, mixed use building in a mixed use area where any total retail floor space is less than the total residential floor space, and any individual retail use does not exceed 4,000 square feet.

I. Goals, Policies and Recommendations

Goals

1. Encourage the creation of new and improved job opportunities while maintaining the rural character and natural environment in Pittsfield.
2. Support the growth existing businesses and the development of new businesses in Town, including home-based businesses.
3. Nurture a strong and diverse regional economy that provides employment opportunities for residents while maintaining environmental standards.
4. Strengthen and maintain the Town's agricultural, forest, and recreational economies, and ensure continuance of the small-town village and rural character.

Policies

1. Maintain and enhance natural, historic, cultural, and recreational resources that provide an outstanding quality of life to attract new businesses, employees and tourists to Town.

2. Protect the long-term viability of natural resource-based industries by preserving rural open spaces through good stewardship of the land.
3. Prohibit development that has the effect of creating sprawl in Pittsfield.
4. Primary retail development in Pittsfield shall be located in the designated Village Area.
5. Economic development activities shall occur in harmony with the Town's historic physical environment, and traditional development pattern of a densely developed center surrounded by rural countryside.
6. Development should be strongly directed away from prime agricultural to marginal soils.
7. The Town should maintain the Village Designation status of Pittsfield's village.
8. Cooperate with neighboring towns, regional planning commissions, and economic development groups to plan for and maintain a balance between the type and number of jobs created and population growth in the region.
9. Support the development of local enterprises that create markets for locally produced goods and services.
10. Attract diverse and sustainable businesses to Pittsfield that provide jobs and contribute to the small-town quality of life.
11. Encourage new business development in appropriate locations where services such as roads, fire protection, and power supply are available or planned.
12. The town shall not allow principal retail development outside the village area.

Recommendations

1. Pittsfield should consider the creation of a local economic development committee that would encourage the growth of appropriately scaled businesses. (SB)
2. Encourage the development of a local farmer's market. (SB)
3. The Town should conduct a simple inventory of local businesses to determine what goods and services are available in Town, and where market gaps exist that may be filled by new business enterprises. (PC)
4. Encourage and support the development of information technology and communication infrastructure that is necessary for economic growth and vitality. (SB)
5. Support efforts to expand public transit opportunities within the Village Area. (SB)

XI. Natural, Scenic and Historic Resources

A. Wetlands

Background

Wetlands are ecologically fragile areas, and how these lands are managed has a direct bearing on the quality and quantity of water resources. The State of Vermont defines wetlands in the following manner:

> "Wetlands" means those areas of the state that are inundated by surface or groundwater with a frequency sufficient to support significant vegetation or aquatic life that depend on saturated or seasonally saturated soil conditions for growth and reproduction. Such areas include but are not limited to marshes, swamps, sloughs, potholes, fens, river and lake overflows, mud flats, bogs and ponds, but excluding such areas that grow food or crops in connection with farming activities.[13]

The Vermont Water Resources Board estimates that wetlands comprise less than 5 percent of the surface area of Vermont. In addition to being Vermont's most productive ecosystem, wetlands serve a wide variety of functions beneficial to the health, safety and welfare of the general public, including the following:

- Retaining storm water run-off, reducing flood peaks and thereby reducing flooding
- Improving surface water quality through storage of organic materials, chemical decomposition and filtration of sediments and other matter from surface water
- Providing spawning, feeding and general habitat for fish
- Providing habitat for a wide diversity of wildlife and rare, threatened or endangered plants
- Contributing to the open space character and the overall beauty of the rural landscape.

In 1986, Vermont adopted legislation for the protection and management of wetlands (10 V.S.A., Chapter 37). Determination of whether a wetland merits protection is based on an evaluation of the extent to which it serves the general functions outlined in the bulleted list above.

Under the Rules, if land development can be expected to impact a protected wetland, such activity cannot commence unless the Vermont Agency of Natural Resources first grants a Conditional Use Determination (CUD). A CUD will be granted when the proposed use will not have an undue adverse impact on the function of the wetland. In many cases, such approvals are granted with conditions to mitigate impacts and to more readily protect wetlands.

For Pittsfield, as well as the State, the most significant wetlands have been mapped and are included as part of the National Wetlands Inventory (NWI) prepared by the U.S. Fish and Wildlife Service. These wetlands have been delineated on USGS topographic maps, and by reference are made a part of this Plan (see Map 3, Natural Resources). Other smaller wetlands often do not show on these maps; hence, a field determination by a qualified biologist is needed for most activities that involve state permits.

In those towns that have zoning or subdivision regulations, final approvals cannot be granted for projects involving wetlands unless the Agency of Natural Resources has first had an opportunity to evaluate the effect of the project on the wetland (24 VSA § 4409). It is important to note that future investigations of wetlands within Pittsfield may result in additional areas being determined as significant or important for conservation.

B. Goals, Policies and Recommendations

Goal

Identify and encourage land use development practices that avoid or mitigate adverse impacts on significant wetlands.

Policies

1. Structural development or intensive land uses shall not be located in significant wetlands or within buffer zones (the areas contiguous with a significant wetland which serve to protect those values and functions sought to be preserved by its designation) to significant wetlands.
2. Developments adjacent to wetlands should be planned so as not to result in undue disturbance to wetland areas or their function. Mitigating measures to protect the function of a wetland are acceptable.
3. Development is not to be located in or allowed to fill in or alter any mapped wetland area.

Recommendation

The Town should conduct an inventory of wetlands to determine where, if any are located, not mapped by the State of Vermont. (PC, ZBA)

C. Flood Hazard Areas and Floodplains

Background

There is a general scientific consensus that our climate change is in large part due to human activity. According to the U.S. Global Change Research Program, changes in climate extremes may not result in more rain overall, but in an increase of extreme weather events. Flood

frequency and amplitude may increase in some regions while other areas may experience drought.

Floods are inevitable natural events which occur sporadically and affect lands adjacent to watercourses. It is therefore in the public interest to plan for floods, and to implement land use strategies which will protect these areas and minimize the risks to public health, safety, and property as well as natural and wildlife resources.

Floodplains (lands adjacent to watercourses) are periodically inundated by heavy rains or during spring thaws. They are porous and can absorb considerable water before reaching flood stage. Floodplains make excellent agricultural land but are poorly suited for development, both because of their propensity for flooding and because of their proximity to watercourses, which creates the potential for pollution.

Vermont has experienced fifteen statewide and regional floods since 1973. All but one of these were declared federal disasters, and economic losses were significant. Damage was not limited to designated floodplains, but often occurred along unstable river systems and steep streams, as with Tropical Storm Irene in 2011. In some cases, recovery costs to the public sector alone amounted to several million dollars per flooding event. Public interest dictates that every reasonable attempt should be made to avoid or reduce such exposure to flood damage.

White River Corridor Management Plan (WRCMP)

In April of 2008, the White River Partnership, as part of the Vermont Department of Environmental Conservation River Corridor Management Program, conducted a community-based river corridor management plan for the Tweed River basin, including portions of the river and its tributaries in Pittsfield as well as neighboring Stockbridge and Killington. The result of the assessment indicated that, due primarily to extensive straightening and channelization, much of the Tweed River has lost access to historical floodplains and that those floodplains have subsequently been developed. Loss of access to floodplain means greater flows are contained within the river channel at high flow events, making the flow of water much more capable of damaging the surrounding area. This increased stormwater, combined with frequent ledge and bedrock outcrops, has elevated impacts during flood events.

The study recommends a “passive restoration” approach to managing excessive flooding along the Tweed River. Passive restoration allows the stream to return to a natural equilibrium, primarily by the removal of human constraints within the river corridor. Over an extended time, the stream will regain meanders and access to its floodplain by use of its own energy. Active buffer revegetation along with long-term protection of the river corridor, is essential to this approach. This alternative is less expensive than active restoration, but often requires a longer time period to achieve equilibrium conditions.

Additionally, the WRCMP recommends that Pittsfield (and its neighbors) adopt Fluvial Erosion

Hazard (FEH) language as part of their flood hazard ordinances. FEH is discussed in detail below. Other options include setbacks, buffers and zoning overlay districts designed to limit development in the floodplain and encourage passive restoration of the Tweed River.

National Flood Insurance Program (NFIP)

Under the provisions of the National Flood Insurance Act (1968), the Federal Emergency Management Agency (FEMA) has conducted a series of evaluations and hydrologic engineering studies to determine the limits of flood hazard areas along streams, rivers, lakes, and ponds expected to be inundated during the 100-year base flood, meaning that the flood level has a 1% chance of being equaled or exceeded in any given year. The calculations do not take into account the impact of ice dams or debris, and may, therefore, underestimate the areas which are subject to flooding damage.

FEMA has prepared a Flood Hazard Boundary Map (See Map 2 – Future Land Use, Flood Plain "FEMA FIRM") for the Town of Pittsfield, which includes flood hazard areas for the First Branch of the White River and for major streams and ponds. This map is on file at the Town Office (on the official flood hazard maps as well as the Future Land Use Map of this plan) and at the Regional Commission. The topography of Pittsfield is such that there are few areas low enough to be in the FEMA Flood Hazard Area. The designated area runs through Town along Route 100 adjacent to the Tweed River and along the portion of the White River that is in Pittsfield. If in doubt when developing, contact the Pittsfield Zoning Board of Adjustment or the Town Office.

FEMA also administers the National Flood Insurance Program, which provides flood hazard insurance at subsidized rates for property owners in affected areas. Even at a federally subsidized rate, the costs of insurance may be prohibitive for some landowners. In order to qualify for federal insurance, towns must adopt and retain a by-law to control land development within these areas. Minimum standards must be included and approved by FEMA.

The Town of Pittsfield adopted an updated Flood Hazard Bylaw in 2014, and is recognized as a participating community in the National Flood Insurance Program. Flood insurance coverage is only available to landowners in towns that participate in the program.

There are 24 residential and 3 commercial/industrial/public structures in the 500-year floodplain, with a value exceeding $6,972,000 if all properties were damaged/destroyed in a severe flooding event. Additionally, there are six structures located within the river corridor, which is defined as the "land area adjacent to the river that is required to accommodate the dimensions, slope, planform, and buffer of the naturally stable channel," according to state statute [10 V.S.A. § 1422(12)]. Mortgage lending institutions require as a prerequisite to financing that flood insurance be purchased on property subject to flooding. Homeowners who do not have a mortgage can still get flood insurance through the NFIP.

Fluvial Erosion Hazards

Much flood damage in Vermont is associated with stream channel instability, also known as the fluvial erosion hazard (FEH), as opposed to inundation related losses. This is a reflection of Vermont's natural geography and its man-made landscape consisting of steep, relatively narrow valleys with agricultural land uses, highway infrastructure, private residences and commercial properties located in close proximity to stream channels. River channels that are undergoing an adjustment process as a result of historic channel management activities or floodplain encroachments often times respond catastrophically during large storm events.

Historically, landowners and local governments have relied on the standards and the flood hazard boundary maps provided by the Federal Emergency Management Agency (FEMA) though the National Flood Insurance Program (NFIP) to determine areas within river corridors susceptible to flood damage. The maps are also used to delineate the allowable (floodway) limits of river corridor encroachments and human land use investments. However, the NFIP maps address only inundation issues by applying a water surface elevation-based standard. For this reason, the NFIP maps are often inadequate as an indicator of flood hazards, especially erosion. The NFIP standards do not recognize the danger present in unstable channels which may be undergoing a physical adjustment process. The stream bed may be eroding or it may be actively aggrading due to erosion occurring upstream.

The NFIP standards often allow for significant encroachment within floodplain areas and river corridors that may prevent the stream from ever reestablishing its stability. Special mapping and geomorphic assessments can identify FEH areas along rivers, more comprehensively defining high-hazard areas.

In 2006 and 2007, the White River Partnership, in concert with Vermont River Management Program mapped the dangers of fluvial erosion hazards (sideways erosion) in the White and Tweed rivers. This process, known as fluvial erosion hazard (FEH) mapping, produced data that can be used in addition to FIRMs to more fully recognize flood dangers. The resulting reports from the White and Tweed River Corridor Management Programs indicated that due primarily to extensive straightening and channelization, much of the Tweed River and parts of the White River have lost access to historical floodplains and those floodplains have been subsequently developed. The Reports recommend passive restoration (as opposed to active floodplain or meander restoration, armoring or further channelization) to help reduce conflicts between land use and river evolution processes.

Future development in Pittsfield shall be limited or, in some cases, prohibited in proximity to streams or rivers, namely the Tweed or White Rivers. Additional information on this can be obtained in the 2014 Pittsfield Flood Hazard Area Regulations.

D. Flooding and Land Use

Floodplains, as with wetlands, are fragile areas which are part of the land and water interface between lakes, ponds, rivers and streams. How these lands are managed has a direct bearing on the quality and quantity of water resources, as well as the safety of the Town. Flood hazards can be exacerbated by poor development practices, including: allowing development in the floodplain without accounting for "no net fill;" channelizing or straightening river segments; and eliminating buffer areas next to rivers and streams.

The potential for flooding can be reduced by adopting the following policies:

1. Structural development or intensive land uses are discouraged from locating in Class I and Class II wetlands. (See Map 3 – Natural Resources.)
2. Developments, and their associated stormwater discharges, that are adjacent to wetlands should be planned so they do not cause undue disturbance to wetland areas. Maintenance of a naturally vegetated buffer strip between a wetland and the project site is encouraged to prevent groundwater pollution and direct discharges into a wetland.
3. Structural development and placement of fill within the limits of the 100-year floodplain is discouraged. Where careful planning at the local level accepts development within the floodplain, the development should be designed to achieve no-net-fill, and located so they do not impede the floodwaters and endanger the health, safety, and the welfare of the public. No structural development, except bridges, should be located within the limits of a floodway.
4. Natural areas, non-structural outdoor recreational sites, and agricultural uses are the preferred land uses within floodplains. Commercial, industrial, and residential uses are discouraged, except as noted above.
5. Development outside of existing or planned settlement areas should not be located closer than 50 feet adjacent to watercourses, lakes, ponds, or shorelines. Such areas shall principally be maintained in a natural vegetative state for environmental and aesthetic purposes.
6. Public and community water supply watersheds shall be protected by limiting development to low densities and by encouraging forest and agricultural best management practices including high standards for erosion control and measures to minimize runoff.

E. Goals, Policies, and Recommendations

Goals

1. Enhance and maintain use of flood hazard areas as open space, greenways, recreation and/or agricultural land.

2. Ensure no net loss of flood storage capacity in an effort to minimize potential negative impacts, such as loss of life and property, disruption of commerce, and demand for extraordinary public services and expenditures that result from flood damage.
3. Maintain maps that reflect as accurately as possible the flood hazard areas to assist in appropriate land use decisions.
4. Recognize that all areas adjacent to unstable rivers and steep streams may be at risk of erosion during floods.

Policies

1. The preferred uses for flood hazard areas shall be for open space, greenbelts, agricultural or recreational uses.
2. Any land use activity (filling, or removal of earth or rock) within flood hazard areas which would result in a net loss of flood storage or increased or diverted flood levels or increased risk to adjacent areas shall be prohibited.
3. Utilities or facilities serving existing development (e.g. water lines, electrical service, waste disposal systems, roads, and bridges) may be located within these areas only when off-site options are not feasible and provided that these utilities or facilities are relatively protected from flooding damage.
4. Flood hazard regulations should be extended to areas identified as at risk to flood erosion.
5. It is the policy of the Town to maintain membership in the National Flood Insurance Program.

Recommendation

The Zoning Board of Adjustment shall continue to limit new development within the floodplain to recreational and agricultural uses. (ZBA)

F. Water Resources

Background

Water resources include aquifers (groundwater) and surface waters. The continued availability of clean, high-quality drinking water is a concern for all Vermonters¸ and sustainable yields of quality water are necessary for the lives and livelihood of citizens of Pittsfield. Because of this, the Groundwater Management Act was passed by the Vermont Legislature and signed into law by Governor Jim Douglas in 2006. This Act [10 V.S.A. chapter 48(5)] is designed to help define the groundwater system, enable greater scrutiny of commercial water extraction operations and provide for the study and mapping of groundwater resources throughout the State. Pittsfield has no mapped groundwater information.

The process for mapping groundwater is complicated. It involves multiple scientific methods, including using technology to create a detailed picture of groundwater situations and use patterns, analysis of well data provided to the state by well drillers and site-specific analysis.

The Vermont Agency of Natural Resources, in cooperation with federal and other state agencies, has evaluated aquifer recharge areas serving systems involving 10 or more connections or 25 or more people. These recharge areas are acknowledged and are recognized as important for protection. Land developments that are potential threats to water quality and significant aquifers are discouraged from locating in these areas. There are several private wells in Pittsfield that have been designated as a Source Protection Area (the former Stanley Tools Plant and Wintergreen Condos) by the State of Vermont, but none of them are for public use.

The health of Pittsfield's surface waters is essential to maintaining quality groundwater, as well as an important element for outdoor recreation and natural beauty. There are a number of state and federal programs that help fund stream-management projects, such as the Conservation Reserve Enhancement Program (CREP). CREP provides funds to farmers for the purpose of preserving lands once used for agriculture, with the goal of introducing and encouraging plant life to prevent erosion and provide habitat. Stream instability can lead to excessive flooding and other types of damage due to increased flow velocity.

Riparian buffers are strips of bankside vegetation along waterways that provide a transition zone between water and land use. Construction or development along shorelines, or removal or disruption of vegetation within these areas can create increased water pollution, higher water temperatures, destabilization of banks, higher soil erosion rates and loss of fish or wildlife habitats. The Plan maintains that no structures shall be allowed within 50 feet of the top of the bank of designated permanent streams, except those that by their nature must be located near streams (hydro facilities, for example). No ground disturbance or removal of vegetation shall be allowed within 35 feet, with the exception of bridge or culvert construction, or bank stabilization as is necessary for hazard mitigation purposes. These setback restrictions may be changed based on Planning Commission review of recent flood hazard events. Damages from Tropical Storm Irene have indicated a need for larger stream buffers, particularly in areas outside of the Flood Hazard Area.

G. Goals, Policies and Recommendations

Goals

1. Maintain or enhance the quality and quantity of drinking-quality resources.
2. Allow use of groundwater resources by new developments in a manner that protects the public right to adequate quality and quantity of the resource.
3. Consider surface water and groundwater impacts and effects related to proposed or existing uses of land.
4. Maintain or improve surface water quality.

Policies

1. Land use activities which potentially threaten groundwater quality or water available to the public must be carefully reviewed and monitored to prevent undue loss of groundwater quality and supply.
2. Maintenance or enhancement of water resources for recreation, fisheries, necessary wildlife habitats and quality aesthetics are high priorities. Water resource policy and practices shall be designed to protect these uses.
3. The location, sizing and density of on-site sewage disposal facilities should be determined by the capacity of the soil, the natural limitations of the site, and underlying substrata conditions, such as depth to bedrock and seasonal high-water tables. For the most current information regarding permitting, see www.anr.state.vt.us/dec/ww/rules.htm.
4. Preservation of the natural state of streams should be encouraged by:
    - Protection of adjacent wetlands and natural areas
    - Protection of natural scenic qualities
    - Maintenance of existing stream bank and buffer vegetation including trees, together with wildlife habitat.
5. No structures shall be allowed within 50 feet of the top of the bank of designated permanent streams, except those that by their nature must be located near streams. No ground disturbance or removal of vegetation is allowed within 35 feet, excepting that incidental to bridge or culvert construction, or permitted bank stabilization.
6. Development in Pittsfield shall be allowed if it does not cause any significant environmental degradation and does not result in the pollution of ground or surface waters or cause unreasonable reductions in supply.
7. No development of any kind which is potentially detrimental to water quality shall be allowed adjacent to any brook, stream or tributary or in a well head recharge area.
8. All proposed development must be reviewed for appropriate location away from brooks, streams, tributaries and well head recharge areas and for adequate protection of the recharge environment of these resources.

Recommendations

1. Support the White River Partnership water quality monitoring and watershed planning efforts for the Tweed and White Rivers. (SB, PC)
2. Investigate maintaining and improving public access to the river for recreational use. (PC)
3. Encourage a state funded mapping study of groundwater resources in Pittsfield. (PC, RPC)

H. Flora, Fauna, and Natural Communities Wildlife Resources

Background

In Pittsfield, there is a broad range of plant communities that exist in the older forests, early successional forests, open fields and valley floors. The breadth and diversity of wildlife and plant communities indicate a healthy, thriving ecosystem. Yet, plant communities are usually strongly affected by the surrounding environment. Plants respond to soil structure and chemistry, hydrology, and climate. The effects of unmanaged development can have a negative impact on plant communities, which in turn will harm the overall ecosystem in the area affected. Good management practices, such as requiring developers to locate their projects in less sensitive areas, maintain buffer areas and protect against silt runoff from excavating, are a few of the ways that these communities can be maintained.

Wildlife is one of the popular attractions to the area and provides some citizens of Pittsfield with direct and indirect livelihoods from sports, tourism and direct harvest of wildlife. Additionally, the interconnection of wildlife with their environment has an impact on the natural environment. Wildlife management requires management of human activities around animals as much as management of animals around human activities. Managing for specific species is not as desirable as managing for the entire ecosystem supporting the species. A diverse system of wildlife is a sign of a thriving ecosystem, and Pittsfield wishes to maintain and enhance the health of this system.

Pittsfield's open lands are home to a diverse and healthy wildlife population that includes bear, bobcat, moose, deer, otter, geese, ducks, and mink, to name only a few. Nearly all open space provides habitat. There are, however, some areas in Pittsfield which provide critical habitat that should remain intact. These areas include wetlands, deer wintering areas, bear mast stands, and edge (the transition zone between two cover types, such as field and forest). Development or logging in or adjacent to these areas should consider wildlife implications during the planning process.

Wintering areas are an important habitat requirement for deer during the critical winter months when snow depth and climate are limiting factors to survival. Typically, these areas consist of mature softwood stands, at low elevations or along stream beds, which provide cover and limit snow depths. Southerly facing slopes are also beneficial due to good sun exposure and may be utilized even in areas of limited softwood cover. More specific factors, such as percent canopy closure, species of softwoods, and stand age, also figure into the quality of the wintering area.

Most important when considering development and its impact on wildlife is the concept of habitat fragmentation. Albert Todd, the Environmental Protection Agency liaison, in the February 1999 issue of Journal of Forestry, summed up the impact of forest fragmentation:

Forest fragmentation affects water quality and quantity, fish and wildlife populations, and the biological health and diversity of the forest itself. When many small habitat losses occur over time, the combined effect may be as dramatic as one large loss. Forest fragmentation can disrupt animal travel corridors, increase flooding, promote the invasion of exotic vegetation, expose forest interiors, and create conflicts between people and wildlife. Habitat loss reduces the number of many wildlife species and totally eliminates others.

To help mitigate the effects of human population growth and land consumption, many scientists and conservationists urge governments to establish protected corridors, which connect patches of important wildlife habitat. These corridors, if planned correctly, allow wildlife to move between habitats and allow individual animals to move between groups, helping to restore or maintain genetic diversity that is essential both to the long-term viability of populations and to the restoration of functional ecosystems.

Some studies focusing on wildlife fragmentation have been conducted in Vermont, but only on a limited basis. At some point, it may be wise for Pittsfield to attempt to study this important element of wildlife preservation.

It should be noted that the majority of lands in Pittsfield are part of the Green Mountain National Forest (GMNF), and therefore are under the control of the Federal Government and are out of Pittsfield's jurisdiction to regulate. The GMNF plan is updated every 10-15 years. During the update period, Pittsfield will be given an opportunity to comment on forestry management policy. There are also specific projects outlined in the plan which allow additional public input, such as the Forest-Wide Non-Native Invasive Plant Control Project.

I. Goals, Policies and Recommendations

Goals

1. Maintain or enhance the natural diversity and population of wildlife.
2. Restore stable populations of endangered or threatened wildlife in appropriate habitat areas.
3. Maintain or improve the natural diversity, population, and migratory routes of natural species.
4. Encourage sport and subsistence hunting of ecologically sound intensities to provide continued success of the species.

Policies

1. Wildlife populations and natural diversity should be maintained or enhanced.
2. Long-term protection of major habitats through conservation easements, land purchases, leases and other incentives is encouraged.

3. Protect deer wintering areas from developments and other uses that adversely impact these areas.
4. Development other than isolated houses and camps shall be designed so as to preserve continuous areas of wildlife habitat. Fragmentation of wildlife habitat is discouraged. Effort shall be made to maintain connecting links between such areas.
5. Preference shall be given to development that utilizes existing roads and field lines.

Recommendations

1. Encourage owners of necessary habitat for threatened species to contact the State for assistance in developing a management plan for these sites. (PC)
2. Identify wildlife corridors in Pittsfield. (PC)
3. The Town should take an active role in the next revision of the Green Mountain National Forest Plan. (SB)

J. Invasive Species

Invasive non-native species are a growing problem throughout Vermont. Invasive plants are defined as those exotic species that typically spread from into natural communities, but many of these species are also impacting yards, agricultural fields, and working forests. In Pittsfield, the spread of invasives is negatively impacting the rural character of the Town, reducing native plant populations and consequently affecting wildlife populations, creating economic impacts by dominating other plants in agricultural fields and inhibiting reproduction of trees in sugarbush areas and other forests and potentially posing health risks. At the present time, the greatest threats are posed by the Emerald Ash Borer, wild chervil (fields, roadsides and recently logged areas), Japanese knotweed (streams, rivers, roadsides, yards), and Japanese barberry (forests), but there are increasing threats throughout the region from garlic mustard, giant hogweed, and other invasives.

Some of these invasives, especially wild chervil and knotweed, have proliferated to such an extent that eradication from many sites is impossible, but there are still portions of the Town that have not been infested. Diligence is necessary from Town residents and employees to prevent the further spread of these species, and the introduction of new species that could pose more serious threats. For example, giant hogweed has been identified in several towns in Vermont. This federally-listed noxious weed produces a sap that, in combination with moisture and sunlight, can cause severe skin and eye irritation, painful blistering, permanent scarring, and blindness.

One of the more common ways in which invasive species spread to new locations is when seeds or root segments are transported on vehicles, especially construction and logging machinery, mowers, etc. Best management practices have been identified for reducing the accidental

spread of invasives, including avoiding using fill from invaded sites, washing of equipment before leaving infected sites, stabilization of disturbed sites, timing of mowing, etc.

K. Goals, Policies and Recommendations

Goal

Reduce the impact of invasive species on agriculture and native ecosystems.

Policy

New occurrences of invasive species should be controlled to prevent further infestations.

Recommendations

1. Town employees, contractors, businesses, and residents should become familiar with the best management practices to prevent the accidental spread of invasives. (PC, Road Commissioner, SB)
2. The Town should time roadside mowing to minimize and reduce the spread of invasive species. (Road Commissioner)

L. Mineral Resources

Background

The use and management of Pittsfield's earth and mineral resources are matters of public good. Maintenance of sustainable quantities of gravel, sand, crushed rock, and other materials are essential for business development, as well as state and local highways. In spite of this, public and private interests are oftentimes in conflict over use of the resource. It is in the interest of the Pittsfield business owners and residents to enable utilization of these resources when such uses do not significantly inhibit or conflict with other existing or planned land uses, or are in conflict with other stated goals in this Plan.

M. Goals, Policies and Recommendations

Goal

Support extraction and processing of mineral resources only where such activities are appropriately managed, and the public interest is clearly benefited. Any support shall be balanced against the need to maintain the rural character valued by the citizens of Pittsfield.

Policies

1. Pollution, noise, and vehicular traffic shall be considered as part of the decision-making process when reviewing proposed gravel extraction projects.
2. Existing and proposed mineral extraction and processing facilities shall be planned, constructed, and managed,
    - So as not to adversely impact existing or planned uses within the vicinity of the project site;
    - To not significantly interfere with the function and safety of existing road systems serving the project site;
    - To minimize any adverse effects on water quality, fish and wildlife habitats, viewsheds and adjacent land uses;
    - To reclaim and re-vegetate sites following extraction;
    - To minimize noise impacts on adjacent uses including residential areas; and
    - To minimize any potential health and safety impacts that may occur as a result of extraction, processing and transport of materials.

N. Significant Natural and Historic Areas

While Pittsfield residents would agree that the entirety of the community is significant for its beauty and its rural landscape, there are several areas that represent the most significant places in Town. Much of the Town grew in a linear fashion, developing as a nineteenth century commercial and milling center for the Upper Tweed River Valley.[14] Numerous historic sites sprung up around the narrow strip along the Village Green in the Village Center Area, some of which remain today and often boast scenic views to surrounding mountainous and riparian viewsheds. These lands are what most residents agree make Pittsfield the place that it is today. These areas include:

- **Pittsfield Village Green** - The original village green that is situated along Route 100 was dedicated in the eighteenth century and is used primarily in warmer months for band concerts, auctions, bazaars, flea markets, and other community events. It features a gazebo that was added to the park space in 1941.
- **Town Office** - Originally built in 1883, this Greek Revival style building served as Pittsfield's schoolhouse until 1969. It now houses the Town Clerk's office, the Town library, and Historical Society**.**
- **Pittsfield Federated Church -** The Pittsfield Federated Church serves two local congregations that merged in 1925: a Methodist congregation that dates back to as early as 1802 and a Congregational Church established in 1803. The building dates to 1917, and was built in the Neo-Gothic Revival style, including a number of large stained-glass windows.

- **Town Hall** - The Town Hall was originally built as a church in 1830. It was constructed in the Greek Revival style and is one of many distinctive historic structures located along the Route 100 Village Green area. It is immediately adjacent to the Town Office Building.
- **The Route 100/Tweed River Corridor** - Running largely parallel to the Town's River, Route 100 offers scenic views of the village, local farms, and other open space areas that straddle the Green Mountain foothills and national forest. This roadway has been recognized as one of Vermont's, if not New England's, most scenic highways.
- **Other historic buildings -** The Town's historic buildings include an array of residences, a tavern, barns, a village schoolhouse, and a church. These structures predominantly date to the 1800s, and are built in a range of styles, including Greek Revival, Vernacular-Greek and Italianate, Georgian, and Queen Anne. There are 25 structures in total that are on the State Register of Historic Places. The majority of buildings are located within Pittsfield's historic village center along Route 100 between Upper and Lower Michigan Roads. They all have a significant role to play in connecting the Town to its historic roots, and greatly enhance the Town's character. A more in-depth description of the Town's numerous historic architectural resources may be found in the Vermont Division for Historic Preservation's 1988 "The Historic Architecture of Rutland County," which is part of the State's register of historic places that is available at the Town Office.

O. Conservation Commission

Vermont statute enables communities to create a Conservation Commission (CC), a volunteer board that focuses specifically on the natural, scenic and cultural resources within a community. A CC may conduct inventories of natural resources, recommend the purchase of or the receipt of gifts of land to the Select Board, assist the Planning Commission with natural resource planning, and maintain a conservation fund. It would be the responsibility of the Conservation Commission to receive any funds designated for mitigation of prime agricultural lands in the event of an Act 250 finding during development of those lands.

The Conservation Commission, at the discretion of the Town, can manage a fund that is to be used to assist with the purchase or conservation of property with the intention of protecting natural resources and implementing the Town Plan. Any use of such a fund requires support from the Select Board. Pittsfield does not have a CC at this time but may wish to create one in the future for the preservation and management of the Town's unique sites and resources.

P. Land Protection Strategies

Methods of protecting significant lands are varied. In general, there are two ways to encourage the preservation of culturally and naturally significant areas: regulatory & voluntary. Voluntary methods are undertaken by the landowner and include:

- Preserving land by placing restrictions on its use, through such tools as conservation easements or mutual covenants.

- Transferring land to a conservation organization (such as the Vermont Land Trust) through donation.
- Selling or donating land with conditions attached, like deed restrictions or conditional transfers.

Pittsfield could become an active participant in land conservation through the creation of a conservation fund. This fund, which is generally funded on a yearly basis, would contain funds that a Conservation Commission could use to purchase land outright, or assist a land conservation organization with the purchase of a conservation easement. It is safe to assume that there will never be sufficient funding for land protection strategies to acquire conservation easements or ownership for all of the unprotected identified areas of value.

Regulatory methods use zoning and/or subdivision rules to regulate the location, density and design of development within selected areas to minimize harmful impacts while allowing for new development. Presently, Pittsfield does not have either zoning or subdivision regulations established. If they sought to enact them at any time, regulatory land protection methods could include any of the following:

- **Overlay Districts** - The creation of overlay districts is the most common method of regulating specific areas for the purpose of protecting cultural or natural resources. Overlay districts can be used to exclude development on or to impose resource protection or conservation standards within overlay areas. These districts can be used to protect many types of resources.
- **Resource Protection Districts** - protect resource and open space areas or resource-based uses such as farming, forestry, recreation from incompatible development.
- **Large Lot Zoning** --Large lot zoning refers to the designation of a very large minimum lot size within certain zoning districts to accommodate resource-based uses, such as farming or forestry, or to require a pattern of very scattered, low-density development to limit, for example, impervious surfaces and protect surface and groundwater quality.
- **Fixed Area & Sliding Scale (Density-based Zoning)** Fixed area and sliding scale zoning are two zoning techniques (typically applied in association with subdivision regulations) that are used to differentiate allowed densities of development from district lot size requirements.
- **Conservation (Open Space) Subdivision Design** Conservation or open space subdivision design is a subdivision design process wherein subdivisions are intentionally designed to protect rural character and open space.

Each of these methods has its own set of benefits and pitfalls and all of them should be thoroughly evaluated before they are implemented. However, there are many examples of successful regulatory land protection strategies in Vermont. The key to success is to ensure that the community as a whole supports the regulations.

Q. Goals, Policies and Recommendations

Goals

1. Identify and protect the natural, cultural and historic resources that are unique to Pittsfield and make the Town special.

2. Allow for reasonable development without sacrificing important cultural and natural resources.

Policies

1. Ensure careful review of all development of all town development projects to minimize the impact on Pittsfield's natural and cultural resources.
2. Unique resources shall be protected through careful and deliberate planning.
3. Sustainable use of the Town's working landscape (forest and agricultural resources) shall be encouraged.

Recommendations

1. The Select Board should consider creating a Conservation Commission. (SB)
2. The Select Board should consider the establishment of a conservation fund, to be administered by a Conservation Commission, for the purposes of conserving natural or culturally significant areas in Pittsfield. (SB)

XII. Land Use

A. Introduction

In terms of planning, one of the most complex discussions is about how land will be used in the future. How a town uses its land and plans for future land development can affect a wide range of issues, including the town's character and its ability to provide services adequately. In order to ensure that the impacts of future development in Pittsfield do not have unintended consequences, the Town's growth must be managed to reflect the vision of this Plan.

This section discusses both current and future land use patterns, and provides goals, policies, and recommendations for future implementation. Vermont Statutes Title 24, § 4411(a) authorizes towns to implement land use regulations, such as zoning, subdivision, and site plan review, provided that those regulations are in conformance with both this Plan and § 4302 of Title 24, which addresses the state's planning goals. In 2004, the state legislature passed Act 115 to more clearly define "conformance with the plan." It states that:

> *All such regulatory and nonregulatory tools shall be in conformance with the plan, shall be adopted for the purposes set forth in section 4302 of this title, and shall be in accord with the policies set forth therein. [§4411(a)]*

A wide range of tools are available to town planners for the purposes of implementing the Town Plan. These tools include subdivision regulations, zoning bylaws, capital budget and programming, as well as town ordinances (see Chapter XIV for more information). All of these tools must conform to the policies of the Town Plan, and once drafted, the Planning Commission is required to issue a report on how the newly drafted tools implement the Plan.

B. Current Land Use

Pittsfield remains much as it has been for centuries, with a relatively densely populated village center surrounded by sparsely populated countryside. The Green Mountain National Forest (GMNF) takes up such a substantial amount of land in Pittsfield that the Town has one of the smallest physical settlement areas of Vermont's towns and cities. Most of its easily accessible land lies within the narrow valley that is transected by Route 100, which is bordered on one side by the GMNF and the Tweed River on the other. With a limited amount of developable land, it is complicated for Pittsfield to grow while maintaining the same rural character.

Goals

1. Continue Pittsfield's historical land use pattern of denser development within the village and sparser development in the countryside.

2. Maintain the rural character of Pittsfield through a balanced consideration of developmental pressures, natural resources limitations, agricultural activities, and home-based occupational opportunities.

C. Land Use Regulation

Historically, the citizens of Pittsfield have generally taken a "no regulation" stance when zoning has been considered. Previous drafts of zoning have fallen short of the votes needed for adoption on two past occasions. This is not to state, however, that the issue may never be raised again. Rather, it is in the interest of the Planning Commission and Town at large to reconsider zoning regulations if the time is ripe for such discussions at a later date.

Towns without land use regulations outside of town plans are always at risk when a large-scale development is proposed. Because of this, State regulators have designated all towns without such land use regulation as "1 Acre Towns" for the purposes of review under Act 250. This designation means the following:

- Any commercial or industrial developments involving over one acre of property triggers a review under Act 250.
- The subdivision of land into six or more lots within a continuous period of five years triggers a review under Act 250.

Under Criterion 10 of Act 250, any proposed project must conform to all duly adopted local and regional plans. It seeks to ensure that new development respects the wishes of Vermont citizens about the future of their town and region.

The Environmental Board has often found it difficult to interpret town plans in a regulatory proceeding because of their inherently vague and non-specific language. Town plans are generally considered visionary documents, and though not intended to be the word of law, will be used by the Environmental Board for direction if zoning laws do not exist. Considering that Pittsfield does not have land use regulations at this time, the Town must specify the standards it expects a developer to meet if it wants the Town Plan to have controlling weight under Act 250. To that end, Pittsfield's planners have chosen explicit language to ensure that the Town Plan gives a clear message to an environmental board if the need arises.

General Land Use Goals

1. Continue consideration of the pros and cons of land use regulation (i.e. ordinances or zoning). Regularly review, update, and add ordinances as needed to achieve the goals of the plan.
2. Recognize that each property is not isolated from others and ensure responsible development and natural resource management within the community.
3. Development and resource management shall not interfere with public or private water rights.

D. Future Land Use

When surveyed by the Planning Commission, residents have indicated that they would like to maintain the present-day aesthetics of Pittsfield. Residents confirmed that they want to maintain the existing settlement patterns but are unwilling to regulate how land should be developed.

This document recognizes that not all land is equally suited for all types and intensities of development, and that certain areas of Pittsfield have unique characteristics that are worthy of protection. It is the basic premise of this Plan that future land uses be sensitive to both the physical limitations of a site and to the overall rural character of the Town. Accordingly, four separate geographical areas have been defined in this section and the physical boundaries of each are defined (for planning purposes only) on a proposed Land Use Map. For each area below (Village Center Area, Route 100 Corridor Area, Flood Hazard Area, and Residential Area), the purpose is stated, and policies are offered in terms of the compatible types of development, intensity of use, and the conservation of natural resources.

While existing use of land and structures may not be entirely consistent with these proposals, it is the goal of this Plan that all future land development shall be in conformance with these policies.

E. Village Center Area

Pittsfield's Village Center Area covers the more densely developed portion of Pittsfield that runs along Route 100. In 2015, Pittsfield acquired Village Center Designation through the Vermont Downtown Program, which mirrors the footprint of the Town's Village Center Area. The purpose of the Village Center land use area is to provide for the continuation of Pittsfield's village center as a social and physical center of community services; to enable higher density residential and non-residential uses in the traditional village setting and to protect and enhance its character and quality in the future.

The scenic village of Pittsfield is a distinct and dynamic entity, serving as the historic commercial center of the Town and the focal point of the community's social life. Future development shall

respect this traditional settlement pattern, its architecture, building proportions and land capability as well. A mix of uses is appropriate in this area, including small-scale commercial and primary retail, residential (including both single-family and multi-family housing), or public uses. Large scale development (typified by buildings over 10,000 square feet) is not consistent with existing development and shall be prohibited. Efforts to disperse services, such as the Post Office, shall be discouraged, as well as commercial activity in excess of the availability of parking or the ability of the village to absorb the additional people and traffic.

Goals and Policies in the Village Center Area

Goals

1. Maintain a viable village center through good planning and subsequent development.
2. Provide a location for thoughtful residential and commercial development at a size and scale consistent with the existing village center that does not negatively impact Pittsfield's ability to provide services or the rural and natural character of the area.

Policies

1. The density of development in this area shall reflect existing settlement patterns, land capability, and the availability of utilities for expansion.
2. Shops, services, professional offices and public facilities shall be developed at a scale that does not negatively impact parking, pedestrian safety, noise pollution, light pollution, traffic congestion, and is designed consistent with existing characteristics. All businesses shall not interfere with residents' rights to peacefully enjoy their property.
3. Locate primary retail establishments within the village (excluding those retail establishments that require substantial area for storage of materials, such as lumberyards and nurseries).
4. Rehabilitation and renovation of structures and older buildings of historic merit is encouraged to enable new and more economical uses of property and to avoid obsolescence.
5. Where new development is being planned, efforts must be directed to ensure that such development shall be complementary and compatible to the configuration of existing buildings and streetscape. Development shall respect traditional scales, proportions, and shapes of the surrounding village.
6. Major public investments, such as improvements to Route 100, should be encouraged and endorsed only on finding that they will not have an undue adverse impact on the character or function of the Village Center. Prior to the commencement of plans, State planners shall consult with the Town and affected property owners regarding these types of activities.
7. The Plan supports pedestrian enhancements that will promote walkability and safety.

F. Route 100 Corridor Area

Vermont Route 100 parallels the Tweed River and its branches along the valley floor, running through the Southeast corner of Pittsfield. This valley floor is a key component of Pittsfield's rural character. The value of much of the Route 100 corridor area stems mainly from its scenic and agricultural qualities. These lands are highly visible from Route 100, the major road through Pittsfield. Therefore, the open meadows and fields that make up this area are seen and enjoyed on a daily basis by local residents and may present the only image of Pittsfield to those who are merely passing through. It is this area, with its open views to distant hills and peaks, which contributes to the beauty of the Route 100 corridor. Most of the open space in the Route 100 corridor area still retains some agricultural value. That is, much of the land can still be used for hay, small crops, and small pasturing. The Town of Pittsfield believes that the Route 100 corridor area should continue to be able to be used for agricultural, open space, and scenic purposes, and that new development must be sited and designed in such a manner as to be compatible with existing land use.

Any development that occurs in this highly visible area shall be designed so as to minimize the impact on the rural character of this area, while allowing for some future growth (see Map 2 - Future Land Use Map). The Route 100 Corridor Area is an appropriate location for light industrial development, provided that developers make all efforts to protect the visual character of the area through use of screening, locating structures on the edges of open fields, or away from roads, etc. Commercial development in this area is limited to low impact light industry. Development shall only be allowed if it does not have an undue adverse impact on the existing character of the Route 100 Corridor Area. In all cases, development that would be commonly considered to be urban sprawl is prohibited. Sprawl can be described as unrestricted growth in single use housing, commercial development and roads over large expanses of land with no consideration to planning. This includes developments such as gas stations, convenience stores, etc.

Due to the constant ebb and flow of the Tweed River, the Route 100 valley floor has the most concentrated amount of prime agricultural soils in Pittsfield. Prime Agricultural land is defined by the National Soil Conservation Service as land that is well suited for the production of food, feed, forage, fiber, and oilseed crops, with the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when properly treated and managed. This definition, although one dimensional (focused only on growth of products and not taking into account aesthetic values), does point out the value these soils represent to farmers. Therefore, any development in this area must carefully consider the potential negative impacts on Prime Agricultural soils, and attempt to mitigate them.

The Tweed River is also a center for recreational opportunities in Pittsfield. Access to these opportunities shall not be impeded by development in this area. Access to the river allows for swimming, fishing, and other activities. Further, it is a thriving riparian ecosystem that would likely be upset if development were allowed to occur unchecked in the valley.

The Route 100 area is to remain largely open and scenic while retaining the recreational, agricultural, and ecological value of the land. Large-scale developments, such as condominiums and industrial developments, are inappropriate in this area. The permitted density of development in this area, whether for commercial or residential uses, must be lower than the Village Center Area, while respecting the predominantly rural, agricultural nature of the area.

Goals and Policies in the Route 100 Corridor Area

Goals

1. Maintain the distinct scenic value of the Route 100 corridor by allowing only well-planned, carefully designed, low impact development.
2. Protect the availability of Prime Agricultural Farmland in the Route 100 corridor.

Policies

1. The density of development in this area shall reflect the existing and diffuse settlement patterns.
2. If more than one building is to be included in a development, the buildings will be clustered to avoid impact on the rural character of the Route 100 Corridor.
3. Buildings and roads shall be located at the edges of woodlands and fields, along hedgerows, etc., in an effort to preserve tillable units, whether or not in the same ownership.
4. Commercial development in this area shall be limited to low-impact light industry, and agricultural businesses that are located in clusters, properly screened and set back from the highway in order to avoid an undue adverse impact on the visual character of the area.
5. Land use activities which potentially threaten surface water and groundwater quality must be carefully reviewed and monitored to prevent runoff and undue loss of quality to groundwater.
6. Development on Prime Agricultural soils is discouraged.
7. Development that is contrary to the goals of this plan is prohibited.

G. Flood Hazard Area

The Flood Hazard area follows the major rivers in Pittsfield, including the Tweed River and its branches. For more information on Flood Hazard Areas, see the Flood Resiliency and Natural Resources chapters of this Plan and the Pittsfield Flood Hazard Area Regulations adopted in 2014.

Floodplains are often excellent agricultural land due to the thick layers deposited river-borne soil. Floodplains also provide natural storage of floodwaters resulting from snowmelt or severe or prolonged rainstorms. Floodplains are poorly suited for structural development. It is prudent Town policy, from a public safety standpoint, to discourage structural development in

floodplain areas.

Goals and Policies in the Flood Hazard Area

Goals

1. Agricultural use is encouraged on the high-quality soils of the floodplain.
2. Recognize and maintain the floodplain functions of the valley, particularly sediment storage and nutrient retention.

Policies

1. New development, except for improvements to existing structures within the building footprint or relating to infrastructural or health and safety concerns within the limits of the 100-year floodplain, is prohibited.
2. Improvements to existing structures within the floodplain shall take into consideration the inevitable changes that will occur in the river's location over time and make all possible efforts not to interfere with this natural process.

H. Residential Area

The Residential Area encompasses all areas in Pittsfield not designated in the land use areas previously discussed in this chapter. This area generally is more rural with rougher terrain. Its primary purpose is to protect the natural landscape while allowing a reasonable mix of low-impact uses.

The Residential Area is a mix of residential and agricultural/recreational development. Appropriate uses in this area include farming, forestry, residential development, home occupations, recreation, agriculture, and cottage industries. Residents in this area should expect to encounter limited sights, sounds, smells, and activities typically associated with a working landscape.

New development in this area shall adapt to the following guidelines. The Home Occupation and cottage industries shall be a discreet, inoffensive, and basically invisible business use of a residential property. All parking or service needs shall be limited to and confined to the property involved. Farming and agricultural activities should be limited to private operations and not factory run facilities. All uses in this residential area must be of a size and scale that can support on-site water and septic while fitting generally within the landscape. Where clustered housing is being developed in this rural section, shared driveway access is recommended to avoid fragmentation of landscapes and habitats.

Some uses should be excluded because they involve too much traffic in the way of customers, deliveries, or visitors. Others should be excluded because they involve too many employees, too much noise, late hours, or some other aspect offensive to residential uses.

Home Occupations can be a legitimate means for Pittsfield residents to maintain their homes as places from which they can conduct their business without infringing on the rights of their neighbors to enjoy their homes, or conflict with the primarily residential character of the area. New commercial and industrial development that does not fall within the designated land use restrictions stated above shall not be allowed in this area. This type of development impacts roads, pollution, noise, nuisance, animal habitat, water quality and the natural character of the area.

Goals and Policies in the Residential Area

Goals

1. Encourage agriculture of all varieties throughout Pittsfield.
2. Support new developments provided that they continue to maintain the rural character of the Town.

Policies

1. Maintenance of a working landscape is the primary goal for the Residential Area. Projects which adversely affect the rural setting and conflict with the existing working landscape shall not be located in this area.
2. Agricultural and residential uses are to be the primary and dominant land uses in the Residential Area. Commercial or industrial projects in this area shall be designed so as to not adversely affect the rural character of this area.
3. The town shall not allow development of primary retail in this area (refer to economic development section)

I. Wildlife and Forest Resources

Forests

Healthy forests provide a significant number of benefits to our communities, including environmental benefits (such as clean water supply, clean air, mitigation against climate change, wildlife habitat, and biological diversity), and economic benefits (such as tourism, recreation, and the wood products industry).

Trends in forest health have changed over the past decade. In the 2013 US Forest Service's National Forest Inventory and Analysis Program report, figures indicated that since 2007 there has been a continuing, though gradual, loss of about 75,000 acres of forestland in Vermont. Developed land in Vermont increased significantly between 1980-2010 (67%). The pattern of development growth has led to significant forest fragmentation throughout the State.

Forest Fragmentation

Forest fragmentation is the breaking of large, contiguous forested areas into smaller pieces of forest. For natural communities and wildlife habitat, the continued dividing of land with naturally occurring vegetation and ecological processes into smaller and smaller areas creates barriers that limit species' movement and interrupt ecological processes. Since the 1980s, Vermont has experienced "parcelization," which is the result of larger tracts of land being divided into smaller ownerships or land holdings. The more individuals that own smaller parcels of forest, the more likely that the land will ultimately be developed with infrastructure (such as roads and utilities) and buildings. The 2015 Vermont Forest Fragmentation Report identifies the following causes for this trend:

- Escalating land prices;
- Increased property taxes;
- Conveyance of land from aging landowners; and
- Exurbanization (the trend of moving out of urban areas into rural areas).

Forest fragmentation affects water quality and quantity, fish and wildlife populations, and the biological health and diversity of the forest itself. When many small habitat losses occur over time, the combined effect may be as dramatic as one large loss. Forest fragmentation can disrupt animal travel corridors, increase flooding, promote the invasion of exotic vegetation, expose forest interiors, and create conflicts between people and wildlife. Habitat loss reduces the number of many wildlife species and totally eliminates others.

To help mitigate the effects of human population growth and land consumption, many scientists and conservationists urge governments to establish protected corridors, which connect patches of important wildlife habitat. These corridors, if planned correctly, allow wildlife to move between habitats and allow individual animals to move between groups, helping to restore or maintain genetic diversity that is essential both to the long-term viability of populations and to the restoration of functional ecosystems.

As of 2019 Pittsfield had 30 parcels enrolled in the Use Value Appraisal Program in the State of Vermont. This totals 1,519 acres of forestland and 158 acres of agricultural land enrolled in the program. Forest management plans required for enrollment of forest land in the Current Use Program are obliged to be updated every 10 years, and well-crafted management plans can play a large role in ensuring vital wildlife habitat and corridor connectivity.

In 2001 a total of 7,500 acres in the towns of Pittsfield, Chittenden, and Killington became part of the Green Mountain National Forest. This addition of 900 acres in Pittsfield brings the total National Forest acreage in the Town to over 7,400, comprising more than half the total acreage of the Town. The Forest is located on the west side of Route 100 from Killington north to

Rochester and extending west to Chittenden. Access is easily accomplished from both Lower and Upper Michigan Roads and from Liberty Hill Road. The Forest serves as an important forest block and habitat connector area in Pittsfield and is a priority location for protection where development and fragmentation should be avoided to protect ecological function. Note: Current and Future Land Use Maps included in this plan may not accurately reflect GMNF boundaries with private landowners.

Wildlife

The interconnection of wildlife with their environment has an impact on the natural environment. Wildlife management requires management of human activities around animals as much as management of animals around human activities. Managing for specific species is not as desirable as managing for the entire ecosystem supporting the species.

Pittsfield's forests, wetlands, streams and fields are home to a diverse and healthy wildlife population. Nearly all open space provides habitat for game and non-game species. There are, however, some areas in Pittsfield which provide critical habitat that should remain intact. These areas include wetlands, deer wintering areas, and edge (the transition zone between two cover types, such as field and forest). Development or logging in or adjacent to these areas should consider wildlife implications during the planning process.

Wintering areas are an important habitat requirement for deer during the critical winter months when snow depth and climate are limiting factors to survival. Typically, these areas consist of mature softwood stands, at low elevations or along stream beds, which provide cover and limit snow depths. Southerly facing slopes are also beneficial due to good sun exposure and may be utilized even in areas of limited softwood cover. More specific factors, such as percent canopy closure, species of softwoods, and stand age, also figure into the quality of the wintering area.

Most important when considering development and its impact on wildlife is the concept of habitat fragmentation. Forests provide habitat to a diverse population of wildlife, which are negatively impacted when forested land is fragmented through development.

Goals, Policies and Procedures in Wildlife Area

Goals

1. To reduce the fragmentation of forestlands from scattered low-density development.
2. To maintain or improve the natural diversity, population, and migratory routes of wildlife through conservation of forest blocks and habitat connectors.
3. Encourage sport and subsistence hunting of ecologically sound intensities to provide continued success of the species.

4. To promote the use of forestlands as part of the working landscape in order to sustain the local forest products economy.
5. To provide the community with access to quality forestland for recreational use.

Policies

1. Long-term protection of state identified forest blocks and habitat connectors through conservation easements, land purchases, leases and other incentives is encouraged.
2. New developments in the Residential area shall take reasonable steps to avoid fragmentation of wildlife habitat.
3. Development that shall make reasonable efforts to utilize existing roads and field edge lines. The construction of utilities, roads, or other development in the areas identified in this plan as high priority forest blocks and habitat connectors on the Natural Resources map are incompatible with this plan.
4. Subdivisions and other development on large lots in the Residential area shall minimize impacts on forestry habitat areas by concentrating development to the forest edge near other development and roads using lot sizes and shapes so that most of the remaining land is in a large undeveloped tract. Development shall minimize clearing forest land and shall avoid the creation of additional roads and power lines that would further future development into interior areas.

Recommendations

1. Encourage owners of necessary habitat for threatened species to contact the State for assistance in developing a management plan for these sites. (SB, PC, Tree Warden)
2. Encourage forest landowners to contact local foresters to help manage their land. (SB, PC, Tree Warden)
3. Support the county forester and conservation commission outreach to local forester landowners. (SB, PC, Tree Warden)

J. Wind Generation Facilities

New highly efficient technologies are now available to harness wind power, making it a viable alternative to more traditional sources of power. While there are benefits in capturing renewable energy, the location, design, and access and maintenance road locations for wind generators can adversely interfere with scenic and historic resources. In Vermont, ridgelines are the favored sites for large-scale commercial generators due to prevailing wind patterns and topography. Locations between 2,000 and 3,500 feet in elevation are considered ideal for "on the grid" generation. For Pittsfield, this means that there are unlikely to be any sites that are available for commercial generation.

In spite of this, wind energy offers possibilities for on-site generation of electricity for home consumer use. Generally, these are considered accessory uses or structures, subordinate to primary uses such as residences or farms. On-site/off-grid generation facilities are not subject

to State permitting, as is the case for commercial generators that are required to obtain approval from the Vermont Public Service Board (24 V.S.A. § 248). Local planning and land use regulation shall consider the potential impacts associated with small-scale, private-use wind towers and provide guidelines for the development of these facilities in Pittsfield. Wind tower generators need to be high to capture the wind, which can raise issues of visual impact. Other considerations include noises emitted from the generator and possible effects on birds and other wildlife.

Goals

1. Design wind generation facility guidelines to protect the visual and natural sensitivity of the area in which they are located, including access roads.
2. Accommodate appropriate scale wind generation as part of a broad-based, decentralized energy approach.
   Recommendation
   Select Board should consider a potential wind generation ordinance for the Town of Pittsfield.

K. Act 250 Requirements

All projects requiring an Act 250 permit shall conform to the following Guidelines. Conformance with these Guidelines is required for being in conformance with the Pittsfield Town Plan under Criterion 10 of Act 250. These Guidelines are in the nature of recommendations for all other projects.

Lot Layout – All Uses

- The amount of frontage and building position shall be varied from lot to lot to avoid a suburban pattern of repeated houses or other buildings situated at or near the middle of adjacent lots one after another.
- Lots shall be laid out to take advantage of and preserve desirable features, such as stone walls, hedgerows, fields, natural clearings, and land contours.
- Locating buildings at the top of ridgelines or at the brows of hills where land is open and sites would be highly visible from nearby public roads is strongly discouraged.
- Excavation for roads or buildings where excessive erosion will be likely is prohibited.
- Buildings and other construction shall be located so that that they will not have an undue adverse impact on natural or scenic features.
- In the case of multiple unit projects, buildings shall be clustered.
- On developments involving adjacent buildings or lots, road access points shall be shared.
- Light industrial and commercial uses shall be located so as not to be prominently visible or shall be screened to minimize detrimental impacts on neighboring uses.

- Noisy, toxic, or noxious uses shall be located where they will not be detected from public roads or neighboring uses (especially housing), and shall take all reasonable means to screen or lessen any detrimental impacts of such uses. This provision does not apply to agricultural uses.

Construction in Pittsfield Village

- Proposed construction shall be of a size and scale consistent with that of other buildings in the Village Area.
- Traditional building massing, forms, and materials shall be used within the Village Area.
- Any development within the Village Districts may have an impact on the existing water supplies. Developers must prove that their development will not have any negative effects on public or private water supplies within this area.
- All noisy, toxic, or noxious uses shall be located where they will not be detected from public roads or neighboring uses, (especially housing), and shall take all reasonable means to screen or lessen any detrimental impacts of such uses.

Commercial Development along Route 100

- Development shall be located in clusters and set back from the highway for minimal visual impact.
- Large parking or delivery areas shall be located at the sides or rear of commercial buildings, away from Route 100 and appropriately screened and landscaped. Where feasible, parking areas shall be shared between adjacent uses.
- A landscaped buffer (using native plants and trees) shall be part of any new construction adjacent to Route 100.
- Paved or impermeable areas shall be kept to a minimum.

XIII. RELATIONSHIP TO OTHER PLANS

Pittsfield is bounded by the towns of Chittenden, Rochester, Stockbridge, and Killington. The Town shares numerous activities and services with surrounding towns, including school services, rescue squad support, and mutual aid fire protection. All abutting towns have planning programs and planning commissions. All of these towns have town plans in effect or are currently in the process of re-adopting them: Chittenden (2019), Rochester (2020), Stockbridge (2015) and Killington (2015). Likewise, all but Chittenden have zoning ordinances in effect.

The neighboring town plans have been read in the context of the proposed Pittsfield Town Plan based upon the four towns' most recent and enforceable town plans. On the whole, the planning activities and priorities of all of Pittsfield's abutting towns are synchronized. All of the towns have an express interest in promoting development that is in keeping with the landscape while maintaining the rural character that so readily typifies the region at large. There are no conflicts that exist in either general philosophy or specific development proposals along town borders, as demonstrated below:

- Chittenden – The Town of Chittenden has an adopted Town Plan (2019) and no additional land use regulations. Much of the more rural landscape in Chittenden has been identified as appropriate for recreation, agriculture and forestry. New residential and commercial development is discouraged from these areas. This pattern of development does not have the potential to create conflicts with the Pittsfield Town Plan.

- Killington – The Town of Killington has a comparatively small boundary with Pittsfield that extends along Route 100. It is a predominantly rural residential area, similar to Pittsfield. As a general rule, Killington places a precedence on maintaining the rustic nature of the adjacent area near Pittsfield for low-intensity development. There is no present conflict between Killington's 2015 plan and this Plan.

- Rochester – The Town of Rochester shares Pittsfield's northeastern border, most of which is under the GMNF's jurisdiction. Remaining lands along Pittsfield's border are to be maintained for agricultural and residential purposes, in keeping with those of Pittsfield. There are no apparent areas of conflict between this Plan and Rochester's 2020 plan.

- Stockbridge – The Town of Stockbridge has an adopted Town Plan (2015) as well as zoning, subdivision and flood hazard regulations. The border shared by Pittsfield and Stockbridge runs along the scenic Route 100 corridor. The pattern of development in this area is rural in nature and should not conflict with the Pittsfield Town Plan.

Pittsfield is also a member of the Two Rivers-Ottauquechee Regional Commission (TRORC) along with its neighboring towns of Rochester and Stockbridge. TRORC's regional plan covers 30

towns, including Pittsfield. TRORC does, and will continue, its role in providing technical assistance to the Town and offering general guidance related to all facets of land use planning and development strategies in achieving mutually held goals.

Since the preparation of the Pittsfield Town Plan was done with the assistance of the Regional Commission, no conflicts between the two plans have arisen. In fact, the two plans have similar policy statements regarding the need for development that does not overburden services. In addition, no specific development goals in this Plan conflict with any regional goals. The Town will continue to consider any future substantive changes presented in the TRORC regional plan that may warrant Town Plan modifications in order to ensure alignment with the regional plan's stated goals and policies.

With much of the Town being federally owned forest, the Green Mountain National Forest (GMNF) is an area of mutual interest. Activities in the forest can have direct and significant impacts on the Town, and vice versa. Maintaining lines of communication and support between the Town and the Forest Service is imperative to ensure the compatibility of development with larger planning efforts for the whole of the forest ecosystem that the Town shares with the Forest Service.

A. Recommendations

1. Encourage continued communication and cooperation between Pittsfield and its neighboring towns. (SB, PC)
2. Work with neighboring towns and the region to encourage sustainable land use and environmental policies that benefit the citizens of Pittsfield. (SB, PC)
3. Continue participation in the Two Rivers-Ottauquechee Regional Commission. (SB, PC)
4. Exchange planning information and development data with neighboring communities as well as the Green Mountain National Forest's agency counterparts. (SB, PC)

XIV. Implementation

A. Putting the Plan into Action

The character of Pittsfield, its people, and landscape have been created over the years through the individual and collective decisions and actions of its citizens and public officials. The efficiency, attractiveness, and well-being of the community is determined, in part, by the ability of the Town to plan for its needs and to find a mechanism to put planning goals into action.

Previous elements of this Plan have been centered on existing conditions, probable trends and policy development, which, when combined, represent a vision for the kind of town Pittsfield desires to be in the future. One thing is certain: the community will change. The opportunity for citizens and town officials to jointly direct this change consistent with their desires is ever-present and requires utilization of a variety of mechanisms.

The following sections describe the tools and techniques that could be used to implement the Pittsfield Town Plan.

B. Adoption of the Plan

Adoption of the Pittsfield Town Plan by the Select Board, in accordance with the procedures outlined in the Vermont Planning and Development Act (24 V.S.A., Chapter 117), is the first step in putting this Plan into action. Through its adoption, the Town accepts the principles and policies as set forth in this Plan in the public interest and as a guide for the future growth and development decisions affecting Pittsfield.

C. On-going Planning

Planning for change is a continual process for Pittsfield and will require the involvement of the Planning Commission and the public to ensure that the goals and policies of the Plan are integrated into the decisions affecting land use, taxation, and public investments in Pittsfield.

The quality of a town plan is reflected in the amount of public involvement in its creation. Community meetings, held by the Planning Commission, that discuss important issues relevant to the Town plan will ensure that the document truly reflects the vision of the residents of Pittsfield.

The Pittsfield Town Plan is a dynamic document reflecting the community's visions and values. By statute (24 V.S.A., § 4387), the Plan must be revisited at least every eight years to be kept relevant. The Planning Commission is responsible for the maintenance and amendment of the Plan. Over the span of eight years following adoption of the Plan, the Planning Commission will need to evaluate the Plan in light of new conditions and needs. Re-adoption of an updated Plan will require notice to the townspeople and action by the Select Board.

At any time, following adoption of the Plan, the Select Board may request the Regional Commission to approve the Plan or amendments to a plan. Before approving a plan, the Regional Commission shall find that the plan meets four basic tests [24 V.S.A., § 4350(b)], and generally meets the statutorily required elements of a town plan. Approval of the Plan provides an improved legal standing for Pittsfield to influence and integrate its planning policies with State agency planning affecting land use. Further, it affords the Town an opportunity to maintain its village designation through the State's Department of Housing and Community Development, and subsequently be eligible for tax credits for growth and revitalization.

D. Implementation Tools

Vermont law enables Pittsfield to implement the adopted Pittsfield Town Plan in a variety of ways. Regulation of land use and development through rules adopted by the voters is one possible method. Because these regulations are susceptible to legal challenge and must clearly benefit the public, discretion must be used. Well recognized and utilized means include, but are not limited to, zoning bylaws and subdivision regulations, and they may be either regulatory or non-regulatory in nature. They may include the following:

Table 17: Regulatory and Non-Regulatory Implementation Tools

Regulatory	Non-Regulatory
Zoning and Subdivision Bylaws	Designing a Capital Budget and Program
Strengthening of the Town Plan's language to lend clarity to Act 250 proceedings (e.g., use of direct language, such as the word "shall" in policy statements)	Establishing advisory committees (i.e., Conservation Commission, Energy Committee)
Official town mapping	Education and outreach on important issues
Town Highway Ordinances (such as Access/Curb Cut Permits, granted by the Selectboard)	Conservation activities and the purchase or acceptance of development rights
Flood Regulation and participation in the National Flood Insurance Program (NFIP)	Follow-up on recommendations for action in the Town Plan

Regulatory Implementation Tools

1. **Zoning Bylaws –** Zoning bylaws are a commonly used method for guiding development at the local level. Zoning may regulate:

   - Uses of land;
   - The placement of buildings on lots;
   - The relationship of buildings to open space; and
   - The provision of parking, signs, landscaping and open space.

   Zoning generally involves partitioning the Town into districts or zones that have different sets of uses, densities, and other standards for development. Zoning districts must be reasonably consistent with the Town Plan. As an alternative to conventional methods, Pittsfield may opt to implement a set of measurable performance standards for specific uses as opposed to dividing the Town into districts. This technique, referred to as

"performance zoning", is designed to be more flexible and to recognize the specific conditions of each site proposed for development. A further form of zoning is form-based code, which, in general terms, allows towns to determine the overall look and feel of development as opposed to placing restrictions on use in given areas. It looks to the form the built environment takes as a guide to growth.

2. **Subdivision Regulations –** Pittsfield does not currently have subdivision regulations. These regulations, if adopted, would be administered by the Zoning Board of Adjustment. Such regulations govern the division of parcels of land and the creation of roads and other public improvements. Furthermore, subdivision regulations can ensure that land development reflects land capability and that critical open spaces and resources are protected from poor design or layout.

3. **Act 250 –** Since 1970, Vermont has had a statewide review system for major developments and subdivisions of land in place. Exactly what constitutes a "development" or "subdivision" is subject to a rather large and involved set of definitions. However, generally speaking, development includes any of the following: commercial and industrial projects on more than one acre of land; construction of 10 or more units of housing; subdivision of land into 6 or more lots; construction of a telecommunication tower over 20 feet in height; and development over 2,500 feet in elevation. Prior to any of these activities commencing, a permit must first be granted by the District Environmental Commission. In determining whether to grant a permit, the Commission shall evaluate the project in relation to ten specific review criteria.

   These criteria relate to the environmental, economic, and social impacts of the proposed project on the community and region. Parties to Act 250 proceedings include Pittsfield, through the Planning Commission and Select Board, the State, and the Regional Commission. One criterion that needs to be addressed is whether the project is in conformance with the Pittsfield Town Plan. If a project were determined not to be in conformance with the Plan, the District Environmental Commission would have a basis to deny a permit. As such, Act 250 reviews can take into consideration protection of those types of resources considered important to the well-being of the community. Accordingly, it is in the interest of the Town to evaluate Act 250 projects affecting Pittsfield and to offer testimony, as appropriate.

4. **Flood Hazard Bylaws –** Under Vermont law (24 V.S.A., § 4412), the Town of Pittsfield may regulate the use of land in a defined flood hazard area adjacent to streams and ponds. These bylaws can be established to ensure that design and construction activities within the limits of the 100 Year Flood Plain are designed so as to minimize potential for flood damage and to maintain use of agricultural land in flood-prone areas. As noted in the Flood Resiliency and Natural Resources sections of this Plan, property owners are eligible for federal flood insurance on buildings and structures at relatively low federally subsidized

premium rates. Pittsfield has in effect a Flood Hazard Bylaw and thus such insurance can be obtained for properties.

5. **Highway Ordinances –** Pittsfield has in effect a Highway Ordinance setting forth the standards and conditions for the maintenance, improvement, discontinuance, laying out and acceptance of Town highways. In addition, the ordinance includes provisions related to the reclassification of town highways (Classes 2, 3 and 4).

   Pittsfield also has the ability to regulate private access to municipal roads through the issuance of "curb cut" permits to landowners through its Select Board. "Curb cuts" are places where a private driveway or road connects to a town highway. In granting a cut onto town roads, the Select Board can give consideration to safety issues such as adequacy of sight distance and proximity to intersections as well as conformance with this Plan.

Non-regulatory Implementation Tools

1. **Capital Budget and Program –** A capital budget and program is a financing approach that benefits the Town greatly in the selection, prioritization, and costing of capital projects. Under the capital budget, a project is selected (e.g. bridge refurbishment), a funding source determined (e.g. general taxes, and general obligation bonds), and a priority year given for each activity (e.g. construction in 2030). Collectively, these capital projects make clear when public facilities will be replaced to accommodate projected growth. When used in conjunction with the Town Plan and local bylaws, it can be a powerful mechanism for limiting the rate of growth in accordance with the fiscal capacity of taxpayers and other funding sources.

   In addition, it is noted that under Vermont's Act 250 law, in granting a Land Use Permit for a major development or subdivision, the District Environmental Commission must first find that the project is in conformance with a town's capital budget [see 10 V.S.A., § 6086(a)(10)]. Accordingly, this mechanism would give the Town an indirect method of implementing its policies and priorities as set forth in the Town Plan.

   While Pittsfield has an informal system of capital programming, it is recommended that a Capital Budget Committee be established to work with the Select Board in the development of a list of capital needs and expenditures, and to formally present a Capital Budget and Program for adoption.

2. **Coordination of Private Actions –** Citizens and private enterprises have a vested interest in the well-being of Pittsfield. The actions of the private sector, such as the construction of homes and businesses, land conservation, and the use of land for recreation and agriculture, should relate positively to the goals and policies as set forth in this Plan.

It is in the interest of Pittsfield, through the Planning Commission and Select Board, to develop a cooperative relationship with private investment activities that may have a significant impact on the community values and policies set forth in the Plan. By working together in a cooperative venture early in the process of planning for a project, an adversarial relationship can be avoided. Contacts should be maintained with the following parties:

- Green Mountain National Forest
- Green Mountain Economic Development Corporation
- Vermont Land Trust and the Nature Conservancy
- Owners of significant properties of high resource and/or development value
- Large employers within Pittsfield

3. **Advisory Committees** – State statute authorizes a community, by vote of the Select Board, to create advisory committees. These committees can have differing roles: some provide advice to the Planning Commission or Zoning Board of Adjustment regarding development (for example, a historic review committee as part of a design review district), but more often advisory committees are created to focus on a specific topic in the Plan. The most common advisory committees are the Conservation Commission and the Energy Committee. These groups (outlined in the Natural Resources and Energy chapters, respectively) can assist the Planning Commission with the creation of policy, but they can also act as the primary source of outreach and education relating to their primary focus point. The Planning Commission has identified specific roles a Conservation Commission or Energy Committee could take if they were created by the Select Board.

4. **Conservation Activities –** Conservation programs are an effective means of securing protection of valuable farm and forestland or significant natural resources. Techniques available involve voluntary direct work between non-profit conservation organizations and affected landowners such as donation of conservation easements, bargain sales of land, and limited development schemes.

   The land trust movement has grown immensely during the past thirty years, particularly in Vermont. Land trusts offer viable means of bringing together the needs of property owners with the community interests. The Vermont Land Trust and the Nature Conservancy are particularly well-recognized organizations working toward conservation goals locally. Several organizations are also involved in water quality protection. It is the intent of this Plan to implement its policies through coordination and the involvement of these organizations and others dedicated to public purposes.

5. **Vermont Community Development Program –** Since the mid-1970s, the Vermont Community Development Program (VCDP) has made grant funds available to towns for community projects. Historically, the major focus of the program has been on housing rehabilitation and affordable housing projects benefiting low and moderate-income

families. Pittsfield should investigate the Vermont Community Development Program and its potential to assist the community in addressing its housing needs. The Regional Commission and the Vermont Agency of Commerce and Community Development are available resources available to assist.

E. Responsibility for Implementation

In order to ensure that the policies of this Plan are implemented, it is essential to identify what Municipal Panel, organization or citizen is most suited to act on them. Throughout this Plan, the Planning Commission has identified recommendations for action and indicated who should be responsible for them. Generally, responsibility for implementation of the Plan falls to either the Planning Commission (in the case of implementing changes to land use regulations) or the Select Board (in the case of implementing municipal policy). However, advisory committees as well as other community organizations could also have responsibilities for implementation.

In addition to assigning responsibility, the Planning Commission should also keep track of progress made toward implementing the goals, policies and recommendations of this Plan. This information will be useful to identify areas where additional effort needs to be applied to achieve implementation. It can also be used to describe how successful the community has been at implementation in the next iteration of this Plan, and to guide future policy.

In order to track the progress of implementation, the Planning Commission has included a chart that identifies the policy or recommendation, the responsible party and the progress (see Appendix A: Plan Implementation Matrix).

---

[1] Vermont Division for Historic Preservation, "The Historic Architecture of Rutland County". 1988

[2] Sources for this section include "History of Rutland County," 1886 and "Vermont Gazeteer" by the Rev. W.R. Blossom, 1876.

[3] Vermont Housing Finance Agency. https://www.vhfa.org/ 2021.

[4] National Low Income Housing Coalition. https://reports.nlich.org/oor/vermont 2022.

[5]Town and Unified School Districts Tuitioning One or More Grades. https://education.vermont.gov/sites/aoe/files/documents/edu-sus-districts-towns-operating-and-tuitioning-grades-7-1-20.pdf Vermont Department of Education. July 1, 2020.

[6] Cannon, Susanne E. et al. "School Vouchers and Home Prices: Premiums in School Districts lacking Public Schools" http://mediad.publicbroadcasting.net/p/vpr/files/201406/vpr-school-vouchers-home-prices.pdf June 2014

7&8 Bright Futures Childcare Information System. http://brightfutures.dcf.state.vt.us/. Vermont Department for Children and Families. 2015.

[9] Alan K. Bates "Climate Change in Vermont" June 2011 (edited 10/29/2011). http://www.anr.state.vt.us/anr/climatechange/Pubs/VTCCAdaptClimateChangeVTBetts.pdf.

[10] Id at p.9

[11] Id.

[12] Vermont Agency of Transportation, https://vtrans.vermont.gov/sites/aot/files/documents/TheOrangeBook_1pdf.